

**Natural Disaster Risk Assessment and
Area Business Continuity Plan Formulation
for Industrial Agglomerated Areas
in the ASEAN Region**

**Final Report
Appendices**

June 2015

Japan International Cooperation Agency

**OYO International Corporation
Mitsubishi Research Institute, Inc.
CTI Engineering International Co., Ltd.**

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Appendices

- A1 Record of Support Committee
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- A6 Record of Progress Seminar
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A1 Record of Support Committee

A1-1 Record of 1st Support Committee

A1-2 Record of 2nd Support Committee

A1-3 Record of 3rd Support Committee

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A1-5 Record of 5th Support Committee

A1-6 Record of 6th Support Committee

2013年04月30日(火)

9:00 - 11:00 6階特別会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』

第一回国内支援委員会 出席者リスト

国内支援委員

林 春男	京都大学防災研究所 巨大災害研究センター教授
池田 浩敬	常葉大学 社会環境学部長・学科長／教授
岡積 敏雄	独立行政法人土木研究所 水災害・リスクマネジメント国際センター上席研究員
小野 高宏	三菱商事インシュアランス(株) 社長付 BCP 担当部長
檜府 龍雄	JICA 国際協力専門員
藤間 功司	防衛大学校教授
馬場 仁志	JICA 国際協力専門員
濱口 伸明	神戸大学経済経営研究所長
渡辺 研司	名古屋工業大学教授

外務省

白井 絢一	国際協力局 国別開発協力第一課
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経済産業省

関口 訓央	通商政策局アジア大洋州課
沖田 俊介	通商政策局アジア大洋州課

JICA

安達 一	東南アジア・大洋州部 次長
高林 博史	東南アジア・大洋州部 計画・ASEAN連携課
西川 真史	東南アジア・大洋州部 東南アジア第一課
堀 淳子	東南アジア・大洋州部 東南アジア第二課
永友 紀章	農村開発部 次長
中本 明男	産業開発・公共政策部 産業・貿易第一課 企画役
竹谷 公男	客員専門員
不破 雅実	地球環境部 部長
山内 邦裕	地球環境部 次長
永石 雅史	地球環境部 参事役
宮坂 実	地球環境部 参事役
三牧 純子	地球環境部 防災第一課 企画役

山下 望	地球環境部 防災第一課
貝谷 一樹	地球環境部 防災第一課
勝間田幸太	地球環境部 防災第一課
松元 秀亮	地球環境部 防災第一課

調査団

高橋 政一	総括/広域 BCP 策定 2/防災計画
辻 禎之	副総括/広域 BCP 策定 1
瀬川 秀恭	災害リスク評価リーダー
木根原良樹	広域 BCP 策定 3
高木 豊博	社会基盤調査
高橋 信吾	経済・産業分析
田中 元	洪水 1
山田 敏博	地震/津波/火山
野中 広美	業務調整/事務局運営/災害リスク評価補助(地質ハザード)
須賀 直樹	社内バックアップ

日時：平成 25 年 4 月 30 日（火） 9:00 ~ 11:00
場所：JICA 本部 6F 特別会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』

第一回 国内支援委員会

議事次第

1. 開会
2. 地球環境部長挨拶
3. 委員及び参加者紹介
4. 背景説明
5. 議題
 - (1) プロジェクトの内容、成果の確認
 - (2) アセアン地域のハザード・リスク評価（コンポーネント 1）
 - (3) 産業集積地における広域 BCP の取組み（コンポーネント 2）
 - (4) 今後の予定
6. その他
7. 閉会

配布資料

- 資料 1 国内支援委員会参加者リスト
- 資料 2 国内支援委員会の設置について
- 資料 3 国内支援委員会委員名簿
- 資料 4 プロジェクトの内容、成果の確認
- 資料 5 アセアン地域のハザード・リスク評価（コンポーネント 1）
- 資料 6 産業集積地における広域 BCP の取組み（コンポーネント 2）
- 資料 7 今後の予定
- 資料 8 パネルメンバー
- 資料 9 広報資料 1

◆JICA

部 長	技術審議役	調 査 役	グループ長	課 長	担 当 者

◆調査団

総 括	副 総 括	担 当 者

コンサルタント名：OYO インターショナル株式会社
 株式会社三菱総合研究所
 株式会社 建設技研インターナショナル

アセアン地域における産業集積地の自然災害リスク評価と事業継続計画に関する情報収集・確認調査
 第1回国内支援委員会議事録

日 時	2013年4月30日(火) 09:00-11:10
場 所	JICA 6階 役員会議室
出席者 (敬称略)	<p>国内支援委員</p> <p>林 春男 京都大学防災研究所 巨大災害研究センター教授 池田 浩敬 常葉大学 社会環境学部長・学科長/教授 岡積 敏雄 独立行政法人土木研究所 水災害・リスクマネジメント国際センター上席 研究員 小野 高宏 三菱商事インシュアランス(株) 社長付 BCP 担当部長 藤間 功司 防衛大学校教授 馬場 仁志 JICA 国際協力専門員 濱口 伸明 神戸大学経済経営研究所長 渡辺 研司 名古屋工業大学教授</p> <p>外務省 臼井 絢一 国際協力局 国別開発協力第一課</p> <p>経済産業省 関口 訓央 通商政策局アジア大洋州課 沖田 俊介 通商政策局アジア大洋州課</p> <p>JICA 安達 一 東南アジア・大洋州部 次長 高林 博史 東南アジア・大洋州部 計画・ASEAN連携課 西川 真史 東南アジア・大洋州部 東南アジア第一課 堀 淳子 東南アジア・大洋州部 東南アジア第二課 永友 紀章 農村開発部 次長 中本 明男 産業開発・公共政策部 産業・貿易第一課 企画役 竹谷 公男 客員専門員 不破 雅実 地球環境部 部長 山内 邦裕 地球環境部 次長 永石 雅史 地球環境部 参事役 宮坂 実 地球環境部 参事役 三牧 純子 地球環境部 防災第一課 企画役 山下 望 地球環境部 防災第一課 貝谷 一樹 地球環境部 防災第一課 勝間田幸太 地球環境部 防災第一課 松元 秀亮 地球環境部 防災第一課</p> <p>調査団 高橋 政一 総括/広域 BCP 策定 2/防災計画 辻 禎之 副総括/広域 BCP 策定 1 瀬川 秀恭 災害リスク評価リーダー 木根原良樹 広域 BCP 策定 3 高木 豊博 社会基盤調査 高橋 信吾 経済・産業分析 田中 元 洪水 1 山田 敏博 地震/津波/火山 野中 広美 業務調整/事務局運営/災害リスク評価補助(地質ハザード) 須賀 直樹 社内バックアップ</p>

議 事	09:00 開会 09:00 地球環境部長挨拶 09:05 委員及び参加者紹介 09:10 背景説明 09:15 議題 (1) プロジェクトの内容、成果の確認 高橋 (2) アセアン地域のハザード・リスク評価 (コンポーネント 1) 瀬川 (3) 産業集積地における広域 BCP の取組み (コンポーネント 2) 辻 (4) 今後の予定 高橋 11:10 閉会 (議事録は別紙参照)
配 布 資 料	1) 議事次第 2) 国内支援委員会参加者リスト 3) 国内支援委員会の設置について 4) 国内支援委員会委員名簿 5) プロジェクトの内容、成果の確認 6) アセアン地域のハザード・リスク評価 (コンポーネント 1) 7) 産業集積地における広域 BCP の取組み (コンポーネント 2) 8) 今後の予定 9) パネルメンバー 10) 広報資料 1
別 紙	議事録
今 後 の 予 定	配布資料 8)

以上

議事録(案)

アドバイスおよび質疑応答

1. プロジェクトの内容、成果の確認

林委員長	発表にあった GIS データベースはスタンドアロン型か WEB GIS を想定しているか。
調査団 (瀬川)	現在はスタンドアロン型を考えている。データは AHA センターに移管するため、できるだけ一般に利用可能な形式にしたいと考えている。
林委員長	一般に利用可能な形式での提供をお願いしたい。

2. アセアン地域のハザード・リスク評価 (コンポーネント 1)

藤間委員 :	津波など過去のデータが少ない災害は、既存の災害データベースを利用するだけでなく、科学的手法に基づき予測可能なリスクも考慮したほうがよい。
渡辺委員	① 本調査で提案するメンテナンスはどのように行うか。運用体制をどのように行うか。 ② 被害額を算出するために GDP を利用しているが、各産業分野のプラス成長とマイナス成長を相殺した見かけの成長率を示しているため、注意が必要。 ③ 経済被害を判断する場合に、地域と期間を明確にしたほうがよい。産業シフトの影響を考慮する必要がある。 ④ カントリーレポートの中で、素データを提供し、ユーザーが自由に活用できるようにしたほうがよいのではないかと。
調査団 (高橋)	① パネル、ワークショップ、シンポジウムなどを数多く開催し、広域 BCP の認識を高めていく。 ④ カントリーレポートに、素データを掲載する予定。総合リスク評価についてもカントリーレポートの中に記述により記載する予定。また、詳細については、関係機関と相談しながら進める。
不破部長	タイでも JICA の支援で MP(マスタープラン)を策定したが、その後活用されていない。リスク評価を実施するだけでなく、今後も利用・活用される仕組みづくりが重要である。
岡積委員	① 総合リスクと自然災害リスクの使い分けの違いは何か。 ② パイロット地域で想定する自然災害は決定されたものか。例えば、ベトナムでは津波被害は想定しなくてよいか。カビテで津波被害を想定する必要があるか。台風とサイクロンの用語が混在しているが、この違いは何か。台風に統一してもよいのではないかと。 ③ 本調査が AHA センター支援であるならば、国内支援委員会では次の AHA センターでの会議に向けてのインプットを議論すべきではないかと。
調査団 (高橋)	① 総合的リスクは対象国での卓越したリスクを指している。また、パイロット地域で発生する自然災害はより詳細に調べることにしている。 ② パイロット国で対象とする災害種は最終確定ではない。今後、国内支援委員会等からのアドバイスを受けながら確定する。 ③ 国内支援委員会からは自然災害リスクの評価方法、広域 BCP の定義と策定手法等のアドバイスを期待している。研究者・有識者パネルは調査終了後に広域 BCP を広げるための核になる人材を育てるために設置している。国内支援委員会と研究者・有識者パネルとは直接的にリンクするものではない。
林委員長	研究者・有識者パネルと AHA センターとの関係性は？
調査団 (高橋)	調査団が AHA センターにコンタクトする。また、AHA センターと JICA は研究者・有識者パネルやワークショップ等を共同で開催する。
林委員長	AHA センターはサーチアンドレスキューがメインの機関であり、本調査は AHA センターのスコープを超えた壮大なプロジェクトである。この様な状況の中で、どのように AHA センターのキャパシティディベロップメントを実施するのか。AHA センターのキャパシティディベロップメントの実施者は誰か。
調査団 (高橋)	調査団と AHA センターが密に連絡を取り、調査を進める。国内支援委員会や研究者・有識者パネルでのアドバイスは調査団を通じて AHA センターに伝え、能力向上に役立てる。
馬場委員	AHA センターはサーチアンドレスキューがメインであるが、リスク評価担当者も若干名いる。JICA はリスク評価分野の能力強化に関して AHA センターを支援する方針。
林委員長	① 総合的リスク評価とは通貨、外交、政情などを含む観点からのリスク評価を総合的リスク評価と呼んでいるのか。 ② 広域 BCP 策定を行う際にはこのような総合的リスク評価が必要であろう。しかし、全てのリスクを対象とすることはできないので、本調査では自然災害リスクにのみターゲットを絞って実施しようという考えではないかと。 ③ 本調査で広域 BCP のテンプレートを作成することにより、ASEAN 各国が活用できる仕組み作

	<p>りを目指したほうがよい。</p> <p>④ 企業も個々の特殊な事情により、日常的なもの、内的なものは共有したがる。しかし、非日常的なもの、外的なものは共有したいと考えており、共有できると考えている。この考えをBCP策定のチャンスとして考えてはどうか。地域が共通認識を持つようになり、結果的に個々の企業の防災に対するキャパシティを高めることにつながるのではないかと。</p>
小野委員	<p>① どのようなウェブサイトで情報を公開していくか。</p> <p>② ASEAN事務局との関係は？</p>
調査団 (高橋)	<p>① AHAセンター、ASEAN事務局、Preventionwebなどを考えている。</p> <p>② ASEAN事務局とも協議しながら調査を進めている。</p>
安達次長	<p>AHAセンターとASEAN事務局は別の組織である。本調査の実施については、ASEAN事務局とは協議しながら進めており、後押しが得られている。</p> <p>ASEANで実施される防災関連会議にはAHAセンターの所長とASEAN事務局の防災担当が参加することになっている。</p> <p>AHAセンターが緊急対応のみを扱う機関であれば、将来的な展望が望めず、事前対策にも注視した本調査はかなりチャレンジングな試みである。</p> <p>本調査での総合的リスク評価の総合の意味するところは、複数の災害を扱うという意味であり、サプライチェーンを含めた企業にとってのリスクを評価することを目的としている。</p>

2. 産業集積地における広域BCPの取組み（コンポーネント2）

池田委員	<p>① 「誰のためのBCPか」ということを明確にしないと、主体にとってのメリット、主体の重点項目、重点業務への配分などが決められず、予定調和的にBCPが策定される恐れがある。BCPは使用者が策定する必要がある。</p> <p>② BCPをどのように根付かせるか。</p> <p>③ 安全レベルの目標値をどのように設定するか。</p>
調査団 (高橋)	<p>① プロジェクト開始から議論を続けているが、地方自治体が主体と考えている。インフラ事業体や企業が独自のBCPを策定するための基礎情報を整理することも目的としている。</p>
林委員長	<p>防災計画との違いは何か。</p>
調査団 (高橋)	<p>産業、企業に特化した計画がBCPと考えている。</p>
林委員長	<p>日本でもまだ行われていない試みを、海外で3回程度ワークショップを実施することで策定できるとは到底思えない。</p> <p>官民連携の考えを元に、個々の企業や事業体と地方自治体と同じテーブルに付き、共通理解を図ることが重要。</p>
関口氏 (経済産業省)	<p>経産省では補正事業として、民間企業に対するBCP策定支援を実施している。地方自治体は住民救助が最重要と考えるため、企業への支援はわずかなものである。工業団地単位であってもBCP策定は日本でも非常に難しい。</p> <p>ロジャナ工業団地への支援もほぼ決まっているが、ロジャナ工業団地を管轄する地方自治体であるアユタヤ県もまだ、巻き込めていない。今後も、随時、紹介していきたい。</p>
林委員長	<p>民間ではBCPが、地方自治体では地域防災計画が既に存在する地域における官民がISO22301をツールとして取り組む共通認識を持つことが重要ではないか。また、ISO22301自体がガイドラインであり、本調査では、ISO22301に肉付けし、官民連携する仕組みづくりが必要なのは。</p>
渡辺委員	<p>① 受益者はだれか。</p> <p>② 地域の経済と雇用を守ることが重要。企業がより強くなることで、地方自治体にも便益があるというwin-winの関係が出来上がるとよい。官民の連携がスムーズに実行されるように、連絡協議会を立ち上げる。さらに、演習を行うことで、策定したBCPが実際に役立つものかどうかを確認する必要がある。経済界側(JETROや商工会議所など)にインセンティブを与えて、官民連携のメリットを感じてもらう必要がある。日系企業を巻き込み、日系企業を助けることで、その地域の経済を守ることができるという仕組みづくりを目指してほしい。</p>
小野委員	<p>DDPM(タイ)、BNPB(インドネシア)でBCP策定の取組みを普及したことがあるが、行政の理解を得ることが難しかった。地方公共団体向けのBCPガイドラインを日本の内閣府が作成した。この考え方を本調査に落とし込むと、調査の方向性が明確になるのではないかと。</p>
林委員長	<p>地方自治体が主体となり、広域BCPの策定を目指すのであれば、調査の目的を達成できないであろう。(1)リスクマッピングの中で自然災害を対象とすることを標準化し、(2)ビジネスインパクトアナリシスを行わなければ、地域防災計画との差別化ができない。</p> <p>対象地域の人たちが、自分たちでリスクを知ることができるということが重要である。対象地域の人たちが独自に実行でき、取り入れるかどうかの判断をするところまで行くのが理想である。</p>

不破部長	<p>タイの洪水の際に、タイ政府はMPを策定済みであったが、活用していなかった。民間は官民連携への参加に際し、官民それぞれのリスクを十分に把握できていない。保険会社も洪水被害による保証を行わない可能性があり、日本企業が洪水被害地域に残れるかどうかは分からない。インドネシアはまだ発展途中のため、AHAセンターなどへの過大な期待はしないほうがよい。ケースバイケースで、現実的なシナリオを作る必要があるのでは。</p>
安達次長	<p>地域や国によって、災害種やインフラ事業者の影響力、官民のバランスなどの状況が異なるであろう。これらの異なりを本調査で見ることができるのでは。</p> <p>タイの事例のように人的被害が少なく、経済的被害が大きいという被害は今後増えるのではないか。被災時にはまずは人命救助というのが鉄則だが、今後は地域のコアになる産業をも守っていこうというチャレンジングな調査である。</p> <p>行政がさらに手当てすべきことがあるのではないかということが本調査の出発点であった。</p>

2013年09月05日(木)

10:00 - 12:00 6階特別会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』

第二回国内支援委員会 出席者リスト

国内支援委員

林 春男	京都大学防災研究所 巨大災害研究センター教授
池田 浩敬	常葉大学 社会環境学部長・学科長／教授
岡積 敏雄	独立行政法人土木研究所 水災害・リスクマネジメント国際センター上席研究員
小野 高宏	三菱商事インシュアランス(株) 社長付 BCP 担当部長
檜府 龍雄	JICA 国際協力専門員
藤間 功司	防衛大学校教授
濱口 伸明	神戸大学経済経営研究所長
渡辺 研司	名古屋工業大学教授

経済産業省

上原 英司	産業技術環境局認証課
沖田 俊介	通商政策局アジア大洋州課
関口 訓央	大臣官房調査統計グループ経済解析室

JICA

安達 一	東南アジア・大洋州部 次長
西川 真史	東南アジア・大洋州部 東南アジア第一課
奥村 将巳	東南アジア・大洋州部 東南アジア第三課
山田 啓子	東南アジア・大洋州部 東南アジア第三課
澤田 聡恵	東南アジア・大洋州部 東南アジア第五課
不破 雅実	地球環境部 部長
山内 邦裕	地球環境部 次長
永石 雅史	地球環境部 参事役
宮坂 実	地球環境部 参事役
宮田 克二	地球環境部 防災第一課 課長
菊入 香以	地球環境部 防災第一課
松元 秀亮	地球環境部 防災第一課
三牧 純子	地球環境部 防災第二課 企画役

調査団

高橋 政一	総括/広域 BCP 策定 2/防災計画
辻 禎之	副総括/広域 BCP 策定 1
瀬川 秀恭	災害リスク評価リーダー
木根原良樹	広域 BCP 策定 3
高木 豊博	社会基盤調査
高橋 信吾	経済・産業分析
田中 元	洪水 1
	業務調整/事務局運 営/災害リスク評価 補助(地質ハザード)
野中 広美	
渡邊 暁	業務調整/災害リスク評価補助(水文気象ハザード)
須賀 直樹	社内バックアップ

日時：平成 25 年 9 月 5 日（木）10:00 ～ 12:00

場所：JICA 本部 6F 特別会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』

第二回 国内支援委員会

議事次第

1. 開会
2. 地球環境部長挨拶
3. 委員および参加者紹介
4. 議題
 - (1) 第 1 回 ASEAN 有識者パネルの結果報告
 - (2) ASEAN10 ヶ国調査の中間報告
 - (3) パイロット地域における活動の中間報告
 - (3)-1 パイロット地域の概要
 - (3)-2 関係機関の組織化
 - (4) パイロット地域のハザード・リスク評価の中間報告
 - (5) 広域 BCP (BCM) のフレームワークと用語の整理
 - (6) 今後の予定
 - (7) 議論
4. その他
5. 閉会

コンサルタント名：OYO インターナショナル株式会社
 株式会社三菱総合研究所
 株式会社建設技研インターナショナル

アセアン地域における産業集積地の自然災害リスク評価と事業継続計画に関する情報収集・確認調査
 第2回国内支援委員会議事録

日 時	2013年9月5日(木) 10:00-12:00
場 所	JICA 6階 特別会議室
出席者 (敬称略)	<p>国内支援委員</p> <p>林 春男 京都大学防災研究所 巨大災害研究センター教授 池田 浩敬 常葉大学 社会環境学部長・学科長/教授 岡積 敏雄 独立行政法人土木研究所 水災害・リスクマネジメント国際センター上席 研究員 小野 高宏 三菱商事インシュアランス(株) 社長付 BCP 担当部長 檜府 龍雄 JICA 国際協力専門員 藤間 功司 防衛大学校教授 濱口 伸明 神戸大学経済経営研究所長 渡辺 研司 名古屋工業大学教授</p> <p>経済産業省</p> <p>上原 英司 産業技術環境局認証課 関口 訓央 大臣官房調査統計グループ経済解析室 沖田 俊介 通商政策局アジア大洋州課</p> <p>JICA</p> <p>西川 真史 東南アジア・大洋州部 東南アジア第一課 山田 啓子 東南アジア・大洋州部 東南アジア第三課 澤田 聡恵 東南アジア・大洋州部 東南アジア第五課 山内 邦裕 地球環境部 次長 永石 雅史 地球環境部 参事役 宮坂 実 地球環境部 参事役 宮田 克二 地球環境部 防災第一課 課長 松元 秀亮 地球環境部 防災第一課</p> <p>調査団</p> <p>高橋 政一 総括/広域 BCP 策定 2/防災計画 辻 禎之 副総括/広域 BCP 策定 1 瀬川 秀恭 災害リスク評価リーダー 木根原良樹 広域 BCP 策定 3 高木 豊博 社会基盤調査 田中 元 洪水 1 野中 広美 業務調整/事務局運営/災害リスク評価補助(地質ハザード) 渡邊 暁 業務調整/災害リスク評価補助(水文気象ハザード) 須賀 直樹 社内バックアップ</p>
議 事	<p>10:00 開会</p> <p>10:00 地球環境部次長挨拶</p> <p>10:05 委員及び参加者紹介</p> <p>10:10 議題</p> <p>(1) 第1回 ASEAN 有識者パネルの結果報告 高橋</p> <p>(2) ASEAN10ヶ国調査の中間報告 高橋</p> <p>(3) パイロット地域における活動の中間報告 高橋</p> <p>(3)-1 パイロット地域の概要</p> <p>(3)-2 関係機関の組織化</p> <p>(4) パイロット地域のハザード・リスク評価の中間報告 瀬川</p> <p>(5) 広域 BCP(BCM)のフレームワークと用語の整理 辻</p> <p>(6) 今後の予定 高橋</p> <p>(7) 議論</p> <p>12:10 閉会 (議事録は別紙参照)</p>
配布資料	プレゼンテーション

	1) 配布資料 1 第 1 回 ASEAN 有識者パネルの結果報告 2) 配布資料 2 ASEAN10ヶ国調査の中間報告 3) 配布資料 3 パイロット地域における活動の中間報告 4) 配布資料 4 パイロット地域のハザード・リスク評価の中間報告 5) 配布資料 5 広域 BCP(BCM)のフレームワークと用語の整理 6) 配布資料 6 今後の予定 参考資料 7) 配布資料 7 国内支援委員会委員名簿 8) 配布資料 8 第二回国内支援委員会参加者リスト 9) 配布資料 9 第一回 ASEAN 有識者パネル報告 10) 配布資料 10 パイロット地域の概要 11) 配布資料 11 パイロット地域における ABCP 策定準備会議
別紙	議事録
今後の予定	配布資料 6

以上

議事録

アドバイスおよび質疑応答

1. パイロット地域における活動の中間報告

渡辺委員	具体的に工業団地に対してどのような調査を実施したか。
高橋	工業団地管理会社、工業団地に入居する企業、工業団地を管理する行政機関、インフラ業者、ライフライン事業者を対象に (1) 自然災害対策の状況調査 (2) BCP の策定状況 (3) 防災組織・緊急対応組織の有無とその概要 などの項目を調査している。
渡辺委員	各関係者からのニーズ調査は行っているか。
高橋	行っている。詳細については、後ほど説明する。

2. 広域 BCP(BCM)のフレームワークと用語の整理

林委員長	調査団は 11 月に広域 BCP 策定のためのワークショップ(W/S)を開催する。W/S をより効果的に実施するためのアドバイス等があれば、いただきたい。本日の国内支援委員会で、方針が決定されれば、調査団も自信をもって調査を進めることができる。最終的には広域 BCP(BCM)の定義を固めたい。
渡辺委員	資料 1 のスライド 3 に「ABCP を広げるためには、当該国の政治的意思、中央政府の興味・関心が不可欠」とある。一方でスライド 4 には「シンガポールは住民、企業、産業を守る重要性を認識」「マレーシアでは住民を守ることが第一で、企業への対応に重点を置かない可能性もある」とあるが、事業継続の目的の一つとして、中央レベルでは国家競争力の確保であり、地方レベルでは地域住民の安全と同時に、地域雇用や経済の確保がある。そのため、自治体を深く巻き込むためのアプローチが必要となる。W/S 実施後に企業からあがった要望を行政機関がどのように取扱うか、不明確になる可能性がある。 シンガポールは進出する企業に補助金を与えることで外資系企業の取り込みを行ったり、既に進出している企業を確保するなど「成長のための事業継続」を実施しているところもある。今後起こるであろう自然災害に対しての備えという「待ち」の観点での事業継続計画では、魅力に欠ける。そのため、積極的な意味で事業継続計画を策定することを謳った方がよい。例えば、資料 5 スライド 3 にある『中央政府/関係機関』の項目に既存の企業により成長してもらうための事業継続計画や災害多発地域でのアプローチ等を記載し、外資系企業が進出しやすく、根付かせるための情報を記載してほしい。 『地方政府/関係機関』の項目には、地域雇用や経済の確保の重要性を明記し、政府機関も積極的に関与し、W/S に参加する必要があることを強く訴えてほしい。
池田委員	関係者間の利害関係が一致するかどうか懸念材料である。BCP の大前提は資源の不足であり、資源が不足する場合の優先順位付けが BCP である。例えば、電力が回復した場合に、その電力が 100%そのまま工業団地に配給されるとは限らない。 ① 各主体が企業や工業団地を支えるという展開に疑問がある。各企業や工業団地が方針や非常時の優先順位等がない中で、広域 BCP を策定しても予定調和的なものになってしまうのではないか。 ② 個別 BCP が策定されておらず、優先順位が固まっていないため、全体ではなく、一部のみに着目した広域 BCP (理想像の・現実的でない広域 BCP) ができてしまうのではないか。 リソースの配分を考えると全体 (現実や実態) を考えずに、策定されてしまう心配がある。本来は、全体を鑑みた (現実に起こり得る状況を想定した) 広域 BCP が策定されるべきである。
小野委員	本調査の対象に住民も入れたほうがよい。住民も対象に入れた方が中央政府の興味も引けると思う。住民イコール従業員というケースも多くある。
林委員長	小野委員のイメージは、政府機関－企業・工業団地の開発者－インフラ・ライフライン－住民が他の 3 者とそれぞれに関係性を持つ(つまり、図で表すと正四面体)という理解でよいか。 例えば、住民は雇用(企業・工業団地)、納税(政府機関)、ライフライン(インフラ・ライフライン)などで 3 つの主体とつながりがある。この概念を持たせるため資料 5 のスライド 3 に住民を入れたほうがよい。 資料では企業と中央政府の関係として納税が記載されているが納税は企業からだけでなく住民からも行われている。雇用は企業と住民との間の関係であるが、企業が撤退した場合は雇用が失われ、ひいては税収が失われる。
小野委員	国際防災の分野では CBDRM(Community Based Disaster Risk Reduction and Management)という考え方がはやっており、住民も対象とすることで、CBDRM との関連性も

	アピールできる。
宮坂参事役	指摘はもっともである。タイの洪水の場合も住民の雇用問題が上がった。地域経済の発展を考えると住民の担う役割は大きい。地方自治体にとって住民はコミュニティ防災の観点からも、ステークホルダーの1つとして捉えれば、説得力が出てくる。
林委員長	まず個々の関係者が事業継続を考えてから、広域 BCP を考える方がよいという池田委員の発言に対してのコメントはあるか。
岡積委員	現状の防災計画や制度の中で、何が不足するかということを実地側が理解できていない。そのため、11月のW/Sの前に、各国の防災対策・制度の現状やこれまでの被災経験での弱点などを整理・把握し、現場に入っていくことが重要である。 BCPのポイントは事業の継続であるので、JICAが調査した経済被害インパクトのモデル（DR2ADモデル）などを活用して、メリットがどこにあるかを説明したほうがよい。 実施の方向性はよいが、プレゼン方法や事前準備を周到に行う必要がある。
藤間委員	① 個別企業BCPなしかつ広域BCPなし、② 企業BCPありかつ広域BCPなしなど、何段階かの比較があると分かりやすい。広域BCPが策定されることで関連する全事業者全員にメリットがあることをアピールしたほうがよい。
濱口委員	東南アジアの工業団地では多国籍企業の入居が多く、工業団地内の企業同士の情報共有が少ない。一方で、BCPに関する関心の共有はされている。BCPに関する情報共有は金銭では測れないメリットがある。本調査は高メリットの情報共有ができるアプローチの1つの方法である。プレゼン資料の中で広域BCPの有無によるメリットが描かれているが、もっと具体的に、たとえば、復旧する際の連携・協力や、日常の防災対策におけるインフラの強化・整備の方法の情報共有をすることで、より良い形になっていくイメージを持ってもらいやすいような1つのシナリオを作成したほうが分かりやすい。
林委員長	池田委員と濱口委員の意見は異なる視点からの意見であるが、内容は類似している。個々の主体が持っているBCPと広域BCPの関係性が不明確であり、説得力がない。また、工業団地の入居企業同士の情報共有が少ない中で共通のベクトルとして進めることができるメリットを明示化するという理解である。
渡辺委員	広域BCPがステークホルダー間のどの場所に位置するかを考える必要がある。各ステークホルダーの利害関係を調整するものとして働くことが理想である。 広域BCPの策定とメンテナンスの主体を明確にしたほうがよい。広域BCPはアグリーメントやスキームのイメージで関係者同士の連絡・調整・協議の体制を作ることであると考える。広域BCPは関係者同士の連絡・調整・協議を行うことで、リソースの最適化を図っていくことである。 希少資源の不足はその時々で変わるものであるが、より多くの企業が救われる方が早く復電するなどの協定があり、最終的には中央政府がその便益も含めて判断すべきことである。これは双方の情報共有やコンセンサスなしには実行できない。資料5のスライド3の図で、関係機関の中心に広域BCPを置くことで、イメージ化ができる。
濱口委員	フィリピンの対象工業団地ではほとんどの入居企業が中小企業であり、各企業がBCPを策定する能力が不十分であると思われる。企業のBCP策定能力が低いことが分かれば、今後、支援が必要な部分が判明する（例えば、中小企業に対するBCP策定支援等）ことも1つの利点である。
林委員長	公的機関が地域のハザード情報を全員に提供するという前提なしには、先ほどの池田委員の疑問は解決できない。関係者同士が運命共同体になるというニュアンスが必要である。リスクの明示とビジネスインパクトを測る手法を公的機関が提供できることが必要。これまでの個別BCPは自企業のみが失敗しないための計画である。個別BCPを策定する際に、自企業がコントロールできる範囲の外にあるインフラやライフラインなどは通常通り稼働していることを暗黙のうちに前提としており、この点が個別BCPの弱点となる。 本調査では地域全体が被災した場合を想定しているので、中央政府がリスクの分析を行い、ビジネスインパクトを評価する手法を教育・研修・提供できるということを明記したほうがよい。企業にとっては自企業を守ることが主目的である。企業が地域に利益を見出すことができれば、地域との関係性を持ち続けるはずである。企業も関係者間で情報共有することで、自分たちの持続性も上がるという点が広域BCPを考えるきっかけになる。 インフラ事業者は自分たちのためにしかハザード、リスク評価をしないだろうし、企業がコンサルタントに委託して実施しても費用と比べて納得がいく結果が得られるとは限らない。つまり、日本のように中央政府か地方政府が被害想定と称して実施したものを利用することになる。これまでの企業BCPの中には地域全体が自然災害のようなものによって被災することは想定されていない。本調査の新しい点は自然ハザードによる広域な被災のケースをこれまでの企業BCPにプラスしたと考えることができる。 企業サイドに話をする場合には、自然災害は防災を考える時の大きな要素の一つであり、企業は低予算で、企業BCPに取り込むことができるということアピールし、防災サイドに話をする場合は減災のメリットのアピールだけでなく減災による地域の成長をアピールする方法があ

	る。 減災の話題になると施設建設の話になりがちであるが、成長の継続や社会活動、住民の安全な生活を守ることをゴールとしたときに、ハード面の強化だけでなく企業体の引き留めやライフラインの復旧のレベルを考えるべき。最初は顧客が満足する程度の復旧でもよいはずだ。 本調査の W/S には 2 つの別の視点(開発と防災)からの参加者がいるはずなので、広域 BCP が成立するためには、その両方に対してのアピールが必要である。
渡辺委員	・アセアン地域の自然災害リスク評価に関して、現在は事実をそのままプロットしただけの静的なデータであるが、インフラに対する流量などのデータをプラスし、周辺環境がストップすることによる影響を工業団地単位まで落とし込み、フロー化されたものが付加されるとよい。被災によって、どのようなもののどのような流れがストップするかということを見せ、ハザードマップと重ねることで、経済的な被害算出が出やすくなる。このような情報を付加してほしい。 ・ABC という用語は美しいが、いろいろなところで使われているので、混乱を避けるためにも「Area BCP」とした方がよい。
小野委員	W/S で使用する予定の質問票はすでに存在するか。
辻	現在、詳細については検討中であるが、配布資料 5 のスライド 9 にある内容を考えている。ただし、ハザードは除く予定。

3. W/S の進め方について

林委員長	パイロット国であるインドネシア、フィリピン、ベトナムの 3 ヶ国での W/S を成功裡に収めるための進め方についてコメントをいただきたい。
永石参事役	現地では企業 BCP の概念すらない状況の中で、1 回目の W/S で広域 BCP の話をしても現地に理解してもらえない上に、受け入れられないだろう。まずは個別 BCP を理解してもらおう方がよい。
池田委員	各企業の BCP の内容を公開してもらっても困難であると思う。広域 BCP を策定することでそれぞれの関係者にメリットがあるということを理解してもらうことが必要。 まずは BCP を理解してもらって、広域 BCP を理解してもらおうという順序が必要。
林委員長	BCP とは、あるいは BCM とはということから話を始めて、「地域全体で考えるべき」という結論に持っていくのがよい。
渡辺委員	個別 BCP の積み上げだけでは事業継続が達成できないという限界を明らかにしなければ、現地のニーズが出てこない。限界が分かれば、行政への要請内容が判明する。何があれば、より行動ができるか。企業の BCP のどこに限界があるかという点が分かれば、広域 BCP の策定者が誰かということが分かるだろう。 つまり、第 1 回目の W/S では「個別 BCP の限界」と「課題」を洗い出すことが必要である。 解決方法がなかったとしても、この点をぎりぎり詰めておいた方がよい。
林委員長	個別 BCP の限界を明らかにすることが、広域 BCP の策定に必要なことであるということの大前提とすると、W/S に参加する民間企業が既に BCP を持っている必要がある。 BCP を知らない民間企業が W/S に参加した場合、3 回の W/S では広域 BCP 策定は終わらない。
渡辺委員	日本企業に参加してもらい、W/S を引っ張って行ってもらう必要がある。
林委員長	現地の政府機関からは、「本調査は日系企業のために実施しているのか？」という質問を受けることがある。これに対しては、どう答えればよいか。
渡辺委員	日本はこれまでの経験から、特にサプライチェーンに関しては相当の打撃を受けているため、国を挙げて取り組んでいる。そのため、日本の経験を教訓として共有したく、日系企業が参加している。パイロット対象の工業団地も日系企業の多い場所を選んでいることもあり、これも含めて、相手に説明するロジックも準備しておく必要がある。
林委員長	JICA 的にはどうか?
宮坂参事役	日本の経験を途上国と共有し、途上国でもできるアプローチで協力することを謳っている。日本のように台風、地震、河川を抱える日本が経済発展してきた日本の歴史を共有するという目的がある。
林委員長	あくまで、ケーススタディの 1 つとして現地で展開するので、比較的先駆的な企業にターゲットを置くようにする。第 1 回 W/S では個別 BCP の限界を明確に理解してもらい、抱えている問題を洗い出すことを目的とする。 企業がリスクとして考えていることの中に、自然災害リスクはどのぐらいの脅威で考えていると思うか。
渡辺委員	企業にとっては労働問題やテロなどのほうが大きな問題として捉えているだろう。 本調査の場合は、自然災害をターゲットとするということを先に言ってしまう方がいいと思う。 人的、政治的なリスクは東南アジアに進出している企業は幅広く持っていると考えられる。
林委員長	企業が問題と認識しているリスクのリストアップはしなくてもよいか。
渡辺委員	宿題として企業が認識しているリスクのリストアップを行うことは意味があるが、あくまで参加者の共通の課題は自然災害である。将来的には、自然災害プラス犯罪被害などの地域の特性

	を反映した内容とすることになるが、今回は共通認識として認められている自然災害を対象として実施する。
林委員長	1 回目の W/S の前に企業が認識しているリスクのリストアップと順位付けを行う。企業が認識しているリスクとして自然災害がリストアップされなかった場合も、リスクの高さを説明し、自然災害に対する対策として、広域 BCP の策定が必要であることを説明する。 リストアップされた場合は、リスク評価を行う費用が高いなど企業が抱えている課題が出てくるとよい。リスクのリストアップを行う際に、自然災害を特出しするかどうか、埋め込んで質問するかについてはどちらがよいと思うか。
渡辺委員	テーマが自然災害となっているので、参加者も自然災害リスクを意識していると思う。しかし、できればプレーンな形から入れるとよいと思う。自然災害のリスクを他のリスクと比較したときに、高く位置付ける企業や低く位置付ける企業といったように差異が出たほうがおもしろいと思う。
林委員長	流れとしては、第 1 回 W/S の前に企業が認識しているリスクのリストアップと順位付けを宿題として出し、個別 BCP には限界があることを共通認識してもらおう。その解決策が広域 BCP であるという結論になるであろう。 調査団が実施したリスク評価の結果を何回目にプレゼンするのがよいか。リスク評価は正当な手法で実施しており、プレゼンの順番は①洪水、②高潮、③地震、④津波の順番でハザードを考えるとよいと考える。再現確立を考えると洪水のリスクは高く、海に近い地域では高潮のリスクも高くなる。気象災害系のリスクは頻度としても多いはずだ。気象災害のほかにも地震、津波のリスクもあるという流れとなる。 1 回目に出してはどうか。せっきくの貴重な情報であるから早めに出し、個別の企業の対策だけでは対応できないという説明がよいのではないか。 地域全体が一度に被災するという場合を想定することで、今の BCP の弱点を認識してもらうことも重要である。
岡積委員	現状の BCP で調査団が調査したハザードの種類と規模に対応できるかどうかを示すことが、個別 BCP の限界を知ることになるのではないか。第 1 回でその限界を示し広域 BCP を参加者に認識してもらったうえで、第 2 回に広域 BCP を策定することでできるようになることを示していくとよいのではないか。
林委員長	第 1 回 W/S までに、リスク評価が完了するか。
瀬川	順調に進めば、完了する。
林委員長	リスク評価結果のプレゼンは 1 回目で実施する。現地のその地域にあるリスクを発表し、その自然災害リスクにも対応できるようにする必要があることを認識してもらい、広域 BCP の必要性を認識してもらおう。 個別 BCP の限界が分かることで、個々の組織がこれまでに乗り切れていないビジネスインパクトも判明する。 第 2 回 W/S ではほかの企業体は何を問題として捉えているかが分かる。また、客観的なインフラの回復情報などが分かるので、これまで独自に考えていた状況と地域全体の中で多様な考え方があることを参加者が知り、もう一度、自分たちへの影響を再確認してもらおうことが第 2 回 W/S のテーマになると考える。
濱口委員	広域 BCP または個別 BCP の有無と今回のシミュレーション結果を重ね合わせて、結果の差異を示すことは可能か。
高橋	本調査ではハザードとリスクの両方を評価することにしている。ハザードの評価結果と BCP の有無による結果の違いを示すことはできないが、リスク評価の結果であれば、可能である。見せ方を検討中である。
林委員長	例えば、日本であれば、地震に関する人的被害や建物被害から機能喪失期間を算出し、被害想定としている。本プロジェクトでは、もう 1 歩進めて、ライフラインの機能喪失による影響を想定できるか。ライフラインの機能喪失による影響を現地に見せることができれば、参加者に大きなインパクトを与えることができ、現状でライフラインの遮断を考えていないというケースがあった場合に、これを改善できる。 また、インフラの機能停止のラフな推定値が出せるか。
瀬川	ハザードの評価までは資料 4 で示した内容で実施する。リスクについては日米の経験や事例(関数などの値)を提示し、現地の場合はどうなるかということが現地側から上がってくるような方向で進めたい。
林委員長	日米の事例を示し、現地の状況に当てはめて考えるという内容を第 2 回の W/S テーマとした方がよいか。
池田委員	リスク評価は広域 BCP のボトルネック分析ができる程度でよい。
小野委員	参加者の理解を促すには、このような流れが必要であるが、一方で 3 回の W/S で完結できるかどうか心配である。

関口氏	<p>日本国内で経産省が実施した広域 BCM の普及会合について報告したい。第 1 回国内支援委員会以降も調整が進まなかった会合がいくつかあった。調整がうまく進まなかった会合に共通することはマルチステークホルダーの利益を考えなければならないと思っていたことである。調整が進まなかったグループに対しては「ここにいる参加者の利益を優先する」ように言ったところ、まとまった例が多くあった。この様に主体的に関与している人たちの利益をまず考えることで、協議が進むようになる。</p> <p>自治体と企業は相対する側面があるが、優先して復旧するインフラについて、民間が自治体に要望するという形式だとまとまりやすい。一方で、インフラ事業者は積極的な参加は見られない。その理由は需要者側の交渉力が上がってしまい、インフラ業者が希望している個別交渉ではなくなってしまうためである。インフラ事業者を広域 BCM に取り組むことは日本国内でも非常に難しい。</p>
林委員長	<p>第 2 回 W/S の内容を考えることは難しいが、第 1 回 W/S のイメージは共有できたと思う。第 1 回 W/S の前に企業が認識しているリスクのリストアップと順位付けを宿題として出し、個別 BCP には限界があることを共通認識してもらいつつ、自然災害のリスクを認識してもらおう。その解決策が広域 BCP の開発であるという結論に結び付けるような W/S を構成することとし、第 2 回 W/S の内容は第 3 回国内支援委員会で協議することとしたい。</p>
檜府委員	<p>途上国の実態やマインドを理解し進めることも必要である。資料の例にある電力の復旧について言えば、遅いと日本側が感じてても、現地では社会的な常識として遅いとはされないことがある。この様な現地とのマインドの違いも考慮すべきである。</p>
林委員長	<p>W/S を成功させるためには 3 つの秘訣がある。</p> <p>1 つは主要なステークホルダーが全員参加することである。本調査の W/S でも日系企業が参加していれば、「復旧が遅い」という意見も上がるだろう。そうすれば、現地も「日系企業は遅いと感じている」ということを認識できるようになる。</p> <p>2 つ目は適切な専門性をインプットすることである。制約条件を加えた中での議論が有効となる。</p> <p>3 つ目は適度な時間制限を設けることである。</p> <p>そうすることで、最良の解決方法が見つかると思う。</p> <p>W/S のステークホルダーの設定をうまく行い、異なる立場の人たちが参加することで、W/S が成功するようになる。</p>

2014年01月09日(木)
9:00 - 12:00 6階特別会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』
第三回国内支援委員会 出席者リスト

国内支援委員

林 春男	京都大学防災研究所 巨大災害研究センター教授
池田 浩敬	常葉大学 社会環境学部長・学科長／教授
岡積 敏雄	独立行政法人土木研究所 水災害・リスクマネジメント国際センター上席研究員
小野 高宏	三菱商事インシュアランス(株) 社長付 BCP 担当部長
馬場 仁志	JICA 国際協力専門員
渡辺 研司	名古屋工業大学教授

経済産業省

上原 英司	産業技術環境局認証課
富原 早夏	通商政策局アジア大洋州課
吉田 悟	通商政策局アジア大洋州課
関口 訓央	大臣官房調査統計グループ経済解析室

JICA

佐久間 潤	東南アジア・大洋州部 次長
高林 博史	東南アジア・大洋州部 計画・ASEAN連携課
西川 真史	東南アジア・大洋州部 東南アジア第一課
奥村 将巳	東南アジア・大洋州部 東南アジア第三課
山田 啓子	東南アジア・大洋州部 東南アジア第三課
中島 洸潤	東南アジア・大洋州部 東南アジア第五課
不破 雅実	地球環境部 部長
山内 邦裕	地球環境部 次長
永石 雅史	地球環境部 参事役
宮坂 実	地球環境部 参事役
大槻 英治	地球環境部 参事役
竹谷 公男	地球環境部 客員専門員
宮田 克二	地球環境部 防災第一課 課長
菊入 香以	地球環境部 防災第一課
宮川 聖史	地球環境部 防災第一課
松元 秀亮	地球環境部 防災第一課

三牧 純子	地球環境部 防災第二課 企画役
平野 潤一	地球環境部 防災第二課
松田教男	インドネシア事務所 ASEAN 首席駐在員
片山英城	インドネシア事務所
箭本陽子	インドネシア事務所
中村 隼人	フィリピン事務所
堀 恒平	フィリピン事務所

調査団

高橋 政一	総括/広域 BCP 策定 2/防災計画
辻 禎之	副総括/広域 BCP 策定 1
瀬川 秀恭	災害リスク評価リーダー
木根原良樹	広域 BCP 策定 3
長谷川 浩一	GIS・データベース
福原 弘太郎	業務調整/広域 BCP 策定 4
加地 広美	業務調整/事務局運営/災害リスク評価補助(地質ハザード)
渡邊 暁	業務調整/災害リスク評価補助(水文気象ハザード)

日時：平成26年1月9日（木）09:00～12:00

場所：JICA本部 6F 役員会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』

第三回 国内支援委員会

議事次第

1. 開会
2. 地球環境部長挨拶
3. 委員および参加者紹介
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 - (1) 本調査（プロジェクト）の成果（コンポーネント2）
 - (2) 第1回ワークショップの報告
 - (2)-1 ワークショップの概要
 - (2)-2 インドネシアでのワークショップ
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6. 閉会

コンサルタント名：OYO インターナショナル株式会社
株式会社三菱総合研究所
株式会社建設技研インターナショナル

アセアン地域における産業集積地の自然災害リスク評価と事業継続計画に関する情報収集・確認調査
第3回国内支援委員会議事録

日	時	2014年1月9日(木) 9:00-12:00
場	所	JICA 6階 特別会議室
出席者 (敬称略)		<p>国内支援委員</p> <p>林 春男 京都大学防災研究所 巨大災害研究センター教授 池田 浩敬 常葉大学 社会環境学部長・学科長/教授 岡積 敏雄 独立行政法人土木研究所 水災害・リスクマネジメント国際センター上席 研究員 小野 高宏 三菱商事インシュアランス(株) リスクコンサルティング室長/シニア コンサルタント 馬場 仁志 JICA 国際協力専門員 渡辺 研司 名古屋工業大学教授</p> <p>経済産業省</p> <p>上原 英司 産業技術環境局認証課 富原 早夏 通商政策局アジア大洋州課 吉田 悟 通商政策局アジア大洋州課 関口 訓央 大臣官房調査統計グループ経済解析室</p> <p>JICA</p> <p>佐久間 潤 東南アジア・大洋州部 次長 高林 博史 東南アジア・大洋州部 計画・ASEAN 連携課 西川 真史 東南アジア・大洋州部 東南アジア第一課 奥村 将巳 東南アジア・大洋州部 東南アジア第三課 山田 啓子 東南アジア・大洋州部 東南アジア第三課 中島 洗潤 東南アジア・大洋州部 東南アジア第五課 不破 雅実 地球環境部 部長 山内 邦裕 地球環境部 次長 永石 雅史 地球環境部 参事役 宮坂 実 地球環境部 参事役 大槻 英治 地球環境部 参事役 竹谷 公男 地球環境部 客員専門員 宮田 克二 地球環境部 防災第一課 課長 菊入 香以 地球環境部 防災第一課 宮川 聖史 地球環境部 防災第一課 松元 秀亮 地球環境部 防災第一課 三牧 純子 地球環境部 防災第二課 企画役 平野 潤一 地球環境部 防災第二課 松田 教男 インドネシア事務所 ASEAN 主席駐在員 片山 英城 インドネシア事務所 箭本 陽子 インドネシア事務所</p> <p>調査団</p> <p>高橋 政一 総括/広域 BCP 策定 2/防災計画 辻 禎之 副総括/広域 BCP 策定 1 瀬川 秀恭 災害リスク評価リーダー 木根原良樹 広域 BCP 策定 3 長谷川浩一 GIS・データベース 福原弘太郎 業務調整/広域 BCP 策定 4 加地 広美 業務調整/事務局運営/災害リスク評価補助(地質ハザード) 渡邊 暁 業務調整/災害リスク評価補助(水文気象ハザード)</p>
議	事	<p>9:00 開会</p> <p>9:00 地球環境部次長挨拶</p> <p>9:05 委員及び参加者紹介</p>

	<p>9:10 議題</p> <ol style="list-style-type: none"> (1) 本調査における広域 BCP/BCM システムの概念整理 (2) 本調査の成果（広域 BCP に関する事項） (3) 第 1 回ワークショップの報告 <ol style="list-style-type: none"> (3)-1 ワークショップの概要 (3)-2 インドネシアでのワークショップ (3)-3 フィリピンでのワークショップ (3)-4 ベトナムでのワークショップ (4) ワークショップを踏まえて広域 BCP 策定ガイドブック策定に導入すべき主な視点 (5) 議論 (6) 今後の予定 <p>12:10 その他 12:10 閉会</p>
配布資料	<ol style="list-style-type: none"> 1) 配布資料 01 第 3 回 国内支援委員会 議事次第 2) 配布資料 02 第 3 回国内支援委員会参加者リスト 3) 配布資料 03 第 3 回国内支援委員会 配布資料リスト 4) 配布資料 04 第 2 回国内支援委員会議事録 5) 配布資料 05 第 2 回国内支援委員会 指摘事項と対応方針 6) 配布資料 06-1 本調査における広域 BCP/BCM システムの概念整理 7) 配布資料 06-2 本調査の成果（広域 BCP に関する事項） 8) 配布資料 07-1 第 1 回ワークショップの報告、ワークショップの概要 9) 配布資料 07-2 第 1 回ワークショップの報告、インドネシアでのワークショップ 10) 配布資料 07-3 第 1 回ワークショップの報告、フィリピンでのワークショップ 11) 配布資料 07-4 第 1 回ワークショップの報告、ベトナムでのワークショップ 12) 配布資料 08-1 ワークショップを踏まえ広域 BCP 策定標準ガイドブック策定に導入すべき主な視点 13) 配布資料 08-2 ガイドラインの構成（素案） 14) 配布資料 08-3 広域 BCP（計画書）の構成（素案）、インドネシアの例 15) 配布資料 09 今後の予定 16) 配布資料 10 広域 BCP(BCM)のフレームワークと用語の整理 17) 配布資料 11 実務者セミナー（マニラ）：アジェンダ、出席者リスト、議論内容のまとめ 18) 配布資料 12 プログレスセミナー（ハノイ）：アジェンダ、出席者リスト、議論内容のまとめ 19) 配布資料 13 プログレスセミナー（ジャカルタ）：アジェンダ、出席者リスト、議論内容のまとめ 20) 配布資料 14 広域 BCP 策定ワークショップ 1（マニラ）：アジェンダ、出席者リスト、議論内容のまとめ 21) 配布資料 15 広域 BCP 策定ワークショップ 1（ハイフォン）：アジェンダ、出席者リスト、議論内容のまとめ 22) 配布資料 16 広域 BCP 策定ワークショップ 1（バンドン）：アジェンダ、出席者リスト、議論内容のまとめ
今後の予定	配布資料 09

以上

議事録

アドバイスおよび質疑応答

1. 本調査における広域 BCP/BCM システムの概念整理

渡辺委員	広域 BCP 策定の主体は状況によって異なる。個別組織は BCP や BCM を持っているが、その集合体が必ずしも地域全体の計画ではない。本調査でとりまとめる計画もしくは各広域 BCP に必要な要素を決定し、それら要素を定義するガイドラインを用意してはどうか。成果物として広域 BCP を作ることは大変難しい。工業団地、自治体、国や商工会など、それぞれの組織が広域 BCP をつくる際に必要な枠組みや要素を示し、その要素の意味や広域 BCP を策定する際の注意点等を示したガイドライン的なもののほうが落とし込みやすいのではないか。
林委員長	そもそも日本において BCP と BCM が間違っ理解されている。内閣府が作成した事業継続のガイドラインが存在するために、多くの人は総務的な計画を持てばそれが最終ゴールであると誤解してしまっている。つまり、東日本大震災の時に、ある企業が述べたように「BCP はあったが、BCM はなかった」という事態になっている。BCM をまわした結果の成果物が、目に見える形で文書化した BCP であるという理解が欠けている。この BCP と BCM に対する理解が欠けた状態のまま援助対象国に持って行ってしまっている。この状態が皆さんの間で混乱をきたしている原因だと感じている。つまり、内閣府のガイドラインに則ったかたちでの BCP の完成では、行き詰まり継続的な改善につながらないし、東日本大震災の教訓を受けても計画は何も変わっていない。バックアップオフィスはどこに置くか、何日で復旧するように決めるか、備蓄はどれくらいにするかなどの総務的ディテールの議論は本来の意義に反している。広域 BCP がかなり高度な考えであることは理解できる。しかし、個々の企業体や組織が各自で事業継続を考え、ISO22301 を基にした事業継続マネジメントという枠組みで展開をし、その成果物が文書化された事業継続計画である。本調査は、BCM をまわすことを基本理念とし、その成果物が計画であるということ、地域レベルに拡大するという挑戦だと考える。BCM や BCP を地域レベルに拡大した時には、同じ地域内に存在する全組織が運命共同体となる。例えば、自然災害が発生した場合、企業の個別 BCP だけでは、復旧が困難である。なぜなら、通常、個々の企業が BCP を策定する際は、企業外部のライフラインは通常通り供給されることを想定している。しかし、タイの洪水や東日本の震災の事例を見ても、大規模な自然災害は広域に影響する。そういったときに、個々の企業の事業継続だけでは対応できないため、もうひとつ大きな範囲の中で、どうするかを考える必要がある。これが広域 BCP や広域 BCP という考え方の出発点である。BCM を広域に適応させる。広域 BCM を回す際にはガイドラインが必要で、実際の作業として広域 BCP を、まずはβ版でよいので作ってみるとというのが、私の認識である。しかし、この考えが関係者全員と共通理解できているわけではないので、委員の先生方のご意見を伺いたい。また、JICA が本調査の最終成果品として、計画案を作成することは委員の皆さんにご承認いただき、プロジェクト活動の方向性に GO サインが出せるようにしたい。
池田委員	静岡県でも早い段階から BCP のモデル計画を策定した。現在、第三版の改定を行っている段階であり、初めて BCP から BCM のガイドラインという言い方に変更した。 BCP と BCM の違いは「継続的な計画の修正」だと思う。つまり、マネジメントシステムを実際に試行し、実情の経営計画に反映させることであろう。しかし、これまでに実行された例はない。今は、BCM を経営や経営のための組織体制に取り組むことの重要性に気づいたところである。本プロジェクトが実施する広域 BCP も、技術移転を行い、どれだけ根付くかを考えると、不確定であり、報告書やガイドラインを本棚に並べて終わりになってしまい一度も試したことがないという結果になりかねない。BCM の考え方が相手国側に根付くかどうかは別として、最初から BCM という概念を伝えるべきである。BCM の概念を移転することはそれほどハードルが高くないと考える。実際に、BCM を相手国側がどのレベルまでできるかという問題はあるが、最初から BCM の概念で進めたほうが根付くと思う。日本の中小企業での取り組みをみてもそう思う。
馬場委員	林先生おっしゃるとおりで、今回 JICA が進める広域 BCP の策定はβ版であり、プロジェクト終了後も相手国側が継続的に実施するものである。もうひとつ、加えて難しい点は、本調査では自然災害を対象としているため、広域の範囲がフレキシブルである点である。例えば、地震の場合の被害地域と洪水の場合の被害地域の範囲は異なる。同じまた、ある災害が発生した場合、災害の最中でも被害範囲は異なるだろう状況に応じて広域 BCM の範囲は拡大したり縮小したりしなければならない。現在は、ある前提条件に基づきシナリオを作成し、広域 BCP や広域 BCM を実施しようとしていて実現しようとしているが、本調査での前提条件がすべてを作成する広域 BCP と BCM の参加範囲によって、様々な災害への対応をカバーできている訳ではないということを手相手国側に理解してもらい必要があり、この点が課題である。
小野委員	私も日本企業に対して BCP の策定支援をしているが、まだまだ BCM という考え方はわかって

	<p>もらえない。企業が防災に対して「減災(mitigation)」、「復旧(recovery)」、「再建(construction)」のどれに重点を置くかにもよるが、どうしても「初動体制」ばかりにとらわれてしまう。初動体制を整えれば BCM を実施したと思っている場合があるが、初動であれ継続であれ、実際にマネジメントを行う場合、初動での対応なのか継続的な取り組みなのか2階層に分けると分かりやすい。それとは別に、BCM マニュアルのようなものをつくり、平時のときにどういう体制で検討を行って、どれくらいの頻度で開催して、いつ見直しをして、トレーニングはいつやるかを決めるとよい。そして、災害が起きたら、BCM のなかに落としこみ、計画の見直しを行う、というような二層構造で導入した方が企業にとっては分かりやすい。これを一冊にまとめると、実際にそれを誰に開示するのか、どこまでこれを閲覧する権限を与えるのかといったことを決めることに時間がかかる。有事の際には、災害対策本部のメンバーが、最低限実施する項目を絞り込んでよいと思う。</p>
岡積委員	<p>ERIA ワークショップで時間を延長してまで議論をした内容は「普段からどれだけうまくネットワークを築いて連携をとれるか」であった。それから考えてもまた、JICA の宮坂参事役の話にあった法制度整備には時間がかかるので、広域 BCM の検討には法整備が必要であるという点に違和感を覚えた。決して、工業団地が作成する広域 BCP も災害対基本法に則っているわけではないと思う。制度があればそれに越したことはない。法制度が無くても BCM を実施するという流れを作り、それを形にすることが BCP であるという考え方になる。広域 BCP や広域 BCM の考え方を進めることによって、制度ができるのであればよいが、広域 BCP と広域 BCM の使い分けを時間的要素によって行うものではない。そのため、β版を作成し、内容を更新する中でより良いものを作り上げるという説明をするとよいと思う。</p>
不破	<p>昨日、JICA 内でも広域 BCP と広域 BCM の違いについて議論をした。JICA はあるカチツとした枠に収めようとする傾向がある。そういう癖がしみついているのではないかと。防災もあるシナリオに固執してそれに対する対策をたてるが、その変化の幅や要素は、偏微分方程式のようにほかの変数は一定で考えている。一方、JICA が実施している紛争国での取り組みではリスクが変動する。紛争に対して様々なリスクがあるが、紛争を排除する場合を考えたときに、変動するリスクにどのように対応するか、を考える。いわば、Continuity Plan を何枚も持っているようなものである。パキスタン、南スーダン、コンゴ民主共和国での紛争解決では、最初分析を行い、リスクを全部洗い出した後に、ステークホルダー分析などを実施した。どこでどのような動きがあるかを察知して、その結果どうなるのか常に予測しながら、状況の変化に対応しながら実施している。これが紛争の現場での実際のスタイルであり、自衛隊も国連の軍隊も NGO もみな同じだと思う。災害を対象とした場合は、このリスクを固定してしまい、変化に対応できず、あいまいになってしまう。チャオプラヤ川の災害対策も、規模の問題を検討した。100年確率での流出というようなスケール決めが最初であり、これに従って計画ができていった。では、もう少し小規模で頻繁に起こる洪水はどう考えるのかという点に疑問に思った。もう1点思ったことは、(紛争の)復興支援室を担当した際に、復興の時にはモノに限られるので、やることの順番はなかなか思い通りにいかない。林先生が以前に BCM の話をされた際に、決まったパターン通りにゆかなかつたらどうするのか、問われたことがあったが、それこそ JICA が途上国で行っている(紛争の)復興支援の現状そのものである。例えば2005年のスリランカ東部の状態は、実際に災害の復興支援を行うが、同時に前からあった民族対立が発生して、思うようにゆかない。その時にどういう解決策がよいかということ考えたが、つくりだす体制のほうが重要であるとの考えに至った。紛争や自然という災害の区別なく考えるしかない。計画の前にある Capacity や Management のスタイル、そういうことに重点があるのだろうと想像しながら、昨日議論をしていた。このような状況であるので、Consolidation のためにいくつかトライアルを出していただくと有難いと思う。</p>
林委員長	<p>個人的な考えでは、不破部長の考え方は結構正解だと思う。まさにそれがマネジメントであって、成果物としての計画は、いろいろなステークホルダーと調整をする必要があると思う。その時に全てのステークホルダーが不破部長と同様に考えていたならば、Negotiation は現実的であり、かなりよいものになるだろう。リスクは常に評価し続けなくてはならない。そうすると、やるべきことの優先順位がついてくるので、優先順位に対する合意を書き留めておけば、次に状況が変化するまでは Operation は流れてゆく。この Operation を流すために書くものが計画である。その計画には、マルチステークホルダー間のある種の合意事項が書かれている。その計画が第三者にも説得力があるようにするためには、ある状況において、このようなリソースしかないから、このようなニーズに対して、こうゆうやり方をするのだ、ということが書いてあるものだと思う。</p> <p>不破部長がおっしゃったマネジメントスタイルが、本調査で BCM と呼んでいるものであり、リスクを常にチェックする部分がいわゆるリスク分析である。プランニングを行う Capacity が必要となる。計画を守るのではなく、自分で計画を作る Capacity をどう高めるのかということが、実は BCM の中では非常に重要なものである。プランニングの Capacity があれば、計画は作れるわけで、仮に、出来上がった計画に必ずしも復旧日数が示されていなかったり、バックアッ</p>

	<p>プオフィスに言及がなかったりしても、それは後で改善すればいいわけで、それでみなが合意している。ダイナミックな仕事の仕方をみなが共有できること、仕事の仕方が大事である。先ほど、池田先生の話では、仕事の仕方になかなか気づけなかったということも、気づいてみたら計画は消去されていて、とりあえずつくってみればいいのだということに、変わってくることになる。</p>
渡辺委員	<p>林委員長がおっしゃられたように、広域 BCP は今の流れのように、まずはいい加減につくって、PDCA をまわして、高度化してゆくようにしないといけない。一番陥りがちなのは、PDCA の C である訓練が計画を正当化するための訓練になってしまうことであるが、計画の正当性を検証するためのものとすれば、うまく落ち着く。計画にはひな形があってよく、それはβ版でよい。</p> <p>また、本来 BCP は公開できない。脆弱性の情報を含むので、例えば、テロリストがこの道路を落とせばこの産業が崩壊するとわかってしまうからである。まずは、枠組みとか計画というよりも、BCM を運用するための運用マニュアルであるとかの勘所を書くような情報を用意しておく、大変有効であると思う。次に、想定シナリオも確かに必要であると思う。例えば内閣府では地震を想定したシナリオを作成している。そのほかにインフルエンザや他のリスクに対しての計画を作成し増えてゆく。東日本大震災のときには、都内の企業では、とりあえず地震編で活動した。しかし、実際は、社員が出勤できないという問題で、インフルエンザ編の方が、適当であった。そこで、BCP をインフルエンザ型に切り替えて運用した。つまり、いわゆるインパクトベースで考える必要があるということが言いたい。社員が来られないとか、電気が一週間止まるとか、道路が一週間使えないという状況では、原因事象で何が起こるのか、こちらから計画を立てておかないと、想定事象が起こらないと対応できないことになる。あるいは、想定事象に対する対策だけを立てていると、免震・耐震、食糧備蓄、避難訓練、で終わってしまう。ISO は、完全にインパクトベースになっている。どんな事象があったとしても、何が起こってそれが自分たちにどう影響するのかという分析の仕方を、また新たに作ろうとしている。BCP の作り方とか、BCM の立て方は、ISO なり何なりで必要なものをつくりながら、むしろ、どうまわすか、どう広域に展開するか、というポイントや勘所が書いてある運用マニュアルがあると、大変有効なツールになると思う。</p>
林委員長	<p>私の ISO の知識によれば、BCM には6つステップがある。①現状認識・基本方針の決定。②リスク分析。全てのリスクを評価するのではなく、とりあえず一番目の前にある危機を想定し、できれば最後はマルチで進めることになる。③ビジネスインパクト分析、④事業継続戦略である。事業継続戦略の構築までは、オープンで書けると私は思っている。それが、地域ではかなり重要な文章になるのではないかと思う。⑤予防策や、被害軽減のための対策の策定。⑥対応・対策。</p> <p>自分たちは、安心・安全や事業継続計画を考えた時に、この6つのステップを踏むということ、その段階で合意してくれた。不破部長が話されたことは、これに乗っている。ウェートのかけ方が違っても、チェックポイントはこの6つである。紛争国に行ったら何をしたらよいか、どのようになっているのか状況を見て、それはリスク分析している結果に基づき、同時にそれはインパクトのレベルで考えてゆくことになる。個別の対策は、それぞれのステークホルダーが持ち帰って作業を振り分けるので、その点については、調査団側の（作業が）出てこない、というやり方になると思う。個人的に期待している広域 BCP は、実は、事業継続マネジメントでいえば、①から④の基本文書となる。それから、渡辺委員が冒頭から強調していた、広域 BCP をつくるための、頭の使い方、議論の進め方、コンセンサスを得やすくするためのガイドラインも必要だと思う。</p>

2. パイロット地域における活動の中間報告

池田委員	配布資料 07-1、P.5 と P.6 について、インドネシアでは BCP の策定率は高いが、従業員や住民の安全確保が他の 2 ヶ国と比較して低い理由は何か。
木根原	インドネシアは、行政からの回答が多かったため、従業員等の安全確保に関する回答率が低かったと考えられる。
池田委員	他の 2 ヶ国も行政の回答があったようだが、インドネシアの行政は職員の安全確保に積極的でないということか。
木根原	インドネシアは、経済関連部署からの回答が多く、このような結果になったと考える。
高橋	ワークショップ開催の 1 か月前にフィリピンとベトナムをハイヤン台風が襲った。そのため、この印象が強くアンケート結果にも反映されたと推測する。
渡辺委員	配布資料 07-1、P.7 の結果をみると発生事象と結果事象が混在している。今後は要素分解をする必要があるであろう。また「Others」が少ないことから、自由記述の項目であったように推測する。過去の延長線上で考えてもらうことが非常に重要であろう。今後は工夫してほしい。
林委員長	インパクトで考えるかハザードで考えるかが混在している指摘であろう。インパクトとハザードの質問を分けたほうがいいのか、混在させた方がいいのかを考えると、ある意味いい方法かもしれない。
渡辺委員	クロス統計をするためには、設計し、理論統計する必要がある。
林委員長	質問項目は、調査団側で思いついたものを列挙しているが、さらに期待するならば、インパクトの項目を増やしたほうがより多彩な回答が得られるかもしれない。
渡辺委員	システム障害についても、通信系か、パワーアップ系なのかあるいは重要なサプライヤーからの部品提供がなかったなど、いろいろな理由が考えられるので、その他(others)の項目でローカルな知見を生かし、具体的な項目を見つけ出すことが重要である。
小野委員	配布資料 07-1、P.6 でアンケートの回答母数は、P.5 と同数か。BCP という用語を回答者が正確に認識しているかどうか疑問である。これまでの経験から防災計画イコール BCP という認識が、ベトナムやフィリピンではあると考える。「安否確認の仕組みはあるか」「何日以内にどのぐらい復旧させるか」「被災時に限られたリソースをどのように活用するか」など、もっと具体的な質問を行う方がよい。
林委員長	現地からの回答を鵜呑みにするのではなく、BCP に含まれるべき要素を指摘し、その要素をクリアしているかどうかをチェック必要であろう。ただ、インドネシアやベトナムの結果を見ると優良な機関がワークショップに参加しているという見方もできる。一方、フィリピンで BCP 策定率が 0% というのは、防災に力を入れている機関が被災対応で、ワークショップに参加できなかったとも考えられる。
高橋	フィリピンで実施した実務者レベルセミナーで、民間企業(Ayara Land、Manila Water など)から、防災対策について発表してもらった。また、Ayara Land と Manila Water は BCP を策定しているとのことであり、企業や国によって差があると考えられる。一方で、中小企業で BCP を策定しているところはほとんど存在しないようだ。
林委員長	Manila water は、Araya Land と三菱商事が JV で出資しているため、防災への取り組みに積極的なものかもしれないし、Araya グループが防災に積極的であるのかもしれない。
岡積委員	宿題を事前に配布したとのことだが、どのぐらい前に配布したのか。結果をみると、想定している災害と同じ回答になっている。アンケートの質問が的を得ていたのか、あるいはいずれの国においてもワークショップの直前にアンケートをしたので、資料の影響を受けているのかが知りたい。フィリピンのハイヤン台風直後のワークショップ開催であったことを考えると、高潮や洪水被害に対する不安がもっと高く出ていいように思う。
高橋	フィリピンのワークショップの参加者のうち、タクロバンから前日に戻ってきた人や今回は不参加であったが、ワーキンググループメンバーでタクロバンの復旧作業に参加していた人がいた。ワークショップの議論の中で、被害規模や被災範囲が大きいことを理由に、地震発生を不安視する参加者が多く見られた。JICA が 2002 年に実施した地震防災調査の結果を知っていて、台風被害も不安だが、地震被害はより不安であるとの意見であった。
岡積委員	本調査が対象とするフィリピンの工業団地を対象とするのならば、地震を不安に思う住民が多いことに違和感はないが、国全体を考えた場合には違和感を覚える。どのような質問形式だったのか。
木根原	いずれの国においてもパイロット地域での重要と思われるハザードに関して質問した。
林委員長	工業団地は水害に強い地域に位置しているということであろう。グループワークはテンプレートを使用して実施したようだが、本調査の中でテンプレートは成果品としても非常に重要な役割を担っている。グループワークで使用するテンプレートを通じて、リスクを同定できたり、ビジネスインパクトを測ることができたりするだろう。

	<p>次回以降は、グループワークのテンプレートの内容を支援委員会で確認、協議したい。ガイドラインにテンプレートを入れるのであれば、テンプレートの中身を事前に確認したいし、本当の意味での成果品となりえるであろう。</p> <p>配布資料 07-1 P.3にある「広域 BCP/BCM」とあるが、広域 BCP と広域 BCM は、渡辺先生がおっしゃっていたように 2 層構造である(つまり違うレベルのものである)。「広域 BCP/BCM」を今後も積極的に使っていくのであれば、広域 BCM を展開する際に、広域 BCM を発散させるのではなく、本調査の成果品としては、広域 BCP の作成を目標とした方がよい。広域 BCP 策定活動を実施した成果として、広域 BCP をβ版としてでよいので、PDCA を回すためにも、紙に落とすことが重要である。まずは、広域 BCP を作成し、今後、改善していくという流れにするとよい。</p>
辻	<p>ワークショップでの、議題は次の 3 点であった。①政策(自由回答)、②重大なハザード(個人が考え回答し、グループ内で協議)、③問題点(ライフライン、交通等の項目分けした欄に記入した)。その他、ワークショップ開催前に宿題として実施したアンケート結果も情報として、参加者に提供しつつ進めた。</p>
林委員長	<p>グループワークの資料であるワークシートのテンプレートを、国内支援委員会の資料として、次回以降は入れてほしい。そのテンプレートを使って、議論の要約として発表してほしい。</p>
小野委員	<p>配布資料 07-1 P.4 の記載で、個別 BCP の積み上げが広域 BCP ではないとの理解である。</p>
林委員長	<p>この点について、JICA としての意見を聞きたい。</p>
宮坂参事役	<p>JICA は広域 BCP を推進していくのは相手国政府だと考えており、相手国政府が自身でできるようにすることが最終目的である。現在は、コンサルタントが、かなりの部分をサポートしながら進めている。相手国政府だけでできるようになるまでには、かなりの時間がかかると思う。</p> <p>今後は広域 BCP を①他国に広げていくのか、②パイロット国の他の機関に広げていくのかは、今後検討が必要である。</p>
小野委員	<p>BCM という用語は欧米ではよく使われているが、日本では、BCP という用語の方が浸透している。そのため、広域 BCM という用語を使うよりも、「広域 BCP を策定し、改善するための運用マニュアル」としたほうが分かりやすいと考える。</p>
宮坂参事役	<p>広域 BCP は静的なイメージであり、広域 BCP と広域 BCM は、広域 BCP/BCM の概念の議論で渡辺委員がおっしゃったように 2 層構造になっている。「広域 BCM」という看板を掲げてしまうと、この看板だけが独り歩きしてしまう可能性があり、不安である。</p>
渡辺委員	<p>広域 BCP を作るためには、広域 BCM の考え方が必要である。そのため、広域 BCM 運用ガイドブックとしたほうが分かりやすいのではないかな。</p>
大槻参事役	<p>広域 BCP は実施のためのツールであると考えている。現在実施されている他の相互総合防災関連のプロジェクトでも法制度と活動のリンクが取れているものは少ない。</p>
林委員長	<p>プロジェクト活動がいきなり法制度とリンクさせようという考え方が、飛躍しすぎていると思う。防災の考え方の基本は組織や地域の生き残りであり、これは法に縛られるものではない。JICA が考えている広域 BCM が高度で、精緻過ぎるだろう。広域 BCM は全ての組織が取り組むべき事という共通理解が必要であろう。ISO で示されている BCP はミニマムでクリアしていればよいと考える。</p>
小野委員	<p>広域 BCM がないと、外国企業が他国に逃げるといふ危機感を政府に持たせることが重要だ。企業を逃げさせないためには、法整備を整える必要があることを訴えたほうがよいであろう。この考え方が逆転し、法整備をすることに重点を置くと、数値目標の達成が目標になってしまい、本来の意味での広域 BCM が根付かないことになる。</p>
大槻参事役	<p>実際の BCM を根付かせるためには、組織や制度的な根拠も重要であり、相手国政府のキャパシティを踏まえて実施できる内容にすることが重要である。</p> <p>一方で、他国ドナーは法制度ベースでのアプローチを行っている。</p>
林委員長	<p>法制度の成功例としては、アメリカのビルディングコードがある。どの国もこのビルディングコードを設定している。</p>
大槻参事役	<p>本調査においては出来るだけ共通のものの抽出を各国での活動ベースで実施し、それをマニュアル化し、相手国側に示す方法を取りたいと考えている。</p>
林委員長	<p>小野委員は広域 BCP でもよいといいと言っていて、渡辺委員は広域 BCM がよいと主張している。各委員が主張する意見の理由を聞きたい。</p>
小野委員	<p>広域 BCP を作成するという土壌を作ることが必要。相手国側の分かりやすさという視点から考えると、広域 BCP を作成し、改善していく方がマネジメントシステムを理解してもらうためには、分かりやすいと思う。これまでの防災計画は初動マニュアルが多いが、それを改善していく運用マニュアルはこれまでになかった。防災マネジメントシステムを理解してもらうためには、まずは広域 BCP から始めたほうが分かりやすいと考える。</p>
林委員長	<p>全員の考えは一致していて、広域 BCP をとっかかりにして始めて行こうという考え方は共通</p>

	している。広域 BCP を継続的に改善していくマネジメントシステムを確立するためには文書化することが重要である。広域 BCP は文書化の一つの作業である。ISO にもマネジメントシステムという枠組みを文書化により確立するとある。 つまり、広域 BCP だけでなく、広域 BCP 策定となるであろう。
小野委員	広域 BCP の P は広域事業継続計画ではなく、プランニングを意味する。
林委員長	計画ではなく、計画を策定するための能力向上を目的とし、そのための策定マニュアルとすれば、渡辺委員の意見も反映できる。
渡辺委員	対象を工業団地とするのであれば、計画ではなく、計画策定となるであろう。計画とすると計画を作った企業数などの数値目標となりがちになる。表現方法は任せるが、ミスリーディングがないようにしてほしい。
林委員長	配布資料 08-2 で説明されている「広域 BCP 策定ガイドブックの構成」を修正する必要がある。 3 番目の項目を 5 番目にし、4 番目の項目を実施するために広域 BCP を策定するという一文を加え、広域 BCP を策定するという作業は、マルチステークホルダーの間での事業継続を行うための共通のツールとして、位置づける必要がある。 ガイドラインのタイトルは「Planning Guide for Area Business Continuity ~ Area BCM Tool Kits~」
不破部長	相手国側の理解に合わせた分かりやすいものがよい。全体としては、広域 BCM を目指すが、マイルストーンとして広域 BCP を策定し、カウンターパートのキャパシティディベロップメントとして、進めたい。
林委員長	今回の国内支援委員会では全員のコンセンサスが取れたので、今後の進め方の詳細については、事務局側に考えてもらうことにする。 ガイドラインの資料編を充実させ、テンプレートを入れましょう。 ワークショップに対するコメントはあるか。
大槻参事役	配布資料で、実施国名だけでなく実施地域名も記載し、事例は対象国全体の調査結果と誤認されないようにしてほしい。
岡積委員	調査団が作成したシナリオは独自に考えたものか、参考した資料があるのか。 ワークショップにおいて、想定していなかったいい意見が出てきているに対する参加度合も高かったようなので、今後も参加者の声を拾ってほしい。
瀬川	地震については、日本やカリフォルニアの過去の災害事例を基に地震被害関数を参考にしている。マニラ港の液状化の業況については、計算結果を基に想定した。 洪水や高潮に関しては、過去に類似の事例がないため、詳細な数値を出すことができなかつたため、DEM から読み取り「何が被害を受ける」という表現になっている。実際の被害状況は現地のインフラ業者等の災害対策の度合いによるところが大きいため、次回のワークショップ前の宿題や次回のワークショップ等で、意見をインプットしてもらい、改善していく。
岡積委員	ベトナムのハイフォン市の場合 DEM の精度の関係で表現できないとのことだが、私が想定していたよりも浸水域が小さくなっているの、今後確認をして続けてほしい。
瀬川	日本のアスターのデータは比較的標高が高くなっている。実際の状況は現地で当たってみたいと分からないが、時間が確保できず、当たっていない。
林委員長	アスターのデータと実際に現地で測量したデータを比較し、係数を算出することもできるのではないか。
不破部長	本調査で実施した高潮の計算にフェッチの計算は入っているか。
瀬川	今回の計算では、単純に海岸線での天文潮位と高潮の水位を足した高さから算出したため、海岸線に入ってから動的計算は入っていない。
林委員長	台風進路と海岸線がなす角に影響を受けるので、今回の結果が最大値であるとは言い切れず、その計算をすればかなりの労力が必要となる。
馬場委員	今回は、他地域でも適応可能な方法と選択しており、最も簡易な方法で実施した。
林委員長	簡易な方法を提示することで、次への展開が期待できるだろう。
大槻参事役	報告書等になった時に、JICA がシミュレーション結果を保障したと受け取られる可能性があるの、報告書等には前提条件などの詳細を記載してほしい。
岡積委員	現地の標高情報などの情報が入手できるようであればして、その時点で補正をするべきではないかしてもよいのではないか。
林委員長	報告書等では、結果を導いた前提条件を明示すべき。受け手が目的に応じて使用できるようにしてほしい。 ワークショップの課題や成果、今後の活動に関してのコメントはあるか。
渡辺委員	ワークショップはとても良いスタートが切れたと思う。配布資料 07 にある「交通インフラ、ライフライン」に関する地図は、ロケーションデータのみなので、これらの利用者や流量などの情報を追加してほしい。これらの情報は第 2 回のワークショップで個別企業がどれだけ情

	<p>報を提供できるかにかかっている。ロケーションデータのみでは、優先順位をつける際につけられなくなる。優先順位をつけることができるようにワークショップをリードしてほしい。行政は優先する企業を選ぶことができないが、例えば、大義名分として、職員数が多い企業(下請け企業も含めて)、住民の生命や生活を守るために必要な企業といった観点で優先し、企業が所有する倉庫の位置なども把握しておく必要がある。その地域にインパクトがある企業の事業継続性を保つためには、地域の重要なステークホルダーを巻き込みインフラの被害状況やインフラが担う役割(ガスや電力を変圧する場所など)を把握し、インフラのクリティカルポイントを見つけておいてほしい。</p>
宮坂参事役	<p>重要なステークホルダーを見つけ出すことは重要であるが、今回の調査でできるかどうかは不明。</p>
不破部長	<p>ハイフォン市の場合、Lac Huyen 港の調査で、渡邊委員が指摘した機能の情報はある程度持っている。しかし、エネルギーに関しては持ってないかもしれない。実際に被災した際に備え、状況を再現できるようにしておくことが必要である。</p>
渡辺委員	<p>現地企業も必要以上の情報は提供しないはずである。地場産業を守ることは地域の雇用を守り、産業を守ることなので、地場産業を支える企業を見つけ出す必要がある。最終的には脆弱なインフラを早く修復するように行政と交渉するぐらいにならないといけない。</p>
大槻参事役	<p>ワークショップに多くのステークホルダーの参加が必要な理由や広域 BCM の必要性についてを相手国側に理解してもらう必要がある。これらの点をガイドラインに記載する際の書きぶり等は今後、検討の必要がある。</p>
林委員長	<p>非常に重要な議論であるが、今のキャパシティですぐにできないだろう。例えば、配布資料 08-2 項目 3.3 のリスク評価の中に、機能喪失についても調査すると記載し、今後の展望が望めるようにしておく必要がある。これまでの防災のフレームの中で考えるのではなく、広域 BCM を実施するのに必要な項目を記載し、実施国のレベルに合わせて選択できるようにする。</p>
不破部長	<p>JICA の過去の調査やプロジェクトのデータや情報を参照したほうがよい。</p>
林委員長	<p>これまでの議論を踏まえると配布資料 08-1 P.2 は「広域 BCM 定着のための調査」となるだろう。</p>
宮坂参事役	<p>概念の一致が重要であろう。</p>
林委員長	<p>今日は広域 BCM の導入として、広域 BCP 策定のためのマネジメントシステムを作るというコンセンサスが得られれば良い。</p>
宮坂参事役	<p>日本語と英語の表現の違いはありか、なしか。</p>
林委員長	<p>これまでの日本の経験から、ダブルスタンダードはうまくいかない。後発の人たちに同じ失敗をさせないことが教育のよさである。一方で、二の轍をわざわざ踏ませる方法もあるが、今回の場合はその必要はないと考える。簡単に入手した手法で実施した場合、相手国側は成長に重きを置き、安全や安心をおろそかにすると考えられるので、日本はこの点を指摘し、導く必要がある。</p>
不破部長	<p>UN や世銀は本調査の結果に非常に期待している。</p>
林委員長	<p>2014 年 6 月の防災閣僚会議に間に合わせるためには、2014 年 3 月に出す報告書が最後のチャンスになる。個人的には防災計画は事業継続計画に将来的には取り込まれるべきと思う。また、日本で実施した調査を世界に広めていく必要がある。</p>
渡辺委員	<p>配布資料 08-1 P.11 に国をまたぐ活動であることを記載し、取り入れてほしい。</p>
林委員長	<p>東西経済回廊などで、ASEAN はつながっていくので、ASEAN 全体へのメッセージとして、広域 BCM が必要であることをアピールできる。</p>

2014年04月10日(木)

9:45 - 11:15 JICA 本部 108 会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』
第四回国内支援委員会 出席者リスト

国内支援委員

林 春男	京都大学防災研究所 巨大災害研究センター教授
池田 浩敬	常葉大学 社会環境学部長・学科長／教授
岡積 敏雄	国土交通省総合政策局 国際建設管理官
小野 高宏	三菱商事インシュアランス(株) 社長付 BCP 担当部長
檜府 龍雄	JICA 国際協力専門員
馬場 仁志	JICA 国際協力専門員
渡辺 研司	名古屋工業大学教授

JICA

佐久間 潤	東南アジア・大洋州部 次長
高林 博史	東南アジア・大洋州部 計画・ASEAN連携課
伊藤 民平	東南アジア・大洋州部 東南アジア第三課
不破 雅実	地球環境部 部長
竹谷 公男	地球環境部 客員専門員
木藤 耕一	地球環境部 次長
永石 雅史	地球環境部 参事役
大槻 英治	地球環境部 参事役
宮田 克二	地球環境部 防災第一課 課長
菊入 香以	地球環境部 防災第一課
宮川 聖史	地球環境部 防災第一課
松元 秀亮	地球環境部 防災第一課
平野 潤一	地球環境部 防災第二課
秋山 慎太郎	地球環境部 防災第二課

調査団

高橋 政一	総括/広域 BCP 策定 2/防災計画
辻 禎之	副総括/広域 BCP 策定 1
瀬川 秀恭	災害リスク評価リーダー
木根原良樹	広域 BCP 策定 3
長谷川 浩一	GIS データベース
松並 志郎	業務調整/事務局運営/災害リスク評価補助(地質ハザード)
渡邊 暁	業務調整/災害リスク評価補助(水文気象ハザード)

日時：平成 26 年 4 月 10 日（木）09:45 ～ 11:15

場所：JICA 本部 108 会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』

第四回 国内支援委員会

議事次第

1. 開会
2. 地球環境部長挨拶
3. 委員および参加者紹介
4. 議題
 - (1) 広域 BCM 説明ビデオ
 - (2) 進捗状況報告
 - (3) 広域 BCM を国際会議等で外部発信する際のポイントについて
5. その他
6. 閉会

コンサルタント名：OYO インターナショナル株式会社
株式会社三菱総合研究所
株式会社建設技研インターナショナル

アセアン地域における産業集積地の自然災害リスク評価と事業継続計画に関する情報収集・確認調査
第4回国内支援委員会議事録

日 時	2014年4月10日(木) 9:45-11:15
場 所	JICA 1階 108 会議室
出席者 (敬称略)	<p>国内支援委員</p> <p>林 春男 京都大学防災研究所 巨大災害研究センター教授 池田 浩敬 常葉大学 社会環境学部長・学科長/教授 小野 高宏 三菱商事インシュアランス(株) リスクコンサルティング室長/シニアコンサルタント</p> <p>檜府 龍雄 JICA 国際協力専門員 馬場 仁志 JICA 国際協力専門員 渡辺 研司 名古屋工業大学教授</p> <p>JICA</p> <p>佐久間 潤 東南アジア・大洋州部 次長 高林 博史 東南アジア・大洋州部 計画・ASEAN 連携課 伊藤 民平 東南アジア・大洋州部 東南アジア第三課 不破 雅実 地球環境部 部長 竹谷 公男 地球環境部 客員専門員 木藤 耕一 地球環境部 次長 永石 雅史 地球環境部 参事役 大槻 英治 地球環境部 参事役 宮田 克二 地球環境部 防災第一課 課長 菊入 香以 地球環境部 防災第一課 宮川 聖史 地球環境部 防災第一課 松元 秀亮 地球環境部 防災第一課 平野 潤一 地球環境部 防災第二課 秋山慎太郎 地球環境部 防災第二課</p> <p>調査団</p> <p>高橋 政一 総括/広域 BCP 策定 2/防災計画 辻 禎之 副総括/広域 BCP 策定 1 瀬川 秀恭 災害リスク評価リーダー 木根原良樹 広域 BCP 策定 3 長谷川浩一 GIS・データベース 松並 志郎 業務調整/事務局運営/災害リスク評価補助(地質ハザード) 渡邊 暁 業務調整/災害リスク評価補助(水文気象ハザード)</p>
議 事	<p>9:45 開会 9:45 地球環境部次長挨拶 9:50 議題 (1) 広域 BCM 説明ビデオ (2) 進捗状況報告 (3) 広域 BCM を国際会議等で外部発信する際のポイントについて 11:15 その他 11:15 閉会</p>
配布資料	<p>1) 配布資料 00 第4回 国内支援委員会 議事次第 2) 配布資料 01 第4回国内支援委員会 配布資料リスト 3) 配布資料 02 第3回国内支援委員会 参加者リスト 4) 配布資料 03 調査の進捗報告 5) 配布資料 04 広域 BCM に係る組織</p>

	6) 配布資料 05	広域 BCP の取組みに関する関係者からの意見のまとめ／特に、広域 BCM/BCP を広めるための意見
	7) 配布資料 06	広域 BCM を国際会議等で外部発信する際のポイントについて
	8) 配布資料 07	広域 BCM の定義（案）
	9) 配布資料 08	パイロット地域のハザード・リスク評価と災害シナリオ
	10) 別添資料 01	第 3 回国内支援委員会議事録
今後の予定	配布資料 03	

以上

議事録

アドバイスおよび質疑応答

1. 広域 BCM 説明ビデオ

渡辺委員	プロモーションビデオは、広域 BCP の解説としては素晴らしい。推進者やステークホルダーの情報が揃うと、つかみとしてより良くなる。 当該ビデオは、HP でダウンロードや閲覧は可能か。会議の PR として使用できるか。
松元	HP 等でまだ公開はしていない。著作権の関係で不特定多数に配布することはできない。使用できる範囲は JICA が関わる会議又は JICA が了解した会議としているため、JICA に依頼を頂ければ、会議やイベントで当該ビデオを使用することができる。
渡辺委員	ISO の会議（6月3日の東京フォーラム）で、是非ビデオを活用させていただきたい。
池田委員	改めて、視覚化すると、政府、ライフライン、個々の企業のような主体が関わることが見え、各々の主体の思惑が一致しないと上手く行かないことが視覚的に伝わる。
小野委員	3月下旬の APEC 主催の TPT-WG(TRANSPORTATION WORKING GROUP)会議で、当該ビデオを紹介した結果、分かりやすいと評判が良かった。APEC の会議にも JICA を呼びたいという声もあった。
馬場委員	ASEAN 事務局で当該ビデオを紹介したところ、大変好評だった。ASEAN 主催の ACDM 会議でも是非紹介してほしいと依頼を受けた。
檜府委員	キャッチーで非常に良い。誰が主体となるかという具体的な内容を伴う、次のステップのビデオがあると良い。
林委員長	ご指摘頂いた意見は、議題3の「広域 BCM を国際会議等で外部発信する際のポイント」に関わることで、外部発信するときの戦術が必要になる。例えば、RISE（パンフレット）は、問題や目的、8つの方針、ステークホルダー、タイムテーブル、運営の仕掛け、進捗状況、ゴールなどが整理されている。6月のアジア防災閣僚級会議（バンコク）で、ビデオの紹介のほかに、紙のパンフレットが必要となるのではないか。最終的には、翌年3月の第3回国連防災世界会議までに、ビデオとパンフレットのペアで準備し、ビデオは著作権の問題で提供できないが、パンフレットなら提供できるといった形になるとよい。また、UNISDR and PwC の「Working together to reduce disaster risk」に当たるものが広域 BCP のレポートになるのではないか。 JICA 単独ではなく、どこかと組むことも考えられるのではないか。
不破	今までのサイドイベントは UNDP と組んでいた。 UNISDR は Humanitarian、世界銀行の GFDRR は開発本流といった理念の異なるもの同士、競り合っている。そのように理念の異なる人たちが複数いて、そういう方々と協力しながら一緒に出すというサイドイベントのやり方がある。仙台の国連防災世界会議は、日本政府と ISDR といった2つのホストがある。日本政府と ISDR の双方から JICA に要請が来ているため、両方に入口を設けていかなければならないであろう。 大西先生や林先生は、UN にどう働きかけているか。
林委員長	UN については手つかずである。大西先生が UNISDR の STAG (Scientific and Technical Advisory Group) のメンバーで、一番太いパイプであり、ワルストロム氏等との橋渡し役である。
不破	国土交通省は HLEP という別の組織を考えており、ハン・スンズ氏が所属している。この組織と ISDR の競り合いがあり、巻き込まれる可能性がある。外務省と JICA のスタンスは ISDR をないがしろにはできないため、今までのものを踏襲しようと考えている。
林委員長	UN とは ICHARM の竹内先生を通してつながっている。6月7, 8, 9日に開催される IRDR のワークショップ（北京）にできるだけ多くの関係者で参加して、色々と話をしていきたい。
永石	JICA が広域 BCM を国際会議で発信しようとしている具体的な状況を簡単に説明したい。翌年3月の仙台での国連防災世界会議の前哨戦として、ISDR が地域別のプラットフォームを開催するが、その中の一つである6月のアジア防災閣僚級会議（バンコク）での発信を考えている。そこで、防災に関わる民間企業の関わりというテクニカルセッションの一つとして広域 BCM のプレゼンテーションをできないか、セッションの取り纏め機関である ESCAP と話を進めている。いずれにせよ JICA として出すブースの中で、ビデオを紹介することができる。5月の下旬には、やはり地域別プラットフォームの一つである中南米防災閣僚会議の民間企業の役割に関するセッションで、広域 BCM の話をする予定である。
林委員長	1月の東京会議の Transdisciplinarity のセッションの中で4人スピーカーを選ばなければならない。UNISDR の STAG の Dennis Wenger (United States' National Science Foundation) と、行政界のスピーカーが決まっているが、まだ産業界のスピーカーが決まっていない。その会議の産業界の枠で、広域 BCP の話ができる外国人を招待できれば、プレゼンの時間を確保できる。ASEAN で広域 BCP の話ができる外国人スピーカーの候補を探していただけませんか。 例えば、AHA センターの所長はどうか。

馬場委員	AHA センターのファイサル所長、もしくは、本プロジェクトのエキスパートに伺うことにする。
林委員長	JICA で人選を検討してほしい。

2. 進捗状況報告

渡辺委員	今回のプロジェクトを通して、感度がいい参加者もしくは地域はあったか。プロモーションビデオでもそうだが、モデルケースを早く作成しなければ、議論が難しい部分に直面するだろう。同業他社やサプライチェーンが凝縮するような地域、またはキーパーソンがいたか。
高橋	国によって異なる。例えば、フィリピンでは工業団地の所管官庁である PEZA が中心的役割を担う。3州をパイロット地域としているが、他の州にも範囲を広める話が出ている。
渡辺委員	企業は BCM を持っているか。
高橋	大企業は持っている。
渡辺委員	先に始めるとすればフィリピンがパイロット地域になるか。
高橋	甲乙つけがたい。
渡辺委員	国が BCM を推奨するシンガポールやタイはパイロット地域にならないか。
高橋	本プロジェクトの実務者レベルセミナーでは、シンガポールの参加者は防災機関に限り、産業、計画分野はこない。自分たちでやれるという自信があるかと思う。
林委員長	シンガポールの場合、国全体がエリアとなる。
渡辺委員	日系企業のワークショップやセミナーへの参加人数はどうか。
高橋	ベトナムでは、第1回は5名で、第2回は1名であった。日系企業は、広域 BCM がどういふものか、どういふメリットをもらすかを観察しているようであった。
渡辺委員	企業にスポンサー思考があり、彼らは部品供給拠点の市場に近い場所を製造拠点とする。東南アジアに目を向けている。日系企業のキーとなる企業がいれば、抱え込むことも必要ではないか。
高橋	インドネシアではトヨタが良く来ていただけるので、今後も積極的に招待する。
小野委員	日系企業について、三菱商事のグループ企業を案内してもよいかと考えているが、案内はどのようにしているか。
高橋	直接コンタクトしている。チャンネルがあれば教えてほしい。
不破	タイの洪水の時に気づいたが、損害保険の料率がくるっているのではないか。本来リスクがあるのに、きちんと示していないため、実際に災害が起こった時に対応できていない。広域 BCM があれば、損保も取り込んで、料率を検討できるのではないか。例えば、東南アジア部で行われているような資金メカニズムと連動するべきではないか。今回はそこまで至らないが、途上国では、エリア毎に保険の料率を変えることがあるのではないか。
林委員長	RISE では、成果として、Disaster sensitive investment (投資) と Insuring Resilience (保険) を考えている。広域 BCM の目指しているものは、より多くの投資を呼び込むこと、何があっても保険がきくということである。 広域 BCM のモデルの妥当性について、意見をいただきたい。 昨年、経済産業省がいくつかの事業継続の試みを行っているが、経産省の広域 BCM と、ASEAN の広域 BCM には、ずれがある。JICA は長年リスク評価を行ってきた経緯があり、その能力が高い。配布資料 04 スライド 1 の外部リソースのうちハザード・リスク情報の提供に長けているという認識が正しいかについても議論いただきたい。これのエッジが立つのであれば、JICA はリスクアセスメントおよびインパクト分析を重視または特徴付けることも戦術として考えられる。 また、PDCA サイクルに、「地域を理解する」、「広域 BCM の戦略を立てる」といったように、具体的に書かれていないことがプラスに働くかマイナスに働くかについても議論いただきたい。
馬場委員	配布資料 06(9)にあるように、JICA は広域 BCM の特徴の一つとして、地域の災害リスク分析を行っている。分析については、100年に1回といった確率をそろえ、マルチハザードに対して、その地域に起こり得る大きめの災害へのリスクアセスメントを行い、その結果を用いて、シナリオを作成し、BIA を行うことが特徴である。途上国の企業や政府機関にない技術である。リスク情報が共有されていないということは、リスクアセスメントができていないということなので、広域 BCM の取組みを通じてリスク情報の共有を強化することが期待される。
不破	JICA は、タイの洪水について、各企業の現状の降雨から一週間後の氾濫の情報を提供した。リスクの情報が揃えば、保険に関して新しい話が出てくるはずである。バンコクのアジア防災閣僚会議でその話を出すと、政治の論争のトピックや混乱の一つの題材となってしまう。

渡辺委員	工業団地等へスケールを落とさないと、政権のごたごたに巻き込まれて、結局 BCM が成り立たなくなる。マクロにこだわりすぎると BCM は作れなくなるため、工業団地別に議論する必要がある。フィリピンはデータや条件が揃っており、仮説をたてて、BIA の詳細なモデルを作成し、工業団地や企業がどれだけ影響を受けるか、また BCM があることでどれだけリスクを軽減できるかについて試算をできるのではないかと。そのために、無理やりモデルを作成する必要がある。
池田委員	配布資料 06(11)にあるように、広域 BCM では立場や思惑が違うステークホルダーが存在し、個々のステークホルダーによってメリットが変わってくる。広域 BCM が成立するには、ステークホルダー全員が必要だと思ふ共通のメリットが必要である。共通のメリットとして、保険、つまりコストが低減できる仕組みを構築し、アピールしていくことも必要だと考えられる。

3. 広域 BCM を国際会議等で外部発信する際のポイントについて

小野委員	随所に地域の災害対応能力を高めるということが書かれているが、「価値を高める」、「投資を呼び込む」ということも書いた方がよい。また、企業の BCP には他社との差別化を図るという部分もあるが、広域 BCP ではお互いに価値を高められるという部分で協力し合えるという理解ではないか。
不破	途上国ではリスクを示しても、例えばタイでは対策するのに時間がかかる。リスクへの対応は各企業の対応次第になっており、各企業は独自で既に企業価値を高めている。
小野委員	工業団地単位で保険の料率を変えていくという話も出てくるだろう。いまはハザードで料率を評価しているが、広域 BCP も踏まえたリスクで評価できれば、工業団地単位で違いが出てくるだろう。
林委員長	インパクトの分析をするためには、地域のアセットへの分析も重要となる。地域のアセットの評価方法を JICA で提案していくことも重要ではないか。7月まででプロジェクトで出来たことと、出来なかったこと（課題）の整理が重要である。また、ケーススタディをする際のガイドラインまたは Implementation Manual を作成することが次のステップとして考えられる。JICA が入手した情報を世界にどうやって公開・発信していくかも重要な視点である。
不破	PPP について、マスタープランの中で、ポリティカルリスクとコマーシャルリスクを分けて、どちらがどちらを背負うべきかという価値を位置づける。工業団地の中の人たちは、その中でパブリックが受けるべきポリティカルリスクを確認すべきである。その上で企業の価値が出てくる。また、ポリティカルリスクのマネジメントなくして、インフラ輸出の話も本来はない。PPP やインフラ輸出の議論にもフィードバックすべきではないか。
林委員長	お金ではなく情報のドナーになるということも考えられ、自然現象の情報については情報を公開していくべきだと思う。手法は開示、結果は JICA プロジェクト、という仕分けも考えられる。メッシュ単位でなく、この施設はどうか、という評価ができると本当はよい。そうした情報の種類によって、開示の仕方も変わってくる。
渡辺委員	インタンジブルアセットとのつながりも重要である。広域 BCP の発展・進化のストーリーも整理しておいた方がよい。例えば、個別 BCP があって、そこでは対応できないので自治体や事業者等とのインターフェイスが必要になって、クラスター形成をして、シングル BCP ができて、BCM が回り、連携ができて、官民インフラがつながっていないと結局個別になる、といった広域 BCP が発展・進化するロードマップが必要ではないか。
大槻	手法等の説明が多いのでベネフィットの話をもっと増やした方がよいと思うが、ご意見をいただけないか。短期、中期、長期でベネフィットがどう変わるかという視点もある。また、時間軸上で展開して、段階的にベネフィットが上がっていくという視点を掘り下げることも考えられる。例えば、配布資料 07 について、実務者に対するマニュアルと異なる表示方法を検討する必要がある。
林委員長	シングル BCP、エリアとしてのリスク共有、ステークホルダーの相互関連性の認識、エリア全体としてのレスポンスサイドのこと、最後にシングル BCP に戻るといったサイクルの中で、それぞれの局面でどういうインプット、アウトプットがあるのかを示すとよいかもしれない。
池田委員	シングル BCP の確立で終わってしまったら、多大なコストがかかることが分かり、しっかり対応しないと、全企業が工業団地から出ていくというシナリオもあるかもしれない。
林委員長	当初、地域への参入（投資）に補欠だった企業が入ってくることもあり得る。全ての地域が一番になることもなく、与えられた環境の中で開発・発展していくもの。その中で、BCM のサイクルを回していくことで工業団地の価値は高まっていくことになる。
馬場委員	個々の企業体の BCM の価値を評価する方法はあるか。
渡辺委員	ISO の認証などが一応ある。BCM 自体が各社でゴールが違うので絶対評価は難しい。
林委員長	企業間の相対評価を導入する事により、自分の位置を確認する方法はある。

檜府委員	マルチハザード対応に関して JICA の売り、JICA として関わるメリットは何か。
林委員長	世界のサステナビリティを牽引している ASEAN のサステナビリティを保証するということに JICA が責任を持つというのはスタンスの一つかもしれない。
不破	これまでは、特に 100 年に 1 度といった大きな災害のみを考慮してきたが、それでは期待値は図れない。50 年、30 年、10 年に 1 度といった連続的な災害リスクを明らかにし、正確なインパクトを測る必要がある。また、災害の規模が小さくなるほど、インフラの話になり、ポリティカルリスクをパブリックがアサインすることを含めたマスタープランなどが必要になる。 DR ² AD モデルの説明ができると、初めて連続的な災害リスクが与える経済的な影響が分かる。説得力がある資料ができれば、仙台の第 3 回国連防災世界会議で日本は役立つものを提供したということで、評価される。アジアで成果が出ると、半年かけて皆チェックするといったメリットがあるため、戦略的にはよいのではないか。
林委員長	ハザードだけでよいので、100 年に 1 度だけでなく、複数シナリオで考える選択肢を与えるのも大切である。
馬場委員	マルチシナリオでリスクやインパクトを算出しておかないと、年平均被害想定額や対策を講じたことによる年平均被害軽減額といった総合的な評価にかかる話もできないので、マルチシナリオは重要と理解している。
林委員長	マルチシナリオを包含するような見せ方を考えてはどうか。
不破	小池先生から相当な情報が得られる。
渡辺委員	マルチハザードの情報をマップに落とすのを政策投資銀行と組む方法もある。
不破	今後はどう見せるかのセンスが大切になってくる。

2014年07月31日(木)

9:45 - 12:00 JICA 本部役員会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』

第五回国内支援委員会 参加者リスト

国内支援委員

林 春男	京都大学防災研究所 巨大災害研究センター教授
池田 浩敬	常葉大学 社会環境学部長・学科長／教授
岡積 敏雄	国土交通省総合政策局 国際建設管理官
小野 高宏	三菱商事インシュアランス(株) 社長付 BCP 担当部長
馬場 仁志	JICA 国際協力専門員
濱口 伸明	神戸大学教授
渡辺 研司	名古屋工業大学教授

経済産業省

宮尾 健	産業技術環境局認証課 国際標準課
関口 訓央	大臣官房調査統計グループ 経済解析室

JICA

佐久間 潤	東南アジア・大洋州部 次長
杉田 樹彦	東南アジア・大洋州部 計画・ASEAN 連携課
黛 香苗	東南アジア・大洋州部 計画・ASEAN 連携課
小松 千寿	東南アジア・大洋州部 東南アジア第一課
西木 陽子	東南アジア・大洋州部 東南アジア第五課
篠原 俊永	東南アジア・大洋州部 東南アジア第五課
不破 雅実	地球環境部 部長
木藤 耕一	地球環境部 次長
渡辺 泰介	地球環境部 参事役
大槻 英治	地球環境部 参事役
宮田 克二	地球環境部 防災第一課 課長
米林 徳人	地球環境部 防災第二課 課長
宮川 聖史	地球環境部 防災第一課
秋山 慎太郎	地球環境部 防災第二課
平野 潤一	地球環境部 防災第二課

調査団

高橋 政一	総括/広域 BCP 策定 2/防災計画
辻 禎之	副総括/広域 BCP 策定 1

瀬川 秀恭	災害リスク評価リーダー
木根原良樹	広域BCP策定3
松並 志郎	業務調整/事務局運営/災害リスク評価補助(地質ハザード)
渡邊 暁	業務調整/災害リスク評価補助(水文気象ハザード)

日時：平成 26 年 7 月 31 日（木）09:45 ～ 12:00

場所：JICA 本部 役員会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』

第五回 国内支援委員会

議事次第

1. 開会
2. 地球環境部長挨拶
3. 委員および参加者紹介
4. 議題
 - 1 プロジェクトの進捗状況と今後の予定
 - 1 - (1) プロジェクトの進捗状況報告と現状の課題整理
 - 1 - (2) 今後の予定、広域 BCM の現地機関への引継ぎ
 - 1 - (3) ガイドブック（案）の紹介と議論
 - 2 広域 BCM の一般化への取組み
 - 2 - (1) 国際会議等での外部発信報告
 - 2 - (2) 広域 BCM の一般化に向けて
5. その他
6. 閉会

コンサルタント名：OYO インターナショナル株式会社
株式会社三菱総合研究所
株式会社建設技研インターナショナル

アセアン地域における産業集積地の自然災害リスク評価と事業継続計画に関する情報収集・確認調査
第5回国内支援委員会議事録

日 時	2014年7月31日(木) 9:45-12:10
場 所	JICA 6階 役員会議室
出席者 (敬称略)	<p>国内支援委員</p> <p>林 春男 京都大学防災研究所 巨大災害研究センター教授 池田 浩敬 常葉大学 社会環境学部長・学科長/教授 岡積 敏雄 国土交通省総合政策局 国際建設管理官 小野 高宏 三菱商事インシュアランス(株) リスクコンサルティング室長/シニアコンサルタント</p> <p>馬場 仁志 JICA 国際協力専門員 濱口 伸明 神戸大学教授 渡辺 研司 名古屋工業大学教授</p> <p>経済産業省</p> <p>宮尾 健 産業技術環境局認証課 国際標準課 関口 訓央 大臣官房調査統計グループ 総合調整室</p> <p>JICA</p> <p>佐久間 潤 東南アジア・大洋州部 次長 杉田 樹彦 東南アジア・大洋州部 計画・ASEAN 連携課 黛 香苗 東南アジア・大洋州部 計画・ASEAN 連携課 小松 千寿 東南アジア・大洋州部 東南アジア第一課 西木 陽子 東南アジア・大洋州部 東南アジア第五課 篠原 俊永 東南アジア・大洋州部 東南アジア第五課 不破 雅実 地球環境部 部長 木藤 耕一 地球環境部 次長 渡辺 泰介 地球環境部 参事役 大槻 英治 地球環境部 参事役 宮田 克二 地球環境部 防災第一課 課長 米林 徳人 地球環境部 防災第二課 課長 宮川 聖史 地球環境部 防災第一課 秋山慎太郎 地球環境部 防災第二課 平野 潤一 地球環境部 防災第二課</p> <p>調査団</p> <p>高橋 政一 総括/広域 BCP 策定 2/防災計画 辻 禎之 副総括/広域 BCP 策定 1 瀬川 秀恭 災害リスク評価リーダー 木根原良樹 広域 BCP 策定 3 松並 志郎 業務調整/事務局運営/災害リスク評価補助(地質ハザード) 渡邊 暁 業務調整/災害リスク評価補助(水文気象ハザード)</p>
議 事	<p>9:45 開会 9:45 地球環境部長挨拶 9:50 議題</p> <p>1 プロジェクトの進捗状況と今後の予定 1-(1) プロジェクトの進捗状況報告と現状の課題整理 1-(2) 今後の予定、広域 BCM の現地機関への引継ぎ 1-(3) ガイドブック(案)の紹介と議論 2 広域 BCM の一般化への取組み 2-(1) 国際会議等での外部発信報告</p>

	<p>2-(2) 広域 BCM の一般化に向けて 12:00 その他 経済産業研究所からの事例紹介 「大災害とリスク認識：タイ洪水を事例として」 「自然災害・地価・企業の立地—タイの事例—」 12:10 閉会</p>
配布資料	<p>1) 配布資料 00 第5回 国内支援委員会 議事次第 2) 配布資料 01 第5回国内支援委員会 配布資料リスト 3) 配布資料 02 第4回国内支援委員会 参加者リスト 4) 配布資料 03 プロジェクトの進捗状況報告と現状の課題整理 5) 配布資料 04 今後の予定、広域 BCM の現地機関への引継ぎ 6) 配布資料 05 広域 BCM ガイドブック (案) 7) 配布資料 06 広域 BCM の一般化に向けた国際会議等での外部発信状況 8) 配布資料 07 広域 BCM ガイドブック第1版 (案) 9) 配布資料 08 広域 BCM ガイドブック第1版 (案) 添付資料1 (パイロット地域の広域 BCP 第1版) 10) 配布資料 09 広域 BCM ガイドブック第1版 (案) 添付資料2 (ハザード・シミュレーション方法解説) 11) 配布資料 10 広域 BCM の定義 (案) 12) 配布資料 11 第3回広域 BCP 策定のためのワークショップ参加者リスト 13) 配布資料 12 第3回ワークショップのまとめ 14) 配布資料 13 第4回国内支援委員会議事録</p>
今後の予定	配布資料 04

以上

議事録

アドバイスおよび質疑応答

1. プロジェクトの進捗状況と今後の予定

1-(1) プロジェクトの進捗状況と現状の課題整理

渡辺委員	本件の次への展開としてビジネスケースを考えた場合に具体的な工業団地など地域を選定しなければならないと思うが、どのパイロット国が熱心で感度がよかったか。
高橋	どれも積極的であるが、相対的に比較すると、フィリピン、ベトナム、インドネシアの順番である。
渡辺委員	フィリピンの感度が良いというのはメンバーの中に国家的な部署が入っているからであるのか、参加している個人にリーダーシップのある熱心なキーパーソンがいるからなのか。次への展開を考えた場合には、積極的な推進者が必要であると思う。
高橋	PEZA の副長官が積極的な方で、機関内や他地域での調整を推進してくれている。また、OCD の副長官も積極的であり、この2名の方が推進者になると思う。
渡辺委員	行政が積極的すぎると、民間企業が消極的になる場合があるが、フィリピンの場合はどうか。
高橋	そのような事態は見られない。フィリピンは、オープンなディスカッションをする特徴がある。招待した民間企業は大企業であり、自社で実施する BCP を紹介している。
渡辺委員	可能性として今後のビジネスケースを創ろうとした場合には、フィリピンが有力候補と考えて良いか。
高橋	そう思う。また、英語圏であるので進めやすいと考える。
林委員長	経済開発と防災を担当する機関では、経済開発を担う機関が本件の中心的な役割を果たす組織として考えているのか。またそれは意図的に設計したのか、結果としてそうなったのか。
高橋	広域 BCP の各種議論は経済（産業）の側面が強いので、まず経済開発の機関をメインとして考え、防災機関を防災に関して各種サポートを行う位置付けで、意図的に設計した。
林委員長	経済開発と防災を担当する機関は各々所管があると思うが、スムーズに連携しているのか。
高橋	フィリピンでは防災に対する取り組みが進んでおり、組織間のしがらみはあるが、地域レベルで具体的に実施する責任者や担当者のレベルでの連携は十分なレベルにあると思う。ベトナムは、ハイフォン人民委員会が市に関する経済、防災をコントロールしており、キーとなる。インドネシアは、西ジャワ州政府から、西ジャワ州地方開発企画庁(BAPPEDA)が責任者になるよう直接指示があった。防災機関の西ジャワ州地方防災局(BPBD)は、経済に関する取組をするスタッフが揃っていない。
小野委員	工業団地の管理組織のワークショップへの参加状況やオーナーシップの状況はどうか。
高橋	フィリピンでは2箇所の工業団地が毎回参加した。ベトナムは1箇所、インドネシアは1箇所の工業団地の管理組織が毎回参加している。

1-(2) 今後の予定、広域 BCM の現地機関への引継ぎ

池田委員	計画書の第3版を作成するといった現地機関による広域 BCM サイクルの実施に対しては JICA が関与するのか。
宮田	今年度の延長期間では、特段想定していない。来年度以降、先方政府や機関から要請があれば、2 国間で広域 BCM や広域 BCP に関する支援をする可能性はある。
渡辺委員	ぜひ机上演習を行ってほしい。計画を高度化してから演習をすると、計画を肯定するための演習となってしまう。まずは、演習（チェック）をして現状を見極め、アクションへ結びつけることが必要ではないか。たとえば、フィリピンでいくつかの組織でタスクフォースを作って、8月の最終セミナー時にキックオフをして、11月、12月のワークショップに向けて演習シナリオを彼らが組んでいくといった準備を進めてはどうか。
林委員長	現状の計画書第1版の内容を参照いただき、それでも演習等ができそうなのかコメントいただきたい。計画書第1版の内容では、具体的な固有名詞がなくジェネリックな箇所が未だに多く、机上演習が出来るレベルに達しているのかが疑問である。それ以前に、ジェネリックな部分をローカライズすることが必要である。具体的に誰が、何をするのかを記載しないと計画にはならず、ガイドラインのままである。
渡辺委員	フェイズ毎に誰が何をするのかを今から決めるのは難しいので、演習は難しいと理解した。ハザードがどういうインパクトを引き起こすかを相互運用性も考慮して、分析しないと防災の域を出ないので、その地域の何を守るのかといった共通の目的の設定やその優先順位、それぞれのフェイズにおいて主体となって行う機関のフローを明確にして、机上演習に取り込むことが必要だろう。
岡積委員	積み残しはいつの時点のものなのか。現地機関は中心となる組織のことか。継続的なフォローをする上で AHA センターが担う役割も大きいと思うが、AHA センターの姿が現状ではあまり

	見えていない。
高橋	積み残しは現状の時点のものである。現地機関は、リーダーとなる機関、ワークショップに参加した現地の地方政府、インフラ関係者、民間など全てを含めた機関を示す。AHAセンターは災害が起こった場合の緊急対応がメインの機関なので、今回のような取組だと目的が違うことや人員が揃っていないことが懸念される。
岡積委員	時間がかかる話なので、誰がフォローするかが決まっていないのは非常に心配である。
高橋	先ほどの中心的な役割を果たす組織が中心になって進めていくことを考えている。アセアン全体に広める上においては、アセアン事務局が中心となることが想定される。
不破	JICAのプロジェクトの設計の仕方は、演繹的な形式知をローカルが学べば自発的にできるという思い込みがあったが、調査団からのインプットだけでなく、現地側で気づいたことを主体的にもっとフィードバックしないと力がかからない。形式知が使えないという意見が現地から出てきたり、現地の意見でローカライズしたりしていくことが必要である。こういった動きが出てこない、ソリューションにつながらない。
岡積委員	3つのパイロットエリアで、メインとなるプレーヤーを特定した上で、それぞれが自ら広域BCMサイクルを実施できる体制を作るのが今回のプロジェクトの最大限できることで、その後はそれぞれの機関が自らやっていくことと理解した。
林委員長	何かを動かす時に必要な5つの観点として、①Governance（誰が責任を持つかという組織体制を作る）、②Standard Operating Procedureの確立（やるべきことを標準化する）、③それらを支えるTechnology、④それを動かす人材のTrainingやExercises、⑤実際のUsage（利用）があげられる。これらに当てはめて、本プロジェクトでできることを考えると、①ステークホルダーを見定めて、ガバナンスを生み出させることがポイントになる。②の標準化はガイドブックに当てはまる。③のテクノロジーに関して、Web上にGISの地図をアップロードできれば、リスク評価のための地図を利用しやすくなる。④これからを担う人材を対象に、ASEAN10を対象にしたトレーナーズトレーニングプログラム等が考えられる。（ガイドブックを基にそれぞれの国でどうすれば広域BCPを作れるかを研修する。）⑤実際のどこかの国で使っていく。金の切れ目が縁の切れ目となって、広域BCMの概念がJICAから切り離されていくのは避けたい。3回のワークショップで現地機関が自立するところまで進むとは誰も期待しない。ただ演繹的なものを進めるのではなく、広域BCMは大事な概念であることを浸透させるための第一歩としては、ここまでできたという結論にして、次につなげていく必要がある。このアウトプットの中心となるのは、ガイドブックである。
池田委員	ジェネリックな計画に対してあまり批判的な意見が出なかった場合や、宿題を出しても埋まらなかつたり形式的なものだったりする場合、美しくまとめると身に着くものが少ないので、演習をして課題を提起するという方法もあるのではないかな。
大槻	工業団地の管理組織が今後広域BCMサイクルを実施するときに、担当者が出てこない、計画書に書き込めないなど課題が生じる。次のワークショップでは、工業団地の管理組織の意見は、他の個々の参加者が考える結果と違う形で評価されても良いのではないかな。
林委員長	パイロット3地域全てにおいて、工業団地の管理組織がワークショップに参加しており、その人たちの振舞を注意深く記述していくことは重要であろう。池田委員の意見は、ジェネリックからローカルなものにカスタマイズする場合、必ず不整合が生じると想定している。机上演習を通じて課題を見つけるなど、自分たちの力で解消するノウハウや能力を持ってほしい。

1-(3) ガイドブック（案）の紹介と議論

濱口委員	ガイドブック1ページの「this goal」の意図が少し分かりにくかった。広域BCMを指すことが分かるように説明にした方がよい。 また、個々の事業者からすると、広域BCPを広域な防災計画と見誤り、色々な規制があると思われるといけないので、広域BCPの概念を冒頭で述べるといい。参加型の演習をして改善するプロセスが回り、これから地域で何が起きるかが分かり、参加のインセンティブがあるといったことなど、広域BCP策定の目的を述べるとよい。社会科学の立場からすると、広域BCPは、事業継続をより確実のものとして、地域の雇用と生活を守ることが最も大きな目的となる。その点を明示すると、参加する事業者にとって目的が明確になると思う。
岡積委員	個々の工場や工業団地でなくて、クラスターとして複数の工業団地を対象として議論するという話を本件の当初に聞いた記憶がある。ある工業団地が機能不全に陥った時に工業団地間での相互協調の話もあるのではないかなと思うが、そういう話がガイドブックに見当たらないので、少し強調した方がよいと思うがどうか。
高橋	官民協力も重要である。ガイドブックの冒頭に説明を追記したい。
岡積委員	計画書第1版の中にも関連する記述が無いと概念だけになって分かりにくいと思う。具体的なパイロット地域の計画の中に書いていくことはできないかな。
木根原	今回のパイロット地域は、洪水が起こると産業集積地全体が同時被災するような地域だったが、同時被災しない地域同士であれば相互協調の話が出てくると思う。

高橋	ガイドブックの4章にも関連する説明を追記したい。
馬場委員	大企業と中小企業間、サプライチェーン間の連携も重要な観点である。
濱口委員	BCMが重要になるのは中小企業だと思う。昨年にタイを訪問した時に、大企業は洪水時でも生き残れるように要塞化するような勢いで対策をしていた。他方では浸水したら何もしないという考え方も見られた。どちらも資源の配分から見ると非効率である。広域BCPやBCMを実施することによって、正確な情報を共有して、復興を視野に入れた防災対策に対して、より効率的な資源配分を実現することができる。これは経営の効率化につながり、事業継続を可能にする利点があると思うので、このような観点も目的の中に入れてはどうか。
渡辺委員	ビジネスへの影響分析(BIA)の内容が薄い。例えば、スライド20ではコンテナの55%を取り扱っている港湾について、中身が何かが分からないとビジネスインパクトが出せない。添付1の戦略(パイロット3地域の広域BCP)、添付2のハザードシミュレーションに加えて、添付3に、シミュレーションで出てきたハザードが、実際にその地域の産業にどのような影響を与えるかといったBIAの事例を入れるのが、教育的なガイドラインという意味では良いのではないか。ボトルネックを明らかにした後、代替性の有無を検討し、代替性がなければどういったソリューションがあるのかについて、具体例を書く。今、インパクトは、その地域内に閉じた話になっているが、その地域に流れているサプライチェーンやビジネスにどう影響するかについて示してほしい。また、評価方法についても、例えばお金はかかるが中長期的に使える方法や、お金はかからず、即効性があるがその効果は1年しかないといった、ソリューションに対しての評価の考え方を示す。これを示すことで、現地機関がどのように予算を取るかにも役立つ。ガイドブックなので、計画を作るにあたって必要な観点、選択肢としてあげられる候補を是非入れてほしい。
小野委員	地域防災計画との連携が重要だという話があった。リーダーを中央政府と想定しているのであれば、計画の冒頭で地域防災計画との関係性を整理した方がよい。
関口	タイのロジヤナ工業団地内のBCMのプロジェクトでは、スライド7の広域BCPの成功の鍵にあるように「推進者のオーナーシップ」、「各参加機関の経営者による理解と支持」が重要であった。タイのプロジェクトの反省点としては、東京でプロジェクトを管理して、現地でのオーナーシップが希薄になってしまったことだ。工業団地を運営しているメインのシェアホルダーに東京から説得に行く際に、目的の共有化が上手く行かず、東京メインでオペレーションを行ってしまった。机上演習をしたところ、現地の参加者からすると絶対に組まないようなオペレーションを組んでしまった。 推進する人たちが自分のものにしなないと、中々意味のある広域BCPにならないというのが正直な感想であった。工業団地単位の小さなコーディネーションでも、林先生の言う最初のガバナンスの部分が難しかった。広域BCMにおいても、ガイドブックの2.2 Organizing Stakeholders for Area BCMや3.2 key for successful implementationの部分で記載されているようにリーダーシップが重要で、推進者が関係者をコーディネーションするのが難しいということも、どこかに書き込んだ方がいい。日本のように協議会や調整するような組織体を作ることも考えられる。
宮尾	広域BCPと個々のステークホルダーのBCPに距離感があるように感じた。インターフェイスをきっちり取っていかないと現実にはうまくいかない。インターフェイスの取り方として、情報を双方向で共有することが考えられる。例えばBCPの復旧目標時間を合わせることで、業務プロセスの流れの中のこのポイントで広域BCPによる情報が入るといったこと。インドネシアの計画書19ページのRole of Stakeholdersの章で、「shall act work to pay each role」は、広域BCP側からステークホルダーにこうしなさいという言い方だが、広域BCP側からこういう情報を提供するからあなたたちのBCPのプロセスに組み込むことでステークホルダー側にもメリットがでるといったように、広域BCPと個別BCPの双方向性を表現した方がよい。
林委員長	ガイドブックの冒頭は、東日本大震災の話から始めるのではなく、「個々のBCPを作成済で、実践しておられますが、果たしてそれで充分ですか。必ずしもそうではありません。」ということから話を引き起こす。その後で、「東日本大震災、タイのチャオプラヤ川のような災害が起これば大丈夫ではない。」という流れだと思う。つまり、全体が同じような運命にさらされれば、1社だけの問題ではない部分についても考えなければならない。全体を考えていくために広域BCMの導入が必要となる。最後の結論としては、あなたの組織のBCMを改善することにつながり、地域の雇用と生活を守ることになる。このように最初と最後のパラグラフを修正する必要がある。ガイドブックは、まだステップバイステップになっていない。例えばガイドブックの9ページないし19ページにも関わるが、何を目的にしてステークホルダーを集めるのか、また、ガバナンスを作るために時間も手間もかかるということも書いた方がよい。今回はガバナンスを作るためのワークショップだったのかもしれない気がしている。
池田委員	ガイドブックの冒頭だけでも、読者の主体別に語りかけてもよいかもしれない。
林委員長	プレゼン資料は綺麗にまとまっているので、委員の皆さんには原文を読んでほしい。

2.広域 BCM の一般化への取組み

渡辺委員	フィリピンでの研究者・有識者パネルでのコメントに ISO22301 に準拠した方がいいとあった。東南アジアは外資企業が多いので、ある程度世界標準を適応した方が競争力を維持できる。認証を取る必要はないと思うが、考え方の不整合が生じることは避けることは最低限必要だ。広域 BCM に単体の BCM をつなげて地域を守るという発想は ISO の中にもあるが、まだ一つの考えとしてまとまっていない。ISO に新規提案をするなら支援する。インターオペラビリティの複数の組織が期間限定で同じ目的に向かうための指揮命令系統や情報の共有の仕方、PPP (プライベートプライベート、プライベートパブリック、パブリックパブリック) いわゆるステークホルダー間の協定に必要な要素、コンピテンシーなどといったパーツはそろっている。今ある ISO のどのパーツが使えて、足りない部分はどこで、それをインテグレートするかどうかというフレームワークだということは、ISO に関わる立場からすると欲しい部分である。たぶん今回の実証実験の中で出てきたフレームワークを、まず ISO との不整合を起こさないような形でモデル化して行って、それを ISO にするというのも充分可能である。こういう分野での動きは必要だけど実際にはできていない。まだ成果がないけど、試行錯誤しながら出てきたものは説得力がある。フィールドワークに基づいた規格というのは歓迎なので、是非やって欲しい。
宮田	JICA 内で意見集約がまだできていないし、ISO 化するメリットやデメリットについても理解できていない。また、ISO の手続きが長期に渡るので、人員体制も整えられるか分からない。ただ広域 BCM の標準化をビジネスとして使う関係者がいて、そこにインプットをする立場であれば情報を共有すること等で関わっていただけると考えている。
宮尾	ISO を大上段に考えなくてよい。ISO の基本的なところは、規格ができています。まずその規格を見ていただき、活用するといったようなところから始めることができる。エリアという概念が必ずしも今の規格に入っていないといった不足部分は、渡辺先生にもご尽力をいただいている標準化の活動を通して、ISO 化への手順をアドバイスできる。ISO の参考となる部分は上手く活用してほしい。
不破	JICA 側の実施体制については、今の担当部署だけで対応する話ではないかもしれないので、JICA で引き取って考えたい。色々な方法があるが、先生方とある組織を作っていかなければいけないだろう。場合によっては経産省と組むという話もあると思う。例えばチャオプラヤ川左岸に存在する工業団地を守れないとなった場合に、どこかと組んで逃げようとする。独自に逃げようとした中小企業は上手く行かず、撤退することが、現実には起きている。タイ政府に体制を作る動きがない中で、広域 BCM を導入した時に、どのように動くかは大きな実験となる可能性がある。
渡辺委員	タイは、ISO22301 が発効した当日に国内基準に採用した。恐らく ISO の議論はタイにとっては信用性が高い。産業構造が固まっていないミャンマーでは、広域 BCM の考えを早く都市機能に入れ込んだ方が計画しやすい。タイ、ミャンマーをおさえるという意味では、ISO の議論を早いうちに進めて、彼らの意向を聞きながら作り上げることで、このプロジェクトも促進する。他への拡張に関しては、共通言語として、またプラットフォームとして ISO は有効である。ISO を始める理由はたくさんある。
林委員長	JICA 独自で実施するのは荷が重いというのが発言の主旨で、国内委員会のような形で、広域 BCM についての様々な分野のステークホルダーを集めて、その主要メンバーに JICA が入るような国内の支援体制をどうつくるかが大切である。JICA は ISO の魅力は承知しているがどのように着地できるかという道筋が見えていない。そのために関係者の援助を仰ぐ、もしくは、ベネフィットを受ける企業を含めた業界を作る。JICA を支えるような広域 BCM についての体制作りをするべきだと、本委員会で打出せれば JICA も心強い。
宮尾	今の方向性で結構で、相談があれば相談に乗るし、国内審議委員会への助成も可能だと思う。
小野委員	国内企業から、どこの工業団地のどこに進出すればよいか、既に進出している企業からは洪水のリスク、保険の料率についても相談もよく受けるので、日本国内の海外進出企業もしくは、既に進出している企業等もターゲットにして普及させていってはどうか。
林委員長	ASEAN をターゲットエリアにした時のステークホルダーとしては国内の海外進出企業も国内委員会に入ってもいいかもしれない。国内の体制を作って、広域 BCM の推進につなげることが必要である。

3.その他

宮田	本プロジェクトは 2015 年 3 月まで延長になるので、国内支援委員の先生方の任期も延長をお願いしたい。
委員一同	異議なし。

以上

2015年02月03日(火)

10:00 - 12:00 JICA 本部 229 会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』

第六回国内支援委員会 出席者リスト

国内支援委員

林 春男	京都大学防災研究所 巨大災害研究センター教授
岡積 敏雄	国土交通省総合政策局 国際建設管理官
小野 高宏	三菱商事インシュアランス(株) 社長付 BCP 担当部長
檜府 龍雄	JICA 国際協力専門員
馬場 仁志	JICA 国際協力専門員
濱口 伸明	神戸大学教授
渡辺 研司	名古屋工業大学教授

JICA

佐久間 潤	東南アジア・大洋州部 次長
加納 大道	東南アジア・大洋州部 計画・ASEAN 連携課
小松 千寿	東南アジア・大洋州部 東南アジア第一課
不破 雅実	地球環境部 部長
竹谷 公男	地球環境部 客員専門員
木藤 耕一	地球環境部 次長
大槻 英治	地球環境部 参事役
宮田 克二	地球環境部 防災第一チーム 課長
秋山 慎太郎	地球環境部 防災第二チーム
井上 陽一	地球環境部 防災第一チーム

調査団

高橋 政一	総括/広域 BCP 策定 2/防災計画
辻 禎之	副総括/広域 BCP 策定 1
瀬川 秀恭	災害リスク評価リーダー
松並 志郎	業務調整/事務局運営/災害リスク評価補助(地質ハザード)
渡邊 暁	業務調整/災害リスク評価補助(水文気象ハザード)

日時：平成 27 年 2 月 3 日（火）10:00 ～ 12:00

場所：JICA 本部 229 会議室

『アセアン地域における産業集積地の自然災害リスク評価と
事業継続計画策定にかかる情報収集・確認調査』

第六回 国内支援委員会

議事次第

1. 開会
2. 地球環境部長挨拶
3. 委員および参加者紹介
4. 議題
 - 1 プロジェクトの進捗状況と今後の予定
 - 2 ガイドブック version. 2 の紹介と議論
5. その他
6. 閉会

コンパニ名：OYO インターナショナル株式会社
株式会社三菱総合研究所
株式会社建設技研インターナショナル

アセアン地域における産業集積地の自然災害リスク評価と事業継続計画に関する情報収集・確認調査
第6回国内支援委員会議事録

日 時	2015年2月3日(火) 10:00-12:00
場 所	JICA 2階 229 会議室
出席者 (敬称略)	<p>国内支援委員</p> <p>林 春男 京都大学防災研究所 巨大災害研究センター教授 岡積 敏雄 国土交通省総合政策局 国際建設管理官 小野 高宏 三菱商事インシュアランス(株) 社長付 BCP 担当部長 檜府 龍雄 JICA 国際協力専門員 馬場 仁志 JICA 国際協力専門員 濱口 伸明 神戸大学教授 渡辺 研司 名古屋工業大学教授</p> <p>JICA</p> <p>佐久間 潤 東南アジア・大洋州部 次長 加納 大道 東南アジア・大洋州部 計画・ASEAN 連携課 小松 千寿 東南アジア・大洋州部 東南アジア第一課 不破 雅実 地球環境部 部長 竹谷 公男 地球環境部 客員専門員 木藤 耕一 地球環境部 次長 大槻 英治 地球環境部 参事役 宮田 克二 地球環境部 防災第一課 課長 秋山慎太郎 地球環境部 防災第二課 井上 陽一 地球環境部 防災第一課</p> <p>調査団</p> <p>高橋 政一 総括/広域 BCP 策定 2/防災計画 辻 禎之 副総括/広域 BCP 策定 1 瀬川 秀恭 災害リスク評価リーダー 松並 志郎 業務調整/事務局運営/災害リスク評価補助(地質ハザード) 渡邊 暁 業務調整/災害リスク評価補助(水文気象ハザード)</p>
議 事	<p>10:00 開会</p> <p>10:00 地球環境部長挨拶</p> <p>10:05 議題</p> <p>1 プロジェクトの進捗状況と今後の予定</p> <p>2 ガイドブック version.2 の紹介と議論</p> <p>12:00 閉会</p>
配布資料	<p>1) 配布資料 00 第6回 国内支援委員会 議事次第</p> <p>2) 配布資料 01 第6回国内支援委員会 配布資料リスト</p> <p>3) 配布資料 02 第6回国内支援委員会 参加者リスト</p> <p>4) 配布資料 03 プロジェクト全体の進捗報告</p> <p>5) 配布資料 04 広域 BCM ガイドブック第2版(案)</p> <p>6) 配布資料 05 第四回パネル会議発表資料、パネルメンバー</p> <p>7) 配布資料 06 第四回パネル会議発表資料、ナショナルコーディネーター</p> <p>8) 配布資料 07 第四回パネル会議発表資料、タイ側発表者</p> <p>9) 配布資料 08 広域 BCM ガイドブック第2版(案)</p> <p>10) 配布資料 09 広域 BCM ガイドブック第2版(案) ツール1 (パイロット地域の広域 BCP 第2版)</p> <p>11) 配布資料 10 第5回国内支援委員会議事録</p>
今後の予定	配布資料 03

以上

議事録

アドバイスおよび質疑応答

1. プロジェクトの進捗状況と今後の予定

渡辺委員	前回委員会までの議論で、パイロット国での広域 BCM の取組みが自主的に進まない中でも、フィリピンだけはやる気があったが、それすらもトーンダウンしてきたという認識で良いか。
高橋	フィリピンは進めたいという意識が高いが、他力本願的な部分があるので、取組みを進めるよう支援していく必要がある。
渡辺委員	広域 BCM の活動を停止させないために、定期的なレポートに対してウェブコンファレンス等で対応すること、また地元の知見を活かすためにも地元のコンサルタントを活用していくことで、地元で継続していくことが必要ではないか。 プロジェクトで進めてきた広域 BCM とタイ国の National BCM の間にギャップはあるか。
高橋	タイの National BCM はアイデアの段階である。今後進め方を考えていく上で、広域 BCM のアプローチを適用しながら、タイの National BCM を計画していこうというスタンスである。
渡辺委員	タイは広域 BCM への意識が高いようなので、タイを推進力にして広域 BCM を広げていくことが良いのではないか。タイは ISO22301 を発効した時も、即日国内標準化したので、今回も同様の連携があるのではないか。シンガポールも ISO の標準化が得意な国なので、2つの国との連携を強めていくことが有効ではないか。タイでは、特に日系企業が多く入っているロジャナ工業団地では BCP を進めているが、単体なので行き詰っているようだ。
竹谷	2014年6月のアジア防災閣僚会議の時に、NESDB のアコム長官が広域 BCM の取組みに興味を示し、タイから広域 BCM の取組みに関する研修に参加できる人数を増やしてほしい、同じメンバーをコンスタントに送り専門的なスタッフを育成したいなどの要請があった。アコム長官は、国家の歳出の許可権限を持っており、クーデターの起こった新政権の中でも運輸省の副大臣を兼務した経験もあり、キーパーソンである。そのような背景から、配布資料3のスライド16のタイ国のパネルメンバーについて、洪水の専門家の Mr. Chukiat Sapphaisal 氏は現在官組織に属していないので、NESDB の副長官が今後のドライバーになると思う。
林委員長	人材バンクの充実は継続的に行っていただきたい。
岡積委員	2015年3月の国連防災世界会議での情報の発信はどう考えているか。
秋山	国連に加盟する各国の政府代表団が参加する本体会議の34のワーキングセッションの17番で「Business and Private Sector: Investing in Resilient Infrastructure」というセッションで、JICA からパネリストとしてフィリピンの MMDA の Ms. Corazon Jimenez を招待する予定である。彼女は、先般の日本学術会議の中で広域 BCP について発表した実績がある。本体会議ではそのワーキングセッションで広域 BCP について発信することを考えている。 また、昨日「総合防災行政 A」という世界8ヶ国から15名が参加する JICA の研修があり、その中で JICA の防災の取組みの一つとして広域 BCP について紹介したところ、ブータンやマケドニアの参加者が興味を持っていた。研修は JICA 関西で行い、参加メンバーはフィリピンでは保健省、インドネシアでは BNPB、その他は地方行政や気象庁関係者等の課長クラスであった。
林委員長	先般の日本学術会議で、Ms. Corazon Jimenez は JICA の想いをきちんと伝えきれていなかった。
竹谷	仙台の国連防災世界会議は、国家間の会議なので、ドナーとして研修を主導している機関が表に出られるかどうかは、オーガナイザーによって恣意的に異なる。そのため、あるセッションは JICA の想いを発表者へ事前にインプットすることが必要である。さもないと、JICA の支援で実施していても、自分たちの考えで実施したという発表になりがちで、全体のビジョンが見えない結果となるので、工夫が必要である。
岡積委員	その他にパンフレットの配布あるいは展示など、多角的な取組みを模索しているのか。
秋山	国連防災世界会議はグリーンカンファレンスなので、会場での配布物はなく、事前にデータを提出して、参加者がダウンロードするというスタイルを取る。そこで、JICA が作成した広域 BCP のパンフレットのデータを事前に提供する予定である。
林委員長	パブリックフォーラムでは、何か打ち出す予定はないか。
秋山	JICA 地球環境部ではパブリックフォーラムにおいて、大きく2つ打ち出す予定である。内容は検討中であるが、JICA の防災の取組みの中から紹介することを考えている。14日と17日のいずれも午前中に行い、17日は東北大学の萩ホールで1000名規模の総合フォーラムを行う。
岡積委員	プライベートセクターのセッションでは防災プラットフォームのモデレーターに依頼し、広域 BCM の話題を入れることは可能である。
林委員長	広域 BCP のビデオを流すスペースはあるのか。
岡積委員	せんだいメディアテークで、防災プラットフォームにおいて日本の技術を紹介する展示スペースを確保しているので、JICA と連携してビデオを流すことは十分可能ではないか。
秋山	本体会議の JICA のブースで、可能であれば広域 BCP のビデオを流す予定である。

小野委員	広域 BCM を普及させるにあたり、工業団地の評価の仕組みを導入できないか。ISO を取り入れると産業界からの反発が出る可能性もある。工業団地に JICA がマークをつけて、日本企業が優先的に入居する、もしくは入居したくなるような仕組みができれば、工業団地側から広がるのではないか。一方、工業団地の主幹となるような政府の部局が工業団地に働きかけをする仕組みを導入できれば政府側から広がるのではないか。
竹谷	JICA マークを導入することはリスクである。タイの経験から、2011 年の洪水直後でも治水対策が進まない状況で、応急措置として輸中堤防を作成したが、品質は低く、確実に安全である堤防を作ることは困難である。そこにマークを与えてしまうと、被害があった場合に大きな問題となる。ただ、タイで実施されたプロジェクトにおいて、非常時の体制について洪水対策が考慮されているか、非常時点検は確保されているかといった項目を入れて評価する試みはされていた。広域 BCP とは異なるが、日本企業が親企業であるタイの企業が被災した場合、ベトナムの企業で代替するネットワークを作ることも計画していた。
小野委員	JICA マークに関して、絶対的な品質保証のレベルを評価するのは難しいので、例えば国家規格として国のマークを作成して、ISO と同様に継続的な改善の仕組みや活動を証明するものであればよい。
大槻	広域 BCM を ASEAN10 ケ国に広げる時のメンバー構成について、アドバイスを頂けるか。例えば、投資等のプロジェクトを形成するインフラ整備分野、投資案件についての採択や優先度を判断する分野、大学などの研究機関、国家の危機管理に携わる分野などがあるが、各国でどういうポジションで取り組むかは、実施状況に応じて差があるのではないか。国の投資省、もしくは国家防災戦略部局がメンバーとなれば政策への反映を重視しているかもしれないし、研究機関であればその国ではまだ勉強段階なのかもしれない。
渡辺委員	貸出先の企業の経営指導するいわゆる融資を行う金融機関を検討頂ければと思う。例えば、タイではバンコク銀行が興味を持つと思う。金融機関として、地域の企業のレジリエンスを上げることは、自分たちの与信リスク低減につながるもので、個別の貸出先の企業への経営指導をしている。将来的に政府へ依存し続けられないように、市場原理や企業価値のロジックを入れることが必要だと思うので、興味を持っている金融機関を入れてもよいのではないか。
馬場委員	リスクマネジメント全体の取組みの動きと保険セクターが結びついてメリットが生まれるのであれば、保険セクターは広域 BCM を広げるためのエンジンとなるのではないか。保険セクターは、リスクマネジメントの中での BCM の取組みをどう見ているのか。
小野委員	保険会社は、絶対的なリスク、例えば立地条件や過去の被災状況を重視している。ただし、保険分野において、各組織の行動、コーポレートガバナンスを踏まえて保険料に反映していくように変えていきつつある。変わっていけば、BCP・BCM の取組みに対する保険料への反映は可能なので、広域 BCM の取組みを知ってもらい意味でも保険会社をメンバーに入れることは、考え方の一つである。少しの保険料を下げることが、各組織にとってどれほどのインセンティブになるのかは分からない。
濱口委員	国際間の企業立地競争だという意識を強く政策担当者にもってもらうことが重要だと思うので、投資誘致の担当の政府部局の方に入ってもらうのが良いのではないか。また、その担当者が地方自治体や工業団地を教育する立場であることが望ましい。
小野委員	投資部門として企業を誘致して地域を守るという観点で、経済産業省の地方事務所と連動している自治体を入れたい。フィリピンで言えば、各県に点在している Department Trade Industry (DTI) である。
林委員長	工業団地で稼げる点をもっとクリアにする必要がある。広域 BCM は、その国のリーディングな産業を守るものと明確に打ち出す。工業団地という個々の単体ではなく地域の中の集積体を守ることで、国の立場では税収を担保するという点をはっきりと打ち出すことで、よいステークホルダーが関与してくれるのではないか。国際的に見ても ASEAN の 10 ケ国は労働力が安くて比較的質がいいので、投資の余地がある。同時に自然災害のリスクがある場所だから、賢い投資をしなければならない。その時に、工業団地単位で守るというユニットの立て方、言い換えればコンセプトの持ち方が重要であるということ、全面に打ち出す必要があるのではないか。それを実現するためのステップバイステップのツールを提供する。工業団地の個々の組織が BCM を実施していない場合、組織毎の BCM を、ISO に依拠して国際標準の形で導入していくというプロモーションがあっても良いのではないか。皆が同じ枠組みで考えてくれるようになれば、それを地域に拡大することができる。先行して、地域としての利害関係や連携協力を担っていくコアフォーラムを作ることが必要ではないか。例えば、ナショナルレベルの会議において、投資部局、国家防災戦略部局、オブザーバーとして研究機関、商業的には投資、保険、金融の関係者を巻き込んでいくことが重要である。そのような枠組みを全面に出すために、ビデオ、冊子、パワーポイントといった広報パッケージの提供が重要となる。発表者に対して、本人の労力を少なくしてよい発表をしてもらえるように、有効なコンテンツを含めたパワーポイントのマテリアルを準備する。マテリアルを用い

	て発表する場として、例えば、総合防災行政 A、実務者セミナーのような色々な枠組みの中で、紹介する場を設ける。JICA の本庁だけでなく ASEAN 各国の JICA 事務所にも広域 BCM を売り込み、案件を形成していくことも必要である。
不破	運輸交通の分野でベトナムのラックフェンでは、パブリックプライベートパートナーシップ (PPP) 案件で、日本企業が進出して、パブリックと連携を取り合っている。その PPP 案件はコマーシャルリスクとポリティカルリスクの境目が曖昧である。ベトナムではポリティカルリスクを民間に背負わせるのが特徴であり、災害リスクのコストも民間に背負わせる作戦に出るのであろう。そうなれば、成熟したコマーシャルセクターであれば、別の国の工業団地と、サイクルコストなどの収益性を比較検討して選ぶため、ベトナムを選ばないであろう。このことから防災はパブリックの仕事だと思わずに、マーケット整備までを見据えて、組織毎の役割の責任分化の議論を起すべきであろう。例えば、港湾の世界では、多大なコストがかかるため、一般的に防波堤と、浚渫はパブリックが行う。それだけの投資をパブリック側が行うかの議論と、投資側や工業団地側がリスクを考慮しているかの議論は、連続して行われるべきである。ベトナムのラックフェンの案件では JICA 内でそういった議論を行ったが、現地日本の企業を背負っているという日本側の弱みがあるので、ベトナム側に対するポリティカルリスクの取らせ方が弱かった。実績に近づけていくために、個別のソリューションを引き出していくことが必要であるが、そういった意味でタイは適した場所だと思う。タイでは JICA の調査で明らかにしたリスク、タイ政府の対策の取り方、そこの保険料率が関連してくるのではないかと。
大槻	広域 BCM を実施する時の経済的なメリットは、個別の BCM では個別最適化にならないので、広域 BCM という概念が必要となるという基本コンセプトにおいては分かりやすい。また、個々の企業に BCM が全くない場合、地域の安全度の確保方法や、進出企業に対して BCM の取組みに関するタスクを与えるアプローチがある。JICA として、パブリックの側から地域や工業団地での案件を考えた時に、そこへの物流、エネルギー、労働力、工業団地の内外の連関、国外との対外的な物流といった様々なスケールの問題が生じる。広域 BCM の概念を最大化する時に、階層的に課題を抽出して、そのレベルにあったソリューションを見つけていかないと、JICA の技術協力、円借款のプロジェクトのメニューに組み込むことが難しい。個々の企業の BCP が無い場合、個々の BCM を導入してステップを組んで次へ進めていく流れは、JICA のアプローチに当てはまる。一方、企業誘致の差別化や、企業開発や地域開発をする方が経済的なメリットを出すために、広域 BCM を活用し、どこまで達成しているかを把握することに対しては、JICA の今の実力や元々持っているベクトルからは、メニューに組み込みにくい。
林委員長	地域を考えると、自然および社会的なリスク、それを担うローカルなパブリックセクター、その中で色々活動するプライベートセクターがあり、それらの3つが良い関係を作ることが広域 BCM だとする。まず、プライベートセクターが個々の BCM を実施していなければ、専門家を派遣してトレーニングをするなど、BCM を普及する仕掛けを打ち出す。パブリックセクターは、広域的に見てロジスティックを含めた国のインフラ整備のことを視点として持つ。いずれのセクターにおいても大前提にあるローカルリスクを評価しなければならないので、国内の専門家等を派遣する。最も重要なのは、3つのセクターをコーディネートするコーディネーターが必要である。ODA 大綱の中で、比較的保険が上手くいっている理由は人を出して、その人たちが地域のコミュニティーベースのソリューションを考えているからではないか。コーディネーターとしては、まずコーディネーションが必要で、次にプライベートセクターに BCM を指導でき、パブリックとリスクについても理解でき、必要なリソースを呼びこむことができる人が望ましい。
小野委員	APEC の中小企業 WG で作成した中小企業 BCP ガイドブックを7か国語で公表予定である。タイではこれをベースに中小企業向けのワークショップを行っている。なお ISO も踏まえている。
林委員長	このガイドブックを使わせて頂き BCP を教えて、大きい枠組みは ISO22301 をそのまま使ってもよい。
小野委員	AHA センターは応急対応に関する活動が多く、APEC は経済産業面での活動が多いため、APEC に広げるといふ展開もあるのではないかと。
林委員長	そういう意味では、リスクの部分を AHA センターに任せてもよい。
濱口委員	APEC に関連して、経済産業省から派遣させて頂き、2014 年 12 月 8 日にフィリピンのマニラにおいて開催された「Informal Senior Officials' Meeting (ISOM)」のシンポジウムで講演した。フィリピン政府から要請があったテーマがレジリエンスで、サプライチェーンのレジリエンス、ローカルコミュニティーのレジリエンスの両方が入っている。フィリピンの災害として台風、火山、地震がある中で、レジリエンスというテーマを、フィリピン政府の今年の重要アジェンダに入れようとしているので、広域 BCP 案件も入り込めるのではないかと。
不破	竹谷さんに意見を伺いたい。タイの場合、洪水予測シミュレーションが整備されており、チャオプラヤ川においては、1週間後の湛水面積、湛水深が分かるようになっている。その情報をもとに、場合によっては進出企業が施設を見捨てる判断ができると思う。リスクの条件が見えてきたので、タイ政府が負うべきコスト、企業の取組み方に発展できるのではないかと。タイで

	取組む場合には、広域 BCM のモデルが考えられると思うが、竹谷さんの意見はあるか。
竹谷	広域 BCM を広げるにあたって、タイがパイロット国として最適であると思う。理由は、タイの洪水は世界中の防災メンバーに与えた影響が甚大であり、チャオプラヤ川の氾濫は、途上国の被害がサプライチェーンを通して世界に波及した事例だからである。別の理由としては、国が推進した工業団地が水没したことがある。本来は、国の責任問題になってもおかしくなかったが、日本企業が多かったこと等により問題にならなかった。元々工業団地が保有していた災害に対する防御の安全度意識が非常に低かった。ほとんどの工業団地では、10年確率の内水排除防御用の輪中堤防しかない立地条件で、浸水リスクは高かった。その上、進出した企業のリスク危機管理意識が低かったため、被害が大きかった。JICA はマスタープランを作ったが、完成までに10年はかかる見込みであった。過去10年間に3回も洪水が来ており、浸水対策のために、洪水予測システムを開発して提供した。一般的には洪水予測は、流量と水位だけなのに対して、氾濫域についても1週間後まで予測することができる。リスクであるが、工業団地のニーズを優先させたものである。NESDB のアコム長官が必死になっている理由は、タイ政府が治水対策をせず、工業団地から日本企業が出て行って5年も経ったら GDP が半分落ちると知ったからで、本当に危ないと思っている。そのため、リスクを評価するシステムの準備が整い、官側が危機感を持ち、民間のやる気もあるので、機は熟している。タイをフラッグシップモデルにしてやれば日本がリードできるが、やらなければ他の国が動いてしまうであろう。

2 ガイドブック version.2 の紹介と議論

渡辺委員	ガイドブックの4ページ図を、本編、別巻、資料毎に統一感のあるレイアウトにした方がよい。3章の Understanding the Area と 3.3 の Knowing the Area と使い分けをしているが、Understanding the Area に統一した方がよい。 45 ページの広域 BCM の演習のパターンの章で、作られた BCP の正当性を保持する訓練は他にもあるため、それぞれのステークホルダーが個別の BCP を持ち寄って集まり、限られた時間と情報で意思決定をするような演習であることを示した方がよい。 表紙の発行年を 2014 年ではなく、2015 年に修正する。
林委員長	本プロジェクトの成果の GIS データベースは、Web 上に GIS を整備したのか。
高橋	Web 上ではない。
林委員長	それではアクセスは難しい。Arc GIS オンラインサービスのような技術が、主流・デファクトになりつつある。Web 上にパブリッシュするための様々なプロダクトがあり、それらを自由に重ね合わせ、表示範囲を指定することができる。ダイナミックマップのように、今までの情報の集積を工業団地や地元政府の人たちがアクセスできると喜ばれるであろう。カントリーレポートの紙媒体はオールドファッションで、JICA がアーカイブする際の表示媒体は真剣に選んだ方がよい。
小野委員	目次の 1 Area BCM と 2 Area Business Continuity Management の使い分けが分かりにくい。広域 BCM のメリットは 1 章だけでなく、2.5 Benefits of Area BCM にも充実させた方がよい。個別 BCM との連携については、4.2 の Individual BIA で個別 BCM との接点が書かれているが、Implementation のところでも個別 BCM との役割分担の話が出てきた方がよいのではないかと。応急対応は書いていないが、そういう割り切りでよい。
林委員長	応急対応は、全体のマネジメントの中の 1 ページだから、そこへ帰結したら帰結してもいいが、そこまでレベルとして書き込まれていないイメージである。
小野委員	全体の印象としては、リスクアセスメントをした中で、事前対策は列挙しており、モニタリングの役割分担も列挙されており分かりやすいが、実際に有事の際にストラテジーの中でどういうステークホルダーがいつまでに何をするのかというアクションプランの要素を書き込むとよりいいのではないかと。具体的には、6.1 に事前対策とアクションプランの要素が別れて記載され、政府および工業団地の災害後の対応が書き込まれているとよい。
林委員長	ISO22301 の枠組みの中で災害後の対応が書かれている。それがないとレジリエンスにならないので、そこを拡充してください。その説明に関連して、ISO22320 も詳細は参照する形で、紹介しても良いかもしれない。これは基本的にはガイドブック全体と ISO との関係づけの問題である。渡辺委員と小野委員と一緒に ISO に関わってきた経緯があるので、ISO を前提にすることで個々の BCM と広域 BCM の連続性が担保できるのではないかとというスタンスで話しているが、ガイドブックでは、前提となる個々の BCM について重視していないので、エッジをたてる必要があるだろう。 広域 BCM の普及に関して、ガイドブックはボリュームが多いので、パワーポイントやビデオ、小冊子など、エッセンスを抜き出した拡販用のマテリアル作りも重要であろう。マテリアルをもとに他国、JICA 内、パイロット国の他のセクターへ浸透していくべきではないかと。
不破	プロジェクト研究なので、リスクアセスメントを詳細に実施しておらず、プリミティブな段階だと思う。タイの事例のように現実の問題に接近して、次の段階として、現地に即したプロジェクトを実施する必要があるとそうである。

林委員長	次のステップで具体化する候補地としてタイがあると思う。タイの中のキーパーソンを上手く集めて、パネルメンバーのようなグループを作る。それを他の ASEAN10ヶ国に伝播させる役割を、本プロジェクトの ASEAN パネルメンバーに負わせるといったようなミッションの整理も必要となってくる。
竹谷	タイは近年の災害の大きなパーセンテージを出した国である。アコム長官は、日本で例えると内閣官房副長官の立場で、災害に対して危機感を持っているため、環境が整っているといえる。行政側の環境だけでなく、民間側も圧倒的な産業集積地があり、実際に被害が出ている。ここで進めなければ他でも進まないと思う。懸念事項としてはクーデターがあり、政治的にややこしい面もあるが、現在は雪解けとなっているようである。 工業団地に焦点を当てることに関して、実際に最も被害を受けたところが手を挙げると思う。JICA の立場としては、ある国の産業競争力だけを支援するのではなく、タイの工業団地をフラッグシップで行うが、将来的には水平展開するという余地を残す。またタイの7つの工業団地は、独立した経営機関なので、ある工業団地だけをサポートするとならないように、最も意欲がある工業団地が手を挙げたので、支援しているだけであるという建前を保つ。
不破	タイで実施することになると、タイより厳しいケースであるミャンマーのダウエイなどの話を無視できないので、急な事をやると反対の意見が出るであろう。
竹谷	タイは JICA が関与した工業団地がない一方、ミャンマーのダウエイやベトナムは JICA が関与した工業団地がある。JICA 中の意識改革が必要で、各セクターで防災のアセスメントをするよう要請している防災の主流化にも関わる。
不破	防災主流化は言うだけでなく、実装していく段階である。さきほどの港湾のケースでは、港湾や工業団地の部局毎にリアリティを持たなければならない。
竹谷	タイでは、JICA の無償案件で洪水の後にサプライチェーンの幹線道路の嵩上げ工事を行っている。仮に似たような洪水が来ても道路が寸断されない措置であり、他の国よりも広域 BCM の思想の原型のところのサポートしている。
林委員長	体制作りに関して、JICA が目指すところは PPP だと思ふ。日本政府を代表して、タイの中で広域 BCM を普及し、形としては工業団地を選ぶかもしれないが、PPP の向上の実例を行っていく。そこでは、国、地方自治体、その地方の企業も関わってくる。現地のコンサルタントを前に立てて、パネルメンバーを中心に据えるなどした上で、JICA が黒子になり、プロセスのドキュメンテーションと一般化を検証するという形で加わる。そのドキュメンテーションがしっかりしていれば、今後、水平展開する時の非常に良いマテリアルになる。 また、日本の中でも広域 BCM をきちんと考えていかななくてはならない。例えばパネルメンバーの中にオブザーバーとして加わるなど、日本で広域 BCM の普及を支援する専門家のネットワークも作っていくべきではないか。JICA イニシアティブの中で、協力してくれる先生方、民間企業、行政の方などのサポーターを個人単位でつながりを作ることが重要ではないか。現地との個人的なつながりで動いていくことも多い。
竹谷	タイは NESDB 以外でも工業団地を開発する工業省の下に、工業団地組合、工業団地連盟がある。非常に大きい影響力がある団体で、タイ政府と一緒に投資セミナーを開催する。これらの国も ASEAN10ヶ国に広域 BCM を広げる時のメンバーの一人ではないか。
大槻	JICA は、国内リソースを使ってどう海外展開をするかを考える。海外のリソースやネットワークも重要だが、日本の金融、ビジネス等の国内リソースを整理して、それらの人達と今後のことを相談していくことも重要ではないか。次のステップとして、JICA は永遠に技術協力を行うわけではなく、工業団地が開発されるのであれば融資の話や、日本政府であれば既に開発されたところに対する安全度、新しいインフラの設備をいれるのであれば、新しいビジネスチャンスとしてとらえるフィードバックも求められる。
林委員長	サステナビリティ・ディベロップメントが非常に重要で、世界規模で実現するための戦略の構築や、それを実現するための努力に貢献するのが、一番の旗頭である。その JICA としての関わり方としては、直営と環境整備の2通りがある。直営は、日本の ODA でこれまでやっていた従来型のモデルであるが、それでは今後立ち行かなくなるであろう。受け手側のレベルが上がり、大きなスコープで自分たちのサステナビリティを考えてもらうようにならなければならない。そうなった時、今の稼ぎ頭である工業団地のサステナビリティは、国の存続のために必須である。それを彼らが主体となって考えていこうとした時にテクニカルなアドバイスが必要となり、リスクアセスメントや政府のエンパワーメント、参加企業のレベルアップが必要となる。それらに関わる全てのセクションに、JICA がサービスを提供・支援できることが理想である。ただ、全てを JICA が直営する必要はなく、大きな枠組みの中で所要所に JICA の ODA の協力のメカニズムが当てはまるような環境整備をしてはどうかと思っている。環境社会配慮だけでなく防災配慮がなければ、少なくとも ASEAN10 にはサステナビリティはありませんくらいのことは言いたい
不破	来年度の方針を発表する上で、本日の議論内容を少し含めていきたいと思う。

以上

A2 Record of Panel Meeting

A2-1 Record of 1st Panel Meeting (Jakarta)

A2-2 Record of 2nd Panel Meeting (Manila)

A2-3 Record of 3rd Panel Meeting (Ha Noi)

A2-4 Record of 4th Panel Meeting (Bangkok)

**1st Panel Meeting
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

July 8, 2013, Sari Pan Pacific Hotel, Jakarta, Indonesia

Under a Joint Program of ASEAN Coordinating Centre for Humanitarian Assistance on disaster management [AHA Centre] and Japan International Cooperation Agency [JICA]

Participant List

● **Panel Member**

Name	Position	Organization
Dr. Max H. Pohan	Deputy Minister for Regional Development and Local Autonomy Affairs	BAPPENAS, Ministry of National Development Planning of Indonesia
Dr. Haji Pariatmono Sukamdo	Director, Empowering Science and Technology for Government Institutions, Head of Information Center for Research on Natural Disaster (PIRBA)	Ministry of Research and Technology of Indonesia
Prof. Dr. Mohd Rasid bin Hussin	Professor, Risk Management Department, School of Economics, Finance and Banking, College of Business	Universiti Utara Malaysia (UUM)
Dato' Haji Zakaria Bin Mohamad	Director, Minerals and Geoscience Department Selangor	Ministry of Natural Resources and Environment of Malaysia
Undersecretary Corazon T. Jimenez	General Manager	Metropolitan Manila Development Agency (MMDA)
Dr. Renato U. Solidum, Jr.	Director	Philippine Institute of Volcanology and Seismology (PHIVOLCS), the Department of Science and Technology (DOST)
Dr. Susan R. Espinueva	Chief of Hydrometeorology Division	Philippine Atmospheric, Geophysical & Astronomical Services Administration (PAGASA), the Department of Science and Technology (DOST)
Col. Anwar Abdullah	Director of Operations Department	Singapore Civil Defence Force (SCDF)
Dr. Goh Moh Heng	President	BCM Institute
Dr. Chukiatt Sapphaisal	Managing Director Former Associate Professor of Department of Water Resources Engineering, Faculty of Engineering, Kasetsart University	Technical Sections, Water Development Consultants Group Co. Ltd
Mr. Dau Anh Tuan	General Director of Legal Department	Viet Nam Chamber of Commerce and Industry (VCCI)
Dr. Dang Thi Thanh Mai	Deputy Director	National Centre for Hydro-Meteorological Forecasting (NCHMF)

- **Observer**

Name	Position	Organization
		National Agency for Disaster Management (BNPB)
Mr. Broerie Pojoh	Head of Sub Directorate of Industrial Estate for Region II	Ministry of Industry of Indonesia

- **AHA Centre**

Name	Position	Organization
		ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)
Mr. Janggam Adhityawarma	Senior Disaster Monitoring and Analysis Officer	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

- **Embassy of Japan**

Name	Position	Organization
Mr. Koki Yoshida	First Secretary, Mission of Japan to ASEAN	Embassy of Japan in Indonesia

- **JICA**

Name	Position	Organization
Dr. Hitoshi Baba	Senior Advisor	Japan International Cooperation Agency (JICA), Tokyo
Mr. Hideaki Matsumoto	Deputy Director, Disaster Management Division 1. Global Environment Department	Japan International Cooperation Agency (JICA), Tokyo
Mr. Norio Matsuda	Principal Representative for ASEAN Coordination	Japan International Cooperation Agency (JICA), Jakarta
Mr. Hideki Katayama	Disaster Management Advisor	Japan International Cooperation Agency (JICA), Jakarta
Ms. Yoko Yamoto	Representative for ASEAN Coordination	Japan International Cooperation Agency (JICA), Jakarta
Mr. Yoshio Tokunaga	JICA Expert on Disaster Management Policy	National Agency for Disaster Management (BNPB)

- **Study Team**

Name	Position	Organization
Dr. Masakazu Takahashi	Team Leader	AHA Centre-JICA Project Study Team
Mr. Yoshiyuki Tsuji	Deputy Team Leader	AHA Centre-JICA Project Study Team
Mr. Shukyo Segawa	Team Member	AHA Centre-JICA Project Study Team
Mr. Hajime Tanaka	Team Member	AHA Centre-JICA Project Study Team
Mr. Hideshige Iida	Team Member	AHA Centre-JICA Project Study Team
Ms. Akira Watanabe	Team Member	AHA Centre-JICA Project Study Team
Mr. Kotaro Fukuhara	Team Member	AHA Centre-JICA Project Study Team
Dr. Krishna Suryanto Pribadi	National Coordinator, Indonesia	AHA Centre-JICA Project Study Team
Mr. Ramon Santiago	National Coordinator, Philippines	AHA Centre-JICA Project Study Team
Dr. Nguyen Phuong Nga	National Coordinator, Vietnam	AHA Centre-JICA Project Study Team
Ms. Aria Mariany	Staff	AHA Centre-JICA Project Study Team
Ms. Lusiana Rumintang	Staff	AHA Centre-JICA Project Study Team

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Concept Note

Background

The 2011 Great East Japan Earthquake caused unprecedented disasters in Tohoku region, Japan. Many private enterprises have suffered heavily and compelled to terminate operations or dropped operation levels due to shortage of supply or for other reasons. The 2011 Flood of the Chao Phraya River in Thailand caused direct damages to industrial establishments and huge negative impact on national economy. These disasters reminded us of high risks of business termination, and also that the natural disasters can cause a blow to national, regional and world economy.

The countries in the ASEAN region have been constantly suffering from the disasters caused by floods, typhoons/cyclones, earthquakes, tsunamis and others. In the case of a large scale natural disaster, individual enterprises have limitations and they struggle to continue their business, mainly due to malfunctioning of basic infrastructure for distribution, shortage of basic supplies such as electric power, water and information, and disrupted supply chains. For those circumstances, not only individual enterprises but also public service companies, operating organizations of the industrial parks, local and national authorities who administer the area of the industrial agglomerated areas are requested to have a common understanding about the regional hazards, business impacts and problems regarding emergency measures and share important information to implement their respective disaster prevention measures and BCPs, in order to maintain or rapidly recover the industrial functions of the region.

Outline of the Study

In collaboration with the ASEAN Coordination Centre for Humanitarian Assistance on Disaster Management [AHA Centre], Japan International Cooperation Agency [JICA] has launched a study titled “Natural Disaster Risk Assessment and Area Business Continuity Plan Formulation for Industrial Agglomerated Areas in the ASEAN region”, in February 2013. The Study aims to support local efforts in the ASEAN region to

minimize economic damages and/or losses of areas where industries are concentrated (Industrial Agglomerated Area), when large scale natural disasters strike.

This Study will collect, analyse and store information on natural disaster risks, industrial agglomerated areas, infrastructures for distribution, lifelines and supply chains in 10 ASEAN member states, and prepare database which can be shared in the region.

Three industrial agglomerated areas have been selected from Indonesia, the Philippines and Vietnam for pilot studies. Natural disaster risks will be evaluated and the Area BCP will be prepared for the selected industrial agglomerated areas. A handbook describing guidelines for natural disaster risk assessment and Area BCP planning will be prepared with an aim to be utilized for other industrial agglomerated areas.

Objectives of the Panel Meetings

Area BCP is a brand-new idea. It has been proposed and discussed only in recent years. The concept and definition are not concretely agreed among the experts and the interested parties yet. This study may be one of the forerunners of Area BCP formulation in the world.

In this study, the Study Team is planning to go through the process for Area BCP formulation. This is a challenging study and may encounter various difficulties. The experiences including problems and deficiency of this study may be the valuable outcomes for Area BCP formulation in the future. Not only the results but the process and problems will be discussed and shared among panel members.

The Study Team expects from the panel members discussions, advices and suggestions from wider scope of view for the concept of the Area BCP, approaches for the Area BCP, methodologies for forming the Area BCP, methodologies of the natural disaster risk assessment for the Area BCP, points to consider when adopting local conditions, and mechanisms of accumulating and sharing information and knowledge among the ASEAN countries.

The Study Team also expects advices on the approaches for dissemination and promotion of the Area BCP in the ASEAN Region after the completion of the Study.

Specifically, the 1st meeting intends to:

1. Introduce and discuss the concept of Area BCP and the procedures of its formulation, which are proposed by the Study Team,
2. Request the panel members to introduce and discuss the present state of natural disaster risk assessment, implementation of Area BCP and other related topics in the ASEAN regions, and
3. Formulate a network of experts and professionals to promote Area BCP in the ASEAN region.

Agenda (Draft version 7)

July 7, 2013, Sunday Arrival of the Panel members at Jakarta

July 8, 2013, Monday

Morning Session	
8:30	Registration
9:00	Welcome Address Mr. Norio Matsuda Principal Representative for ASEAN Coordination Japan International Cooperation Agency (JICA), Jakarta Office
9:05	Welcome Address Mr. Koki Yoshida First Secretary Mission of Japan to ASEAN
9:10	Opening Address ----- ----- AHA Centre
9:20	Introduction of Panel Members
9:40	Introduction of the Project by the Study Team Dr. Masakazu Takahashi
10:00	Discussion
10:30	Coffee Break
10:50	Introduction of Natural Disaster Risk Assessment for Area BCP by the Study Team

	Mr. Shukyo Segawa Mr. Hajime Tanaka Mr. Hideshige Iida
11:20	Discussion
12:20	Lunch Break
Afternoon Session	
14:00	Introduction of Area BCP by the Study Team Mr. Yoshiyuki Tsuji
14:30	Discussion
15:30	Coffee Break
15:50	Introduction of the Pilot Study by the Study Team Dr. Masakazu Takahashi
16:10	Discussion
17:00	Plan of the Future Meetings Dr. Masakazu Takahashi
17:10	Wrap-up and Closing of the Panel Meeting Dr. Hitoshi Baba Senior Advisor Japan International Cooperation Agency (JICA) HQ
18:30	Dinner

July 9, 2013, Tuesday Departure of the panel members from Jakarta

**1st Panel Meeting for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”**

Day/ time	July 8, 2013 09:00 – 17:30
Venue	Sari Pan Pacific Hotel, Jakarta, Indonesia
List of attendance and email address	See the Appendix
Agenda	See the Appendix
List of documents distributed	See the Appendix

Meeting Minute

- Welcoming addresses were delivered Mr. Norio Matsuda and Mr. Koki Yoshida.
- Opening remark was delivered by Mr. Khiam Jin Lee of AHA Centre.
- Introduction of panel members
- Presentation 1: Introduction of the project (Dr. Masakazu Takahashi)

Discussion 1: Introduction of the Project

Dr. Haji Pariatmono Sukamdo:

What is the importance of ABCP for a nation, in particular for Indonesia? The varied conditions occur in every country should be put into consideration to have the implementation aligned with the expected implications. In Indonesia, there were many studies and researches conducted, yet because there were no interest from the government, then there is no applicable method implemented. It is highly expected that this study results can be disseminated widely in a more concrete way.

Dato’ Haji Zakaria Bin Mohamad:

Interests mapping of all nations should be built to interpret the needed final results and mechanism. Each nation will have different pro policy to solve the impacts of disaster happened.

Dr. Masakazu Takahashi:

Currently, the project is still in pilot and trial stage. Particularly for three countries involved in Component 2, the variations of disaster scenario of elaborated from ABCP will betested, e.g. stakeholders, mechanisms, situation sites, type of natural disasters, and type of industry.

Dr. Renato U. Solidum, Jr.:

Do the three countries involved and selected for Component 2 is included in ABCP?

Dr. Masakazu Takahashi:

Yes. Those three countries were selected because they have different situations and conditions as stated above. For example, large scale enterprizes have their own BCP. On the other hand, small and medium size enterprises have not prepared BCP.

Dr. Renato U. Solidum, Jr.:

There should be a political will and interest from the government to support and integrate this effort. In communication aspect, government is one of enablers; thus the question would be how to communicate ABCP in every nation involved?

Because afterwards, when a good communication is already established, then the panel members can

freely speak their mind. However, if there is no green light from the government yet, nobody can state their words. In this case, representative from Malaysia agrees to represent of their country.

Mr. Khiam Jin Lee:

For ASEAN countries, an internal coordination has been conducted. For countries, e.g. Laos and Myanmar, a structuring process has been developed to put instructions into internal mechanism responses. ABCP might not be the main priority, but the again it can be considered as essential because it is a cross cutting issue. In Malaysia, there is a National Security Council who manages this kind of affairs but local enforcement should be also activated to enable ABCP implemented coherently, sustainably, and integrated.

Col. Anwar Abdullah:

Although it has a novel title, ABCP is not a new concept. It has been used in some of the countries in the region. The salient point to this plan is to identify the various key stakeholders in each of country involved and how to acknowledge the inter-relationship of all partnering members.

Dr. Krishna Suryanto Pribadi:

In summary, there is a need to identify the willingness and interest from the government of each country in ASEAN. ABCP is not about the BCP as a concept, but also about the internal correlation and collaboration which binding every partner involved.

Undersecretary Corazon T. Jimenez:

BCP as a concept was introduced last year in Metro Manila. It is not a new concept. During previous discussions, it was known that many private companies especially the telecoms have been trying to build the network but was not sustained. Even though the impact of BCP is important.

Why the three countries were selected into Component 2? What were the requirements set for those countries?

Dr. Masakazu Takahashi:

Backgrounds on selecting Indonesia, Philippine, and Vietnam were: highest susceptibility to natural disasters in the ASEAN region, thus, those countries has higher level of risk.

Dr. Goh Moh Heng:

There were many discussion on ABCP took place, but it is important to comprehend the definition of ABCP and BCP. Not all industries have BCP, although they might have their BCP. It is significant to know what utilities are actually needed, public facility related, stakeholders in national and international levels. In Manila, Global Centre Consortium is responsible for the public transportation, while in Singapore public facility is managed by another agency. In conclusion, it is significant to know who responsible for what in every country, in relation to public facilities needed in ABCP.

Dr. Masakazu Takahashi:

In the later session, the three pilot areas will be presented. There are three local administrations and different infrastructure operators in each country; and, that is why a coordinating body for all stakeholders is needed to enable coordination in a higher level of government. Approaches to form the coordinating body, as well, are different as every country has different system and policy.

Dr. Susan R. Espinueva:

Need a clarification of definition on coastal storm surge.
(Clarified by Dr. Masakazu Takahashi)

Prof. Dr. Mohd Rasid bin Hussin:

The importance of having government build coordination with ASEC immediately, as if the government agrees with the plan, then it would be easier for the panel members to state their opinions. However, until further endorsement from the government is achieved, then only limited gestures can be given.

Mr. Khiam Jin Lee:

Agreed with Prof. Dr. Mohd Rasid bin Hussin. AHA Centre is willing to facilitate the communication with all ASEAN countries. ACDN is conducted three times a year and it can be used as a channel to deliver the significance of having ABCP; inputs and proposals from experts are sought to provide

suggestions to ASEAN countries who participate in ABCP.

Dr. Haji Pariatmono Sukamdo:

In Indonesia, there is a difficulty to show the state of ownership. Every study (including its results) is owned by the government. The results of this study is highly sought to have a better comprehension on the existing ownership sharing. In 2007, in West Java, there was collaboration between GoI and GoJ for tsunami recovery. Thus, from political perspective, it might be safe to state that there is an interest to build disaster recovery in industrial aspect. Although the situation in Indonesia is a bit different nowadays, there is a need to observe the mechanism first.

Dr. Renato U. Solidum, Jr.:

Agreed with AHA Centre idea that has the willingness to be act as the communication messenger between ASEAN countries. The experts' role is to provide ideas and inputs, but their umbrella organizations perhaps only last for short term (one or to year) only. That is why the government support is considered as a must.

Col. Anwar Abdullah:

The supportive government and conducive policy should be encouraged.

Dr. Masakazu Takahashi:

This project takes 1.5 years to be completed. It tries to offer new approach, indeed, but the time allocated for sure will not be sufficient to distribute all mechanisms. Thus, AHA Centre and ASEAN countries are needed to allocate and supports the existing three components: supports, comments, suggestions.

Dr. Krishna Suryanto Pribadi:

In summary, the ownership encouragement from stakeholders' collaboration is needed. There is a supportive interest from AHA Centre to act as a facilitator in accommodating political will of every ASEAN country needed.

- **Presentation 2: Introduction of Natural Disaster Risk Assessment for Area BCP (Mr. Shukyo Segawa, Mr. Hideshige Iida, and Mr. Hajime Tanaka)**

Discussion 2: Introduction of Natural Disaster Risk Assessment for Area BCP

Dr. Renato U. Solidum, Jr.:

If the impacts of earthquakes are only based on the previous incident, then it might better to re-elaborate. It might be wise to consider other type of disaster to be included, although it never happened before; e.g. in Metro Manila, nearby pilot study area, there are active faults but it never occurred earthquake for more than 100 years. If you can include the enough information about nearby fault, it gives better assessment.

Mr. Shukyo Segawa:

Not only the probabilistic analysis but combination of probabilistic and deterministic analysis is better. For deterministic analysis, precise fault survey of trenching and geophysical survey are necessary. However, it means more budget and time allocations. In the meantime, what need to be done for Area-BCP is executing probabilistic analysis based on the existing information.

Dr. Renato U. Solidum, Jr.:

Appreciated the related study and efforts given for Manila. For Vietnam, is it really true that there was faults that often move? The monitoring record of earthquakes in Vietnam is short.

Mr. Shukyo Segawa:

The monitoring record in Vietnam and other countries are still very limited. The geological study is important in thses countries for the analysis and the efforts should be concentrated.

Dr. Haji Pariatmono Sukamdo:

Why Bekasi and Karawang were selected, while actually those areas are not susceptible to

earthquake and tsunami? Why those two predominant hazards were selected for Bekasi and Karawang? How to implement (and continue) the tsunami study in Bekasi and Karawang? In relation to flood, what is the explanation and recommendation to improve the resilience and preparedness?

Mr. Shukyo Segawa:

The pilot study area in Indonesia has not experienced many earthquake and tsunami incidents. However, the less hazardous scenario is also intended to prepare because this is the pilot study of Area-BCP. We are intending to consider middle level hazards.

Mr. Hajime Tanaka:

The roles and responsibilities of each local organization might be not similar, and the same condition also occurs in central governments.

The improvement of resilience and preparedness for flood disaster management are to be considered based on the actual conditions collected in the Area BCP.

Dr. Renato U. Solidum, Jr.:

Perhaps Cavite and Laguna were selected because their high susceptibility for disaster impact. Why volcanic disaster is not included for the study in Philippines? There will be no direct damage but affect especially to aviation by ash fall.

Dr. Masakazu Takahashi:

For Philippines, there were several records of volcano eruption and the experiences can be used as the risk scenario for Area BCP.

Dr. Susan R. Espinueva:

We have been doing risk assessment project using satellite data with ADB and JAXA. But it is limited in northern part of Luzon and Manila.

Currently, the Government of Philippine is doing lidar mapping for only major basis of risk assessment. This information can be used this pilot areas. Also that information will be collected for level committee in Cuvite for risk assessment. Japan Meteorological Agency had built a storm surge model under the responsibility of Typhoon Committee, PAGASA provided them storm tide (surge) information in order to use as initial data in this model for five events in the past ten years. Now JMA storm surge model is run and provided the prediction results. Data on tropical cyclones and storm surges in the Philippine areas can be provided. We prepared two assessment report on tropical cyclones in Typhoon Committee 1st and 2nd meeting, these report can be provided, as well.

Prof. Dr. Mohd Rasid bin Hussin:

It seemed that there is a high prevalence to rely only on historical data. There was an experts meeting in Malaysia last year, and it was discussed that they had problem to predict the natural disaster incidents as the available data are coming from 30 to 50 years ago; meanwhile, the data needed should be, at least, coming from 300 years ago. Asia Pacific of Countries Reports and Cambridge University have discussed this matter: so, how to do the assessment and forecasting of risk assessment here? Does the existing disaster management mentioned (previously on the presentation) mean as disaster management plan or plans? If it is plan, does it already include the emergency management plans?

Mr. Hajime Tanaka:

It means the existing national and local disaster management plans because they might be varied in every country, and generally they include the emergency response plans.

Prof. Dr. Mohd Rasid bin Hussin:

Does it mean it is intended for the (three) country and the existing plans?

Mr. Hajime Tanaka:

For the existing ABCP, it is not only for the three countries, but for the other ASEAN countries to collect the existing disaster management plans.

Dr. Masakazu Takahashi:

(Showed) the presentation slide.

Prof. Dr. Mohd Rasid bin Hussin:

Malaysia is using the definition set by UNISDA, i.e. countries above the equator line are considered as blue zones, and countries below the equator line are considered as red zones

Mr. Hajime Tanaka:

I did not check the definition set by UNISDA yet.

Dato' Haji Zakaria Bin Mohamad:

In Malaysia, ABCP definition is more related to industrial zone or industrial park. How can a specific plan for each area can be considered in details? The planning can be completed if there is a guideline, so that the profit and loss resulted from the implementation can be forecasted. It would be much better if it can specifically developed per area. Although this is only a pilot project, is there any explanation. Is it possible to have level 1, 2, 3 (referring to ABCP level)

Mr. Dau Anh Tuan:

Vietnam has no capacity to build ABCP yet; and, if it exists, it is still very weak. It might be safe to consider the fourth option (referring to who should be responsible in building and formulating ABCP). It can be a combination of government and AHA Centre, or private sector and government.

Dr. Masakazu Takahashi:

We consider three levels: using existing hazard and risk assessment, hazard and risk assessment using available information and resources of the country, and more elaborate hazard and risk assessment. The usage of the existing hazard and risk assessment, or hazard and risk assessment using available information and resources of the country is much preferred. On the industrial agglomerated area level, specific methodology may be needed.; but, the methodology for countries, who do not have sufficient data/information and resources, should also be considered.

Prof. Dr. Mohd Rasid bin Hussin:

Although zone division has been conducted, a continuity is still needed. Phillipine already have report on climate change adaptation (so, it might be considered to be used, as well). On ACCRN (please clarify) Climate Change Report, Indonesia has allocated 10-20 percents of national budget for disaster management. Yet, how to rise the interest of ASEAN countries to do the similar policy?

Dr. Krishna Suryanto Pribadi:

In summary, it is important to have commitment from government to actively take part in the policy made.

Dr. Renato U. Solidum, Jr.:

There are many modalities which can be used, but there is no guarantee which one is better to be inserted. Thus, database of exposure and risk assessment need to be developed. It is safe to say that transparency is also an issue to be considered. Inter-risk assessment might be conducted in all ASEAN countries; however, not all ASEAN countries can involve private sector in development aspect, like in Japan.

Dr. Masakazu Takahashi:

The objective of this study include to identify the capacity of each country.

Dr. Renato U. Solidum, Jr.:

(In Phillipine) Professional organizations are involved to identify vulnerabilities in order to build sustainability in strategies.

Dato' Haji Zakaria Bin Mohamad:

In conducting risk assessment, it is better to include and identify the ABCP zone formulation. The indicators from zoning (can be) are: light industry and heavy industry, or to minimize and maximize the ABCP results when natural disasters occurred. If the indicators are too general, they can be specified. From global perspective, definite areas can simplify the mapping based on location or utility.

Dr. Masakazu Takahashi:

Pilot area in Indonesia can be used as an example. An industrial agglomerated area is defined as an area where industrial parks are agglomerated. An area where infrastructure is located varies

depending on its type.

Col. Anwar Abdullah:

How to adjust different stakeholders' interest?

Dr. Masakazu Takahashi:

We will try different approach and input for each location. The capacity available in each location and infrastructure type are also considered as indicators in risk assessment.

Dr. Krishna Suryanto Pribadi:

In summary, the importance of data and information can level up ABCP issue to government level. It can encourage the government to commit in ABCP establishment and implementation. Lesson learnt taken from Phillipine is that government can also actively involved in risk assessment by involving professional organizations. It is essential to re-observing past studies as the inception part of lesson learnts shared.

- **Presentation 3: Introduction of Area BCP (Mr. Yoshiyuki Tsuji)**

Discussion 3: Introduction of Area BCP

Undersecretary Corazon T. Jimenez:

Need clarification whether the study for Phillipines will be conducted provincial wide or only in Laguna and Cavite.

Mr. Yoshiyuki Tsuji:

Only in one industrial area.

Undersecretary Corazon T. Jimenez:

It is better.

Mr. Yoshiyuki Tsuji:

ABCP should involve other industries.

Dato' Haji Zakaria Bin Mohamad:

(Referring to the slide shown) It's only stated industrial park and so on.

Requesting better definition on industrial park. Does ABCP should be like something as industrial zone or industrial park which susceptible to disaster?

The definition is not too specific, many things can be part of an industrial, but what is more there. Requesting to reduce definiton to be more specific in meaning.

Mr. Yoshiyuki Tsuji:

There are two points to be considered. At first, the information about ABCP should be shared as wide as possible. On the other side, there is a proper size of geographical range to discuss the concrete measures to be taken (related to budget issues) and ABCP as well as other issues like urban/city development plan, disaster management plan and etc. That depends on the situation of each country, local condition, and other factors. For example, a nation-wide may be a proper size in Singapore, and province may be in other country.

Dato' Haji Zakaria Bin Mohamad:

(Clarifying) BCP is a plan, but why the areas should be defined as ABCP? There are other industrial zones, but why there are some included as ABCP, while the others are not? What are their differences? (On his persepective), ABCP should consists of representatives (areas or countries) which agree to be part of it.

Dr. Masakazu Takahashi

Agreed. There are 12 industrial agglomerated areas in Bekasi. (show the industrial agglomerated areas in Indonesia). And, there are three local governments: Karawang Regency, Bekasi Regency, and Bekasi City. There are two leading government organizations: Bappeda of West Java and BPPD

of West Java. Both organizations are requested as the hub to the (national?) level government.

Dr. Hitoshi Baba:

Before starting this project, JICA has discussed with the Tokyo Office. In discussing BCP, it is better to be meticulous when explaining ABCPlan and ABCPlanning (ABCM).

The ABCPlanning is not too similar to ABCPlan. It is still considered as tentative definition in JICA. It is a framework offered to the stakeholders, i.e. area managers, local administrators, and infrastructure operators.

The size of each industrial agglomerated area has not been defined before the natural disaster occurred. By considering that every natural disaster has different effect, then there is no standardized specification and time in treatment management; it is different because the dynamic availability according to its nature. In this study, JICA has requested the team to build ABCPlan in accordance to specific scenario, which can be implemented easily in other areas too.

Dr. Goh Moh Heng:

The definition offered by Dato' Haji Zakaria Bin Mohamad is fine.

When discussing industrial park, there should be also agreements on risk of power based on the available criteria.

There are many principles formed in industrial zones. Is there any industrial hub or industrial park in which all industrial facilities are available to enable industrial activity? Several parameters are needed to formulate proper comprehension of ABCPlan and ABCPlanning.

Every country has their own definition on industrial park, so the parameter might be defined from size.

The definition established depends on the blocking parameter. It might be safe to use the definition derived from ISO 2003, although perhaps it is not the best definition.

Dr. Masakazu Takahashi:

The definition of industrial park here is industrial estate. The objective of ABCP includes to help encourage implementation of BCP. ABCP is not popular yet in ASEAN countries, but there is an interest to acknowledge how this project can escalate the capacity and preparedness towards natural disasters.

Dr. Goh Moh Heng:

Industrial parks are built because for purposive reasons. (Personal perspective on seeing ABCP and Government of Singapore), it is safe to say that Singapore need to have BCP concept to be implemented. Yet, the cost calculation will also need to be considered. For instance, when BCP should be implemented, the government can cover 70percents of the cost. Thus, support and commitment from government are needed.

Mr. Yoshiyuki Tsuji:

ABCP is, actually, should be built ideally and it is costly; however, the price paid aftermath will be more costly should there is no preparedness built to face natural disasters. ABCP is suitable for natural disasters; while for epidemic, there should be humanitarian assistance from the government.

Dr. Goh Moh Heng:

When a (natural) disaster happened, BCP became very important as there is no facility available to be accessed. Even so, when BCP is already implemented, the duration of available facilities to be accessed should be considered. And, how long ones can survive in the particular situation?

It is also necessary do acknowledge the difference set of pandemy and natural disaster. A back-up plan should also be planned for each incident.

It is important to know person in charge for every scope of roles and set of regulations to be obeyed. The common procedures available from government side, during a natural disaster, is to save lives; but, what about in industrial sectors? Supply chain is something difficult to be predicted as third parties cannot be controlled.

Col. Anwar Abdullah:

We recognized the importance of having an acceptable definition to all this is especially when each country may have their own definition. In Singapore, ABCP is also available as a Cluster BCP. As such, he opines that to accomodate all available concepts in each country, it is better for it to be define have broadly but yet inclusive gso that it is able to capture the necessary essence and the key stakeholders within the areas.

Mr. Yoshiyuki Tsuji:

(Instance in Japan) Medical facilities are concentrated in the vicinity of Ochanomizu Station in Tokyo, including disaster base medical centers, and they are expected to continue to provide medical services during a disaster.

With a view to establish a regional supply-network, the area is currently discussing about how to secure electricity and water supply which are vital to medical services.

Undersecretary Corazon T. Jimenez:

Who decided that a specific area in Makati is an ABCP? The mayor or the stakeholders?

Dr. Masakazu Takahashi (and confirmation from Mr. Yoshiyuki Tsuji):

The disaster occurred and the stakeholders.

Undersecretary Corazon T. Jimenez:

(Requesting for confirmation) Does it depend on who holds the highest interest as in the case of an economic center in Japan?

Mr. Yoshiyuki Tsuji:

Most likely, yes. ABCP was formulated by the estate company which has many land and buildings in the area.

Col. Anwar Abdullah:

Singapore has many BCPs implemented; it depends on few factors such as industry type (petro-chemical industry formed their own BCB. Likewise for financial sector), interest group and government encouragement and assistance.

Mr. Yoshiyuki Tsuji:

Requesting to email the information of instances or idea which help to define the size or border of ABCP, in order to reflect them to the handbook(as one of outputs in this project) for Asean countries.

Dr. Renato U. Solidum, Jr.:

One of the main issues is how to develop BCP for areas where there is no capacity to build ABCP and BCP. What needs to be done by countries, who have limited resources and capacities, and what needs to be prioritized by the community and industry?

Mr. Dau Anh Tuan:

(For Vietnam) Positively agreed. In Vietnam, the developers are customer-oriented; thus, when ABCP is formulated, the consumers' perspective need to be considered. For enhanced urban areas, there are several zones which have different industry size. Most industries in Vietnam are small size. How ABCP answer small and medium enterprises needs? How about if they are mixed?

Dr. Masakazu Takahashi (for Dr. Renato U. Solidum, Jr. and Mr. Dau Anh Tuan):

Will be answered in later presentation.

Prof. Dr. Mohd Rasid bin Hussin:

In disaster management, saving lives is the most important objective. On the government perspective, ABCP might be considered as not too important, as relocation perhaps will be offered as the solution for industrial areas. GoJ has better financial resources; why GoJ has the interest to build new concept and wasting money; why do not GoJ buy half of Kalimantan and build the new Japan there?

Mr. Ramon Santiago:

In summary, prioritizing in disaster size, life saving, ABCP scope of work, and ABCP definition need to be defined meticulously. A closer and deeper observation need to be done on the issue.

- **Presentation 4: Introduction of the Pilot Study (Dr. Masakazu Takahashi)**

Discussion 4: Introduction of the Pilot Study

Dr. Renato U. Solidum, Jr.:

Because OCD is only small organization, it is better to include NDRRMC. Economic and commerce sectors ministry should be included too as they are the ones who would be pushing the issue to the surface. It might be a good idea to involve politicians as political policy will play great role, but it is better not to include local politicians.

Dr. Masakazu Takahashi:

(Representative of) PESA and Chamber of Commerce will be involved in the working group.

Mr. Dau Anh Tuan:

In considering stakeholder for Vietnam, it is good to involve People's Community in the management. Desentralization (and autonomy) is implemented in the government; thus, in license establishment, there will be zoning management.

Dr. Haji Pariatmono Sukamdo:

(For Indonesia) Which organization to be included in the stakeholders approach?

Dr. Masakazu Takahashi:

Currently there is nothing permanent, as the presentation only showed the concept of stakeholders.

Dr. Haji Pariatmono Sukamdo:

If Bappeda (for Indonesia) is included, then Ministry of Home Affairs should be involved too. (Bappeda, in the local government, reports to Ministry of Home Affairs). Every local government has been given autonomy authority.

Dato' Haji Zakaria Bin Mohamad:

Will representative from National Disaster Management Agency (of Indonesia) will be included in the working group?

Mr. Broerie Pojoh:

Ministry of Industry works as peer-partner for National Disaster Management Agency. (not as subordinate or superior entity).

Dr. Haji Pariatmono Sukamdo (and clarification from Dr. Krishna Suryanto Pribadi):

Indonesia has special agencies which responsible in disaster management. Volcanic and geological hazards (including earthquake) are the responsibility of Geological Agency in Bandung. BMKG responsible in the monitoring and geophysics aspects. Both agencies collaborate in disaster management. BMKG provides the historical data, while the Geological Agency provides the needed geological data and information.

In provincial level, there is Regional Planning Agency (Bappeda. [Bappenas is the National Planning Agency]. [Although the agencies' identity are almost similar, actually Bappeda does not report to Bappenas]). Bappeda reports to Ministry of Home Affairs.

Dr. Renato U. Solidum, Jr.:

Does the scheme is generic? (referring to the slide shown)

Dr. Krishna Suryanto Pribadi:

It is generic. Each ASEAN country only need to position the suitable ministry/ agency in the scheme.

Dr. Haji Pariatmono Sukamdo:

Will there any international coordination?

Dr. Masakazu Takahashi:

Not yet, but the importance of having coordination is highlighted. Currently, a meeting will be held in the international level should considered needed; however, as per now, every country is considered equal.

Dr. Renato U. Solidum, Jr.:

(In Phillipine) Why Cavite is included, but Laguna and Metro Manila are not?

Dr. Masakazu Takahashi:

Laguna and Metro Manila are also included in the target industrial agglomerated area. We chose one industrial park in Cavite as an example. Problems and issues of business continuity related to infrastructure and lifeline utilities are common for every industrial park. Cavite experienced most of natural disasters happened in the Philippines (volcanic, flood, earthquake, tsunami and storm surge); and, Cavite experienced severe flood than Laguna.

Dr. Renato U. Solidum, Jr.:

So, it is (only) Cavite?

Dr. Masakazu Takahashi:

Most of the issues related business continuity are common for industrial parks. So, results from Cavite can be applied to other industrial parks in Laguna and Metro Manila.

Dr. Renato U. Solidum, Jr.:

Why Laguna is involved? What will Laguna get?

Dr. Masakazu Takahashi:

Metro Manila, Cavite, and Laguna are covered in the Project. The time is limited, so, only one industrial park is analyzed deeply to get common lessons.

Dr. Renato U. Solidum, Jr.:

Stated his hesitation on how to convince the Laguna government.

Dato' Haji Zakaria Bin Mohamad:

More explanation is still need on how the area identifications were made (how an area is selected and included in Component 2). Requesting a slide which show the linkage of each aspect (refer this as the ABCP framework).

Dr. Masakazu Takahashi:

The framework will be prepared and sent to every panel members (request the panel members to give their comments on the framework later).

Dr. Renato U. Solidum, Jr.:

There are several organizations (referring to Oyo Internationa Corporation (OIC) and Mitsubishi Research Institute (MRI)) in the assessment. Requesting information for scope of roles.

Dr. Masakazu Takahashi:

Risk assessment is divided into two components.

OIC: earthquake, tsunami, volcanic. CTI: flood, typhoon, storm surge, landslide. MRI: BCP.

Overall management is conducted by OIC.

Col. Anwar Abdullah:

Need to have further discussion on engagement and simplified framework. It is better if representatives from related parties and government are included. Requesting the progress of the implementation to be shared. The dropbox features could be used for this purpose so that all members could access to it.

- **Plan for future meetings (Dr. Masakazu Takahashi)**

(see the presentation slide)

- **Wrap-up and Closing (Dr. Hitoshi Baba)**

Note:

- Moderator for morning sessions was Dr. Krishna Suryanto Pribadi
- Moderator for afternoon sessions was Mr. Ramon Santiago

**2nd Panel Meeting
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

January 23 and 24, 2014, Dusit Thani Hotel, Manila, the Philippines

*Under a Joint Program of Japan International Cooperation Agency (JICA) and
ASEAN Coordinating Centre for Humanitarian Assistance on disaster
management (AHA Centre)*

Participant List

□ **Panel Member**

Name	Position	Organization
Dr. Haji Pariatmono Sukamdo	Director, Empowering Science and Technology for Government Institutions, Head of Information Center for Research on Natural Disaster (PIRBA)	Ministry of Research and Technology of Indonesia
Prof. Dr. Mohd Rasid bin Hussin	Professor, Risk Management Department, School of Economics, Finance and Banking, College of Business	Universiti Utara Malaysia (UUM)
Dato' Haji Zakaria Bin Mohamad	Director, Minerals and Geoscience Department Selangor	Ministry of Natural Resources and Environment of Malaysia
Undersecretary Corazon T. Jimenez	General Manager	Metropolitan Manila Development Agency (MMDA)
Dr. Renato U. Solidum, Jr.	Director	Philippine Institute of Volcanology and Seismology (PHIVOLCS), the Department of Science and Technology (DOST)
Dr. Goh Moh Heng	President	BCM Institute

□ **Observer**

Name	Position	Organization
Ms. Susana M. Cruz	Regional Director	OCD-NCR
Ms. Lynn P. Melosantos	Senior Science Research Specialist	PHIVOLCS
Mr. Roy A. BADILLA		Philippine Atmospheric, Geophysical & Astronomical Services Administration (PAGASA)

□ **AHA Centre**

Name	Position	Organization
Mr. Andy Musaffa	Disaster Monitoring Officer	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

□ **JICA**

Name	Position	Organization
Dr. Hitoshi Baba	Senior Advisor	Japan International Cooperation Agency (JICA), Tokyo
Mr. Hideaki Matsumoto	Deputy Director, Disaster Management Division 1. Global Environment Department	Japan International Cooperation Agency (JICA), Tokyo
Mr. Hayato Nakamura	Project Formulation Advisor (Disaster Management)	Japan International Cooperation Agency (JICA), Philippine
Mr. Takaaki Kusakabe	Expert	Japan International Cooperation Agency (JICA), - OCD

□ **Study Team**

Name	Position	Organization
Dr. Masakazu Takahashi	Team Leader	AHA Centre-JICA Project Study Team
Mr. Yoshiyuki Tsuji	Deputy Team Leader	AHA Centre-JICA Project Study Team
Mr. Shukyo Segawa	Team Member	AHA Centre-JICA Project Study Team
Mr. Koichi Hasegawa	Team Member	AHA Centre-JICA Project Study Team
Mr. Shiro Matsunami	Team Member	AHA Centre-JICA Project Study Team
Dr. Krishna Suryanto Pribadi	National Coordinator, Indonesia	AHA Centre-JICA Project Study Team
Mr. Ramon J Santiago	National Coordinator, Philippines	AHA Centre-JICA Project Study Team
Mr. Nguyen Thanh Ha	National Coordinator, Vietnam	AHA Centre-JICA Project Study Team
Ms. Josephine R. Sy	Staff	AHA Centre-JICA Project Study Team
Ms. Rizza Mae C. Yson	Staff	AHA Centre-JICA Project Study Team
Mr. Alex Nicolas P. Tamayo	Staff	AHA Centre-JICA Project Study Team
Ms. Valerie Anne Santos	Staff	AHA Centre-JICA Project Study Team
Mr. Dante A. Susano	Staff	AHA Centre-JICA Project Study Team

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Agenda

January 22, 2014, Wednesday Arrival of the Panel members at Manila

January 23, 2014, Thursday

Opening Session	
8:30-9:00	Registration
9:00-9:30	<p>Welcome Address</p> <p style="text-align: center;">Dr. Hitoshi Baba Senior Advisor Japan International Cooperation Agency (JICA) HQ</p> <p>Opening Address</p> <p style="text-align: center;">Ms. Susana M. Cruz Regional Director, Office of Civil Defense (OCD)-NCR</p> <p>Introduction of Panel Members</p> <p>Group Photo Session</p>
Session 1 Report on Progress of the Project	

9:30-10:30	<p>JICA's Approaches for Contribution to HFA2</p> <p>Dr. Hitoshi Baba Senior Advisor Japan International Cooperation Agency (JICA) HQ</p> <p>Progress of the Project</p> <p>Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Q & A / Discussion</p>
10:30-10:50	<p>Coffee Break</p>
10:50-11:40	<p>Progress of Natural Disaster Risk Assessment for Area BCM</p> <p>Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment</p> <p>GIS Database for Formulating Area BCM</p> <p>Dr. Koichi Hasegawa Team Member, GIS and Database</p> <p>Q & A / Discussion</p>
11:40-12:20	<p>Development of Concept of Area BCM</p> <p>Mr. Yoshiyuki Tsuji Deputy Team Leader of the Study Team</p> <p>Q & A / Discussion</p>
12:20-13:30	<p>Lunch Break</p>
<p>Session 2 Pilot Projects</p>	
13:30-15:00	<p>Plan of the Workshops for Area BCP Formulation including Video</p> <p>Mr. Yoshiyuki Tsuji</p> <p>Results of the First Workshops</p> <p>Results of the First Workshop in Indonesia</p>

	<p>Dr. Ir. Krishna S. Pribadi National Coordinator of Indonesia</p> <p>Results of the First Workshop in the Philippines Mr. Ramon Santiago National Coordinator of the Philippines</p> <p>Results of the First Workshop in Viet Nam Mr. Nguyen Thanh Ha (Viet Nam) National Coordinator of Viet Nam</p> <p>Q & A / Discussion</p>
15:00-15:20	Coffee Break
Session 3 Plan of Guideline and Future Meetings	
15:20-16:05	<p>Guidebook and Issues to Consider</p> <p>Dr. Masakazu Takahashi</p> <p>Q & A / Discussion</p>
16:05-16:10	<p>Plan of the Future Meetings</p> <p>Dr. Masakazu Takahashi</p> <p>Q & A</p>
Session 4 Guidance of the Field Trip	
16:10-16:40	<p>Guidance of the Field Trip</p> <p>Introduction of the Pilot Area and Hazard Simulation Mr. Shukyo Segawa</p> <p>Trip to Taal Volcano Ms. Lynn P. Melosantos Senior Science Research Specialist Philippine Institute of Volcanology and Seismology (PHIVOLCS)</p> <p>Plan of the Field Trip Mr. Ramon Santiago</p> <p>Q & A</p>
16:40-16:50	Closing of the Panel Meeting

	Mr. Justo Porfirio Ll. Yusingco Deputy Dir Gen for Finance and administration Philippines Economic Zone Authority (PEZA)
16:50	Adjournment
19:00	Dinner

MC: Mr. Santiago, Moderators : Dr. Krishna, Mr. Santiago and Mr. Ha

January 24, 2014, Friday

Field Trip	
7:50	Meet in the Lobby of the Hotel
8:00	<p>Departure of the Hotel 8:00</p> <p>Study Trip to Industrial Park</p> <p>Cavite Economic Zone</p> <p>Introduction of the industrial park in a meeting room Tour within the industrial part and surrounding area</p> <p>Visit PHIVOLCS Observatory</p> <p>Introduction of Taal Volcano and Its Observation by PHIVOLCS. View Taal Volcano and Taal Lake (Guide by PHIVOLCS)</p>
13:00	<p>Lunch</p> <p>Josephine's Restaurant</p>
14:00	<p>Depart Josephine's Restaurant for Laguna Techno Park</p> <p>Visit to Laguna Techno Park</p> <p>Briefing regarding the industrial park in a meeting room and Tour of the facilities and surrounding area (Surrounding area will be viewed from the bus along the route)</p>
18:00	Return to the Hotel



	<p>There will be an assembly of the Panel Members at the Hotel to “Narra” function room located at Mezzanine floor for light snacks and small discussion.</p> <p>Retirement</p>
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January 25, 2014, Saturday Departure of the panel members from Manila

“Natural Disaster Risk Assessment and Formulation of Area Business Continuity Plan for Industrial Agglomerated Areas in the ASEAN Region” Project

Under a Joint Program of Japan International Cooperation Agency (JICA) and ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)

Proceedings of the 2nd Panel of Meeting

23 January 2014, Dusit Thani Hotel,
Makati City, Philippines

Highlights of the 2nd Panel of Meeting

The 2nd Panel of Experts Meeting of the AHA-JICA ABCP Project was attended by representatives from Malaysia, Singapore, Vietnam, Indonesia, and the Philippines.

The Meeting started with the Opening Ceremonies with Dr Hitoshi Baba of JICA (HQ) providing the panel members an insight on the future direction of HYOOGO Framework 2. Dr. Baba underscored the potential of the ABCP Project of being promoted among the framers and signatories to the proposed HF2 after completion considering its importance in the light of recent disaster events in the Asia-Pacific Region.

Dir. Susan Cruz, representing the Philippine Civil Defense Administrator- Undersecretary Eduardo Del Rosario, who is also the concurrent Executive Officer of the National Disaster Risk Reduction and Management Council, delivered the latter’s message which in essence, welcomed the selection of the Philippines to be among the Pilot Areas. The Philippines’ recent disaster experience highlights the need to look into measures that can be adopted like a template to facilitate early recovery and ensure economic viability of the Country after a devastating disaster.

The initial session and discussions during the Q&A part focused on the direction of the ABCP Project which is more attuned towards International Standards. The framework and processes to be developed, at least for the Region, should be aligned to what can be adopted and benchmarked internationally and not simply confined at the individual country level.

The Panel again discussed the importance of carefully defining and distinguishing between BCP and BCM but added the need for a certain degree of flexibility.

The need to ensure that the scenarios being developed under the project be fully appreciated by the target stakeholders in the pilot countries and henceforth in the Region was also discussed. This idea should be included in the Guidebook to be developed for the Project. This idea should be promoted to the government, as well.

There was also a proposal to integrate ABCP into what can be translated as Area Risk Assessment using the analogy of the death of a famous American Movie Star as it relates with investments made by the Producer sans Risk Assessment.

Data or map maker attribution was also emphasized to guide users of such in developing ABCP.

There was a suggestion to encourage active involvement of Local Governments and the inclusion of their roles in the guidelines considering that they are in the forefront of actions.

The role of AHA Centre was also highlighted in coordinating efforts of the ASEAN Members in promoting ABCP or BCM.

The following sessions gave updates on the activities that were held in the different Pilot Countries and the immediate future direction of the project in relation with the forthcoming workshops.

The National Coordinators of the Pilot Countries presented the results of the 1st Workshops that were held. Once again, the importance of data sharing was highlighted during the Q&A portion of the Session.

The Panel Members were also briefed on the methodologies employed to formulate the disaster scenarios and risk mapping. The products resulting from these activities will be provided to the AHA Centre.

The last Session is a series of briefings on the Field Visit to the Industrial Agglomerated Areas selected in the Philippines starting with the character and historical incidents involving Taal Volcano and ending with administrative details during the Trip.

The closing presentation is an insight into what was developed by APEC for the SMEs of the member nations on how to develop a BCP using some simple checklist and procedures.

Opening Session

Welcome Remarks Dr. Hitoshi Baba and Dir. Susan Cruz
Introduction of the Panel Members
Photo-session of the Panel Members

Session 1

Reports by Dr. Hitoshi Baba and Dr. Masazaku Takahashi

Discussions:

Mr. Ramon Santiago (National Coordinator for the Philippines): Thank you very much, Dr. Takahashi, we are now opening the floor for discussion. The panel members or some other members of the team may want to raise some questions so that the two speakers can answer them or, if there will be some suggestions, and I think that will be a welcome move for the team.

Dr. Goh Moh Heng: Dr. Takahashi, a quick question. What is the understanding of what's inside the components of the area?

Dr. Takahashi: The component of the area, including the stakeholder, and natural hazard, infrastructure, utility, and other important aspect of natural hazard.

Dr. Goh Moh Heng: The reason for that question is that I don't know whether the team is moving towards alignment to the ISO standard, because this morning I think Dr. Baba has mentioned BCMS. Actually, what I thought of this is that it could be met not actually at the enterprise level we could meet at

the regional level; with alignment with the BCM standard- International Standard called ISO: 2301. So that's something just to prove our part because, from your model actually to roll up so the enterprise and the garment and the industry side can still be certified, I mean, aligned to ISO: 2301; and then we aggregate them to industrial park level and the area level. We can tell everybody that we adhere to international standard.

Dr. Takahashi: Yes, this is our idea. Our system is based on ISO and we like to expand from the individual level to the regional level. So this is our idea.

Dr. Goh Moh Heng: It's a good opportunity because alignment to some form of international standard like ISO not necessarily at the enterprise level of this model can shift up to the area level. So that would give a lot of credential to the party who is actually moving towards the development of a BCM system both at the enterprise and the area level. Of course this is just a comment.

Dr. Takahashi: Thank you very much.

Dr. Baba: Actually, we need to be very careful about the definition of the area BCP and area BCM. We actually defined the area BCP and area BCM, but still, it is under discussion and still a draft. However, while we named this as area BCP or BCM, was that after you may know that area common which is already acknowledged in the International standard of disaster management; defined by the National Incident Management System in the US? That is going to coordinate to the incident command systems in case of large scale disaster or very much complicated event, or emergency for proper control of the restricted resources for emergency management and allocate the resources for a the priority instant command the similar concept was adopted into this area BCP are BCM and we know that the previous BCP as defined in the ISO 2301 is targeted for the single organization of a private company or a government organization and we are now going to expand the single organization-oriented BCP to more coordinated framework of a the enterprises, and government organization and so on. So, thinking about the geographical site of the area, the area will be depending on the magnitude of disaster affecting area in site and it will also change by the condition so, we defined the area BCP as very much flexible and we also understand that similar concept such as district BCP are already proposed by several research institute. The district BCP is targeted for certain district not flexible that because we understand that the area of damage is very much flexible and more changeable the magnitude of disaster and also the condition of the society and will sometimes expand the border of the local government so we need to be very much flexible so area BCP must be changeable. However, in this project, the first burden of the area BCP is data coordination plan we are trying to make a certain part of the area such as the area in Indonesia based on plan disaster risk reduction plan so we need to understand that plan is not only what we need to consider but we need to make another many different kinds of plan based on different scenario that is our understanding to be shared by our panel.

Dr. Goh Moh Heng: Actually, I'm not talking about the whole framework of this study. I'll give an example if you go to any country. Let's say we go to the Philippines, by understanding the area the problem of the private institution are having on the ground, they don't have the same assumption, the same limitation that play the same scope, what area BCP has done now is that we go here and this is subjected to quick adaption so based on that when you do the study enterprise will actually used that as a pending scenario so that they will be consistent that has been my objective. The framework, there's no question. The reason why I am mentioned this is that 2 weeks ago I was in UAE, they actually took the same thing from the National Crisis Emergency Management Authority, so what they did was they were stated by the shake [earthquake] in Abu Dhabi, I am thinking of something similar, it comes under the study so the concept is the same but one of the things that they used is sharing the same ideals. So the concept is the same but the sharing of and to be conscious we work plans with respect to this but I am

coming from a more commercial point of view this framework is the local government this is a livelihood property then we plan from this scenario most organization who takes initiative doesn't know what to do if they're going to have fire, power outage, they don't think about it but with this framework, it helps the organization tremendously by having a framework which very much better planning. That is just a comment, thank you.

Dr. Renato Solidum: Dr. Goh, just to relate it to a question that I raised during the workshop the other day, is that appreciation of the hazard and the risk which is the scenario is very important and that the same scenario must be appreciated with various levels let's look at super typhoon Haiyan, some said they did not expect that it would happen. But there were some that were prepared, but the appreciation of the scenario and the management of that potential disaster is that they would have different appreciation some said that I will just focus on that city and the others would say that is your city you're supposed to be handling that. But, if the scenario is so big, then those at the higher level of governance and even the private industry must pitch in so that we can help that particular city. And this is based on to a point where I asked the question of the hazards information will be produced by this project versus the hazards and risk information based on the put out by the mandated organizations of the government. So we have to be very careful in really making sure that this is a project and we are doing it and we are showing the industry and the local government participating we are using this as an example but the information that must be used might also changed with time, so we have to emphasize that whatever the project would put up might be different from the other organizations within the country will be putting out or even some international organization. We have to make sure that the data that will be used should be understood correctly.

Dr. Takahashi: So, what Dr. Solidum has said is that what we are thinking for the guidebook because the simulation for this project for the pilot area is just an example on how to produce hazard and risk map and in the guidebook probably we would recommend using existing available hazard and risk map. Second priority is using local research institute for university to produce hazard and risk map and maybe methodology would be from the very simple one to the complicated one but it depends on the user of the guidebook and also organization to produce the ABCP and BCM it depends on them the method or methodology on what organization they are going to use. So the maps we produce here are just examples. We don't recommend producing.

Dr. Rasid: If I may provide some input, is actually in support of what Dr. Goh has mentioned and also what Dr. Takahashi has actually reiterated just now that we have actually some form of a missionary so to say, within the panel of experts members here. Myself for instance representing the International Institute for Risk Management Strategies at the same time as an academician I am attached to a University. So, our down line is there in terms of resources, so I truly welcome what Dr. Takahashi has mentioned just now, that is to optimize rather than to utilize the resources available within the ASEAN Panel of Expert Members and I think mentioning about the Universities giving a helping hand, I think, that is the kind of question that I wanted to ask also. But, since you have actually mentioned that I think that is most welcoming but what I want to highlight is in line with what Dr. Goh has mentioned in terms of the BCM standard which has a direct relationship to risk management standard. This natural disaster risk assessment, and risk assessment is a component which is part of the broad spectrum of risk management. So, I see this more as ARA- BCP or ARA- BCM. So ARA means, instead of Area Business Continuity Planning, it is Area Risk Assessment BCP or BCM, but I am looking more on risk management, because risk assessment is just a tiny component an important component of the broad spectrum of the risk management. So, it could possibly the ARM-BCP or the ARM-BCM, Area Risk Management and BCP, BCM coming together, because of the fact that we also have the work force for risk management standard the ISO: 3100, so, I'm with Dr. Goh in saying that you know it can be looked at individual enterprises, companies, complying to such standards but it is similar standard which after all is a guideline, ISO is a

guideline, we don't have to be domestic about it, we can adopt and adapt according to our scenarios but having said that when we talk about individual companies and organizations, we are talking about the industry also. So industry is actually adopting and adapting to such international standards. We need support, we need the allotment of the political leaders you know, we need the support from the ministry we need the support of the ministers, we need the support of the political leaders all the way up to the prime minister and they have the missionary, and the government missionary is through the prime minister department. And the arm for the prime minister department for disaster is the National Security Council and we all need to speak the same language. Otherwise everybody will have different definition, different interpretation, like for example if I may say the British School of Thought, then look at it as Contingency Planning. Nothing more than a contingency planning, so the essential components of contingency planning are the BCM plan you must have a disaster plan. And if there's any disaster there will be an emergency, so there must be an emergency plan. And this two cover which is the crisis management plan so the outcome is simple if you look at country, if you look at the industry, you look at companies and organizations, and you can test them. They have BCM plan. If they don't have that means, there's no such kind of framework, there's no standard, so in any disaster there must be emergency, if you don't have disaster plan if you don't have emergency plan and you don't even have crisis management plan then, you look at one example universal studios, I'm sure you're very familiar with Paul Walker, the Fast and Furious movie, he was down under and they need to find a replacement and that particularly shows that Fast and Furious actually, heightened back their profile in the movie industry. But when Paul walker died they are doing their shooting for their 7th series of Fast Furious, he died! Universal Studio never thought that this actor could die but that's the risk! People die! Sometime sooner than expected you expect the unexpected, and they don't have to so-called "recovery plan" why, because they are so confident. This is a risk management problem. We are talking about so, they are in deep trouble they are trying even to come up with somebody who can imitate who have a similar look you know, like Paul Walker and kill that character in the movie that this particular character actually died. So I'm talking about the British School of Thought, they have different version of it. The Americans have different version, therefore the ISO 3100, this is based on International Practices and we have deliberated the ISO 3100 for five long years! Every International Meeting we deliberated that. So, my point is that if we align and re-align to such a global standard then that makes life easier for every country including ASEAN country. Because we have the political will, and in the recent ASEAN minister meeting, who I have been involved, as adviser to the government of Malaysia, I was in the section and I again and again, emphasized the importance of such a standard and align to the nationwide education and training program and that has been accepted in the UN level, that was the reputation which I made with the deliberation of the during the session of the GPDRR in UN in 2011 and during that time, I was also accompanying the prime minister why and how they should come up with risk management mechanism within the region. I have highlighted that again in Jakarta. So this a very good platform whereby the UN through the other international strategies in disaster risk reduction they actually noted the zoning system in Asia Pacific and also the ASEAN Countries, so they used that platform to making in conjunction with Asian Ministry of Conference. That would be something that we should look at so that we speak the same language and perhaps this kind of study and the findings could be well embraced in the UN meetings also they have the GPDRR, and I strongly suggest that particular committee findings should be well represented and deliberated also in the GPDRR and also next year, the HSCA will be replaced by 2015 so that is my point, thank you very much for your kind attention.

Mr. Ramon Santiago: Thank you very much Dr. Hussein, last item in response to that before we go on a break.

Dr. Takahashi: Thank you very much on your comment; we are developing concepts of this ABCM and BCP for the first time, we are suggesting the concept methodology as easy as and also according to international standard which you mentioned that it will be more easier in developing the international

standard. And also, at the end of this meeting, we like to advice from the panel how to introduce this concept to the lawmaker and other important people who can help us to promote this Area BCM and BCP. Okay, thank you very much!

Mr. Ramon Santiago: Thank you very much, with that note we like to summarize the discussion for the initial session. First, Dr. Baba gave us a preview of JICA's contribution to the framework action plan for part 2 beyond 2015 in which he gave a point and try to correlate the project with respect to emphasizing the appropriate understanding of risk and the role of the private sector as well as trying to cultivate all of this into the future HSA area, then Dr. Takahashi gave the panel an insight on how the project are already progressing, including the processes involved plus an insight on stakeholders or those who participated in the different activity how was there response. He also mentioned about the timelines of the area the project in the different pilot areas. During the question and answer portion, again, the consent on the adoption of a standard for this particular project on ABCP or ABCM, there were suggestions on especially from Dr. Goh and Dr. Hussein, for the process that would evolve in this project they could be aligned toward existing international standards on risk management and business continuity. Dr. Solidum also rose that the issue on appropriate understanding on each type of hazards in response that he took it on a positive note, especially highlighting the role of the local scientific research agency. So with that, we bring this first session into a close, everybody could go for a break, it has eaten a few of our minutes so we might be calling back in everybody in a very short period of time, so thank you very much.

Coffee Break

Session 2

Reports by Mr. Hasegawa and Mr. Tsuji

Discussions:

Mr. Ramon Santiago: Thank you very much Dr. Hasegawa, we are now open for discussion.

Dr. Renato Solidum: I would like to suggest that whatever data that the team would gather maps or texts and even when you put out maps, it would be good to site the reference or the source of the data so that there can be checks on the accuracy, not only on the citations but also the accuracy. In the workshop that I attended the other day, I already pointed to Mr. Santiago that some of the data points, plotted in the map for me is not correct because I know the data very well. Since you are gathering data from these sources, it does not mean that these data are correct because they are also gathered from the news paper and other sources, and since the data will be lodged in the center, it would be good for us to reflect the best quality data in the GIS. It is also good to indicate the source because then the user can refer to the organization or the author of the source if they have any question.

Mr. Ramon Santiago: Thank you very much, Dr. Solidum for reiterating the point.

Mr. Haji Mohammad: I think the study is very prominent. The presentation by the first and second speaker about the database to me in this case, they indicate each country that whether they need to come up with a BCP or not. If there's none, which means the country the intention given to the country is very different. Second, it is actually just to for me and in the national level, if you put. Then we can initiate the ABCP or BCM actually. Then we are going to use head on. The most important part is the study. This is very useful information for us in the local authority. The right skill, the right information, then the members of the state and the committees. Usually, if we have that kind of information, then we hold all together all the authorities look at it and how to address the issues. So, on this study later on, we are going

to come up with a guideline. The guideline is actually very useful, because that is the step forward by the local authority and several agencies. My question to you is the ABCP who are the ownership? Usually when it comes to who are the owners of the ABCP, for the industry, they are the industry, they are the owners, but when we are talking about the areas? Is it the local authorities? Or is it the federal agencies? Because, usually, the national level of this ABCP, the frontier would be the local government, and one is the country level and the third is the local government. So we must indicate who is going to lead. In a study in the Philippines, I'm sure you know who is going to lead this. When you come up with a plan, who is the authors, of the plan, this is very, very important. We address the issue, so the outcome of this study will lead the federal and local agencies. These are very good information. Thank you very much.

Mr. Ramon Santiago: Thank you very much! Is there any brief reaction from the team or any additional recommendation?

Dr. Takahashi: There are several questions in the panel. First of all, I would like to explain about who is the owner of area BCP. This question is related to the area of industrial agglomerated area. For example the area maybe industrial park, so in this case, ownership is the private sector. In some cases, a group of industrial park are within one area so in this case maybe the promoter or organizer are BCP is the local government and in some cases like the Philippines, industrial park located in another in several stage so in this case, for example in Malaysia, we are asking higher level of local government. So that's the government who control to state one city so we are discussing with the government. In the Philippines, the three local governments, Cavite, Laguna, and MMDA, so in this case we are still studying what is the best way of overseeing the probably the candidates of the owner of the ABCP. It depends on the size of the area so this is what we are discussing now. Information is also very important for this project, we corrected information within short time and also we found during seminar and discussion, there is other important information from government research institute and also government agencies. So information we have collected is the first step for database of the information for each country so this should be the guide and also takes it by the government and also sources information is very important so we try to put the sources of information and also you've mentioned where we can get those information from each countries. That is the report so far.

Mr. Andy Mussaf: I want to give a small comment or input to the what happened currently especially during the flood in Jakarta and Bakasi which is still ongoing until now, I think as we know that over the last 1 or 2 weeks, Jakarta, Bakasi, Phang Rang, and also Su Bang, having a massive flooding and some of the infrastructures for example in the Northern portion, transportation is paralyzed due to the flood. So I hope this situation we can benefit from it by maybe like more investigating the effects to the business continuity investigating also again collecting more information of what happened to the based on this situation we expect that by this investigation we get accurate result for the study so I think this is my comment so we can benefit this investigation by gathering more information from the business or industrial companies. Thank you.

Usec. Corazon Jimenez: I was just telling Dr. Solidum, is it alright for us to be able to suggest or recommend who would the official sources be of the hazard and risk map, because there are so many on-going, and different agencies are using different sources so maybe each country should be able to adapt a policy of which agency should have the official source? I mean, we can talk among ourselves from the Philippines, and then, we'll suggest it to the AHA Centre or to JICA team.

Mr. Ramon Santiago: So perhaps, GM in line with your question, I think Dr. Solidum can provide you also with an insight on the others as to how or what was the approach of the Philippines in so far as the Hazard Mapping is concerned. Because in the case of the Philippines, Dr. Solidum can give you. Those involved in mapping or hazard mapping, in the country from different agencies and it was formed under

one umbrella and it is supposed to be an adjunct or a support group to the National Disaster and Risk Reduction Management Council. That was the approach here in Manila, of course that does not prevent academic institutions from coming up with their own, but at least for the hazard that are taken into account by local government unit the source would be the agency under the Office of Civil Defense. That's where most of the hazard maps are coming from.

Dr. Mohd Rasid: Actually what I want to highlight first is what Dr. Solidum has mentioned just now as an Academician also, I am very particular so that means that even in your deliberation of the slide, the magnitude has also is being cited there. Although, I know that in your final report, you mentioned but it is equally important as you mentioned just now. The AHA Centre as a coordinator, so here I think the key role is to ensure that in terms of being the internal control of ASEAN countries, you have the data. So any government, in terms of National Security would verify with ASEAN AHA. So this is how the system works for my experience, I think I have mentioned this, in our earlier meeting in Jakarta, and from my previous action with Mr. Andy, I don't see Mr. Kiam, your former colleague passing the burden to you. Correct me if I'm wrong but, what I mentioned earlier was the current owner and Madame [pertaining to GM Jimenez], you rightly put it also, the areas are the parties claiming to champion this kind of thing but we need to know to firstly to identify and confirm who's who, representing ASEAN country, in terms of ABCP, BCM and also risk assessment. So in this context, I see the most strategy and integrated approach, whereby I would expect that Mr. Kiam would pass to Mr. Andy the bet on when you in turn, representing the AHA, to coordinate very closely with ASEAN Secretariat, because it is the secretariat that actually is the catalyst in getting the ASEAN ministers to agree on various issues so I think what's important is that AHA must pass on the information to the secretariat so that the secretariat will duly inform the prime minister of each ASEAN countries including the president. When this piece of information cascade down, there would be this political will of getting the national security council of each country. There would be activation centers, but, when they want to coordinate or even to research on or to study, they must have various centers, but for now, I don't get any "red alert" coming from my national security council. I don't get although as advisor to the government and Risk Management working with NSC very closely, still, I don't get that red alert from them saying we got this new latest information from ASEAN secretariat that actually got from ASEAN humanitarian center that actually got this from the first JICA meeting, we don't get this information. So, you can see the approach still prevalent among the countries but in terms of the Indonesia, Philippines and Viet Nam, I don't know whether it's fortunate or not but I will see as fortunate because of the blessing of the disaster, you tend to get more attention, and you tend to get more funding but even in Malaysia, we do have the so-called expertise but we don't get the funding, why? Because we don't have the disaster. And when we don't have the disaster the AP syndrome comes in. Why bother we have other priorities but because you have been hit by the disaster especially in Indonesia, that's why the President Bang got his award from the UN, he was able to recover time and again, the disaster that's why your president got the award and when we gave the honorary award, I was one of the writers for his speech also sorry for His Majesty the King of Malaysia's speech, I am the speech writer, so from there I can see, why he got the award why Indonesia got it. It's all because of this disaster, you get the full attention and you get the funding but if you don't have disaster, you can't get the funding, that's why we can export the expertise. The problem is, even though we have the expertise, but this AP-Syndrome still comes in were not into this happened to us in 200 years time. What we need to do is that we need to present the preventive measures coming in, we need to create a risk conscious society even among the citizens I think the expertise actually dome from experts like in other ASEAN countries. I think the combination of all these intellectual properties, capital coming from all these countries would be a very good starting point for other countries who hasn't suffered and who knows, expecting the unexpected you will never know, although Malaysia has been very fortunate that we have been spared by theses disasters so called protected by the Philippines, Indonesia, actually, if it is not there to block then I think Malaysia would've been hit very badly by the disasters. That's I see the National CSR coming in to actually contribute our aid to Indonesia to build up thousands of people sacrificed during the tsunami, but

because of them we were saved so I think it's time for us to give back to the national community and society. So this is my point and my final point it is important for each respective country to identify the Nuclear power station I think the combination of these entire intellectual capital coming from all these countries would be a very good starting point for other countries who has not suffered, and who knows, expecting the unexpected, you can never know. We have been discussing climate change quiet regularly now even in the ASEAN region, and we have actually had a forum with the scientist all over the world, they are also talking about the global warming the landscape of the world has been changing. The problem with Asian countries is that the data is only posted with the in terms with the change of the area. Thank you very much for your kind attention.

Dr. Takahashi: Thank you very much. This ABCP, BCM is very new concept so all the developed ASEAN including AHA Centre and also the government of each member country, we are hoping they are to disseminate and promote this project and this idea.

Mr. Haji Sukamdo: I just would like to confirm whether you have also considered the capacity of the local government?

Dr. Takahashi: So this is the most important issue and I showed the process of ABCM for this project, JICA study team has carried out most of the work but actually to meet with the local stakeholders, we think about the information quality and quantity, and also the capacity of the local resources, so this is the more important issue for guideline and also for promoting this new concept. We need those advices from you on how and what should be done including the guideline and so on.

Mr. Haji Mohammad: Can I recommend I see that to me the BCP, you are talking about the areas and the industry the BCP each individual industry. My opinion is that in ABCP the ownership should be the Local Government. They are the mover of the ABCP.

Dr. Takahashi: Thank you very much for the comment.

Mr. Nakamura, JICA-Philippines: Just a comment on Mr. Tsuji's presentation, may I acknowledge Mr. Roy Badilla, the representative of Madame Susan Espinueva, although we don't have Dr. Espinueva, we can tackle any point with Mr. Badilla around.

Mr. Ramon Santiago: So we have enough presence from the Authorities that is what Mr. Nakamura is saying.

Mr. Tsuji: Thank you Mr. Santiago, I would like to make a simple comment because lunch is waiting in my presentation, I'd like to explain what we have gathered what we are going to do and what we did after the ABCM in this project, I explained this slide at the last panel meeting, the aim of BCP is ensuring that the recovery time objective is met in case of emergency by securing business resources, however 3 resources need more recovery time, so again I say, that external resources often become the common bottleneck. Each stakeholder takes measure individually. If stakeholders cooperate with each other, recovery time objective is met no matter what the magnitude of the disaster is. This presentation states why many stakeholders should be included in the ABCM. It means in a disaster each stakeholder should consider ABCP and BCM not only for each but for other stakeholders in the area. The first time to show you the definition of Area BCP. Thank you for your kind attention.

Mr. Ramon Santiago: Thank you very much, with that, we'd like to bring the morning session to a close, and we'll resume later as scheduled, hopefully we'll be able to meet the time frame. Thank you very much everybody! Please enjoy your lunch!

Lunch Break

Session 3

Reports by: Dr. Krishna, Mr. Santiago, Dr. Mohd Rasid

Discussions:

Mr. Ramon Santiago: Thank you so much, so, any question from the panel members or any comments?

Dr. Renato Solidum: The industry would of course participate because they are the ones mostly to be affected and those from the government would help but two things actually, the local government should take the initiative and not only that but improving the BCP in the pilot areas but also replicating there is other areas. So, can you comment on our local government in the Philippines?

Mr. Ramon Santiago: So, in the case of the Philippines, there was good representation from the provincial level during the time of the workshop. Then, the National Government Agency, cuts across energy, transport, but we still year for an additional representation that's why yesterday, we tried bringing it to the City level, the mayors of some of the towns.

Dr. Renato Solidum: So, the province level is not enough for example Laguna?

Mr. Ramon Santiago: For the workshops, we also brought in some from the City but during the progress seminar the other day, we already tried to introduce or bring it to the level of the Cities. Due to some certain limitations, we just have to be content with the provincial level in the case of the Philippines, because Cavite and Laguna, these are the major areas in the agglomerated industrial areas.

Mr. Hayato Nakamura: So in the progress seminar, Laguna is not in the industry area, but they have to cover everything, right? So that the what we are planning with Mr. Santiago, before the next workshop we will try to extend more to the local level, of course and then to the city level. As Philippines' pilot area, is not administrative area but it is more like just a broad, flexible areas, that we try to continue discussion with the local government, at once.

Datu Haji Mohammad: I have 2 objections here. First is that regarding the authority of each country differs. So my question is that when it comes to the BCP, is each area different based on the level of each area? In my opinion, should there be a law constant in the Philippines, also a law that is about the authority where each area is under. We need to show a study that studies the impact of each different perception in the local government. We have to take not that the industry is not that bad, although there a few. My question to the study team, do you want to help eradicate these disasters or you just want to help manage the earthquakes, floods? So these are the things we need to look at, and maybe you can answer that. Secondly, based on 3 workshops, very good workshops attended by various sector of the stakeholder and 1 key issue mentioned here and also in my country is about the data shared in the risk mapping or hazard mapping. I think we should have a database for each individual area. So it can be developed for the local authorities to use. We have very good information but how do we spread the information with the local authorities. We prepared a special database for them and then train them how to use it. We prepare a special workshop just for them on how to use this database. Thank you.

Dr. Renato Solidum: We are using our GIS, are we going to open it so that all communities later on can have access to the GIS?

Dr. Takahashi: So regarding the database, for example, in my country, there are database of hazard maps, by each local government. So this is made by the central government so the information to the public is available so we can see the location of the area landslide, and earthquake on the website so this is a system we need to aim in the future. So each database I think is very confusing, from the central and local government, they are very different. So to produce some standard when it comes to making these hazard maps are one of the goals of this study. And also, about the hazard we are using for ABCP we are constantly marking hazard to make an example of plan so we select one for making plan and also we need to see diff type of hazard so we chose one for flood for earthquake and also one for storm surge. So this is our approach.

Dato Haji Mohammad: Each area BCP has all those hazards taken in consideration?

Dr. Takahashi: Yes, we have already consolidated all the data for hazard.

Dato Haji Mohammad: I'm not talking about the hazard; we are talking about the database information system of area BCP. We have the facilities are you sure this area is you come up with the map and give them to the authorities. This is just a suggestion. We have to budget for that, then when we finish it we design it and they can use it as a management tool. And then we come up with a workshop on how to use it. But that database should be Area BCP for that particular spot only. That is just a view you can consider whether it can be workable. If it is in Malaysia, I will do it to that level that's why I think it is very effective. Thank you.

Dr. Takahashi: Actually area BCP and database are separate issues. We have enough information to produce BCP or BCM, they can extract information on hazard and disaster from other source because in ASEAN country, the amount of information is not sufficient. For this project we include the database information as well.

Mr. Ramon Santiago: I think Dr. Solidum, yesterday when you posted that question, about the GIS as the take off point for this project, I consulted with Mr. Hasegawa. It is not going to be exclusive but the use of the database as the product here is due to the fact that it already exists in the area so just for purpose of expediency, it has to be sorted but it's not going to be exclusive. I have experience that even before when you go down to the LGU's, they cannot even talk about the software because the first part is the hardware, so it is quite difficult to push for it so you can even go manual GIS, you have several layers of information etc. and these are also options that we are telling the less affluent towns. For this particular project, we are considering to bring in areas in other industrial or economic zones, the LGU there would be able to generate income and therefore you could level with them in terms of the sustainability even if they can afford it is going to be the issue in the future. Other comments from the panel?

Dr. Raid: Back to what I have mentioned earlier in terms of ASEAN secretariat and AHA, again in terms of database, I think even at the ASEAN level we need comprehensive database even because we are talking about long term in the ASEAN level. The ASEAN AHA center including all the Asian countries must have similar, consistent, and accurate database that can be used and that is important. Having said that, I have 1 question to ask Dr. Takahashi and probably also Dr. Baba I think the way I see it, JICA has been exemplary in terms of such a research and development. So, I foresee that JICA will be the champion not only for Japan, but the champion who would set very good model examples for other Asian Countries, the way I see it I would that JICA will continue in this endeavor and to ensure that we will have capacity building in the ASEAN countries, that is most important when we are talking about nation building, we are talking about capacity building so we need the right kind of people and the right kind of people will have the drive the passion, dedication and importantly the commitment and I'm leading to my

point here when Mr. Nguyen this is the problem we keep on having change of guts every now and then representing countries. If you address to other institutional level, then it will be at the whims and fancy of the director general or whoever to a point who's who do attend this kind of meeting. I believe this kind of meeting in terms of human capital but also intellectual capital, most of the end of the day we will have those kinds of people who are being identified as the so-called experts in their respective field for their respective Asian country. If JICA want to go long term, then they will succeed under the leadership of Dr. Baba. It's time for us to have a capacity building for the key representatives of the JICA study team.

Mr. Hideaki Hasegawa: If JICA continues this project it is much easier. We'd like to get your opinion, on how to disseminate the information from this Study with intervention by JICA.

Mr. Andy Musaff: Thank you very much. In AHA center we also identified about our needs in the data collection and to support our function as the information center for the region. This is also our main concern; within this year for example we have tried also to initiate one of our kinds of projects to have a disaster management plan. So again, we would like to try to collect all the data that happened in the region, but however, it's not an easy path to do it because some of the data are located in the National Disaster Management Offices. It will be like a long term of work and coordination and we are still trying to pursue that within. It is our dream to have our disaster database wherein the entire region can access the information freely and then it is available to the public. Also by using this opportunities, we gain more data and then we collect it and we try to compile this information so it will be available for the respective institutions. We are going towards that direction but it is still on process.

Dr. Takahashi: So for this project, information collected for this project will be transferred to AHA center to support their effort to do the database in the ASEAN region, so this is also one of our tasks.

GM Corazon Jimenez: I would just like to add to some comments, I have been attending since the time we met in Tokyo and Jakarta, I've been seeing that the methodology is being emphasized and this is actually very consistent so that the countries will be able to sustain the process. I think the success of this concept is continue to be consistent, continue talking to the same stakeholders who have been with us from day 1 and as Mr. Santiago had articulated earlier, it's time to elevate it to a higher level like the government. OCD is very aware of this in the manner that we did for mainstreaming the CCA, so I think it will run very smoothly, and you are known for this, the Japanese, very methodical, very organized. My only other recommendation is those who have attended should be able to already report to their respective bosses.

Mr. Ramon Santiago: I think that point is well taken especially in communicating. What the team has been doing is raising more information and more concrete process or something that when you give it to the principal of those who are attending somehow it is already easy to digest. In the case of Manila, PEZA oversees most of the economic zones, we are talking with the second level, most of their deputy director generals attended they would like to issue a requirement already for all the areas we just told them little by little as soon as you are armed with better information that your locators are encouraged to participate. Time will come for that.

Dr. Hitoshi Baba: Thank you very much for very important comments on the sustainability of the study. We really hope that stakeholders of this project could take their own responsibility to feedback their through this project to continuously generate the process, cycle of the area BCP, BCM, JICA's project ends this year, and we really hope that the stakeholder will take their own responsibility to secure the sustainability. We know clearly that the important thing is that the few resources the capacity in managing this action by using the technology GIS GPS modeling technology and so on. If we are very keen on support, actually we are doing separately with this project such as satellite information utilization. Also

we have many planning courses of JICA re those useful technologies. AHA is also providing many kinds of training courses. Today we'd like to get more ideas how to generate the movement of the ABCP even after the completion of this project this is more important than requesting the second phase of ABCP.

Dr. Renato Solidum: That's a good trigger question for discussion; let me share with our experience with JICA project, of course we thank you for the Japanese government to JICA for allotting funds given to Philippines. One good thing for the project to be implemented, in other areas, would be working together for a project. During the MM earthquake impact reduction study, we had all the technical working group, we worked with Dr. Takahashi and with JICA, we provided them with the analysis that we have, we have been replicating since then, we really need the staff to be actively participating. They must be part of the action.

Mr. Ramon Santiago: We are now going to take our coffee break; maybe we can get some refreshments as well so we can be back with our discussion. Thank you.

Coffee break

Session 4

Reports: Dr. Takahashi, Mr. Tsuji, Mr. Santiago and Ms. Melosantos
Impromptu report / presentation on Guideline book: Dr. Goh Moh Heng

Discussions:

Dr. Goh Moh Heng: Just a quick run though, is this guidebook suited for all the ASEAN countries? We can with the help of JICA we can maybe produce a universal guidebook. The idea is to make a guidebook for ABCP and BCM. How do you share the data, compound the data, how do you share it with your companions? With your service provider? That is all, thank you very much for your kind attention.

Mr. Ramon Santiago: So for the field trip tomorrow, we expect everyone to meet at the lobby, 10 minutes before departure. Thank you so much for you kind attention, see you next panel meeting in Hanoi in June!

Closing speech by GM Corazon Jimenez, MMDA

Adjournment at 17:30.

3rd Panel Meeting
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”

June 19 & 20, 2014, Melia Hotel, Ha Noi, Vietnam

*Under a Joint Program of Japan International Cooperation Agency (JICA) and ASEAN
 Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

List of Participants

List of Panel Member on Natural Disaster Risk Assessment

Country	Field of Specialty	Name	Organization and Designation	Note
Indonesia	Earthquake, Structural Engineering	Mr. Prakoso Sawarda Mandala (Dr. Haji Pariatmono Sukamdo)	Director, Government Science and Technology, Ministry of Research and Technology	-
Philippines	Earthquake, Tsunami, Volcano	Dr. Renato U. Solidum, Jr.	Director, Philippine Institute of Volcanology and Seismology (PHIVOLCS), the Department of Science and Technology (DOST)	http://www.phivolcs.dost.gov.ph
Philippines	Flood, Typhoon	Dr. Esperanza Cayanan (Dr. Susan R. Espinueva)	OIC, National Capital Region PAGASA Regional Services Division/Asst. Weather Services Chief, Philippine Atmospheric, Geophysical & Astronomical Services Administration (PAGASA), the Department of Science and Technology (DOST)	http://www.pagasa.dost.gov.ph
Vietnam	Flood, Meteorological Hazards (Early Warning)	Ms. Dang Thi Thanh Mai	Deputy Director, National Centre for Hydro-Meteorological Forecasting (NCHMF)	http://www.nchmf.gov.vn/web/en-US/43/Default.aspx
Vietnam	Flood	Dr. Tran Ngoc Anh	Associate Prof., Faculty of Hydrology, Meteorology and Oceanography, Hanoi University of Science, Vietnam National University	http://www.university-directory.eu/Vietnam/Hanoi-University-of-Science.html#UWqInL_c
Malaysia	Landslide, Local Urban Planning	Mr. Zamri Bin Ramli (Dato' Haji Zakaria Bin Hohamad)	Head of Engineering Geology, Minerals and Geoscience Department Selangor, Ministry of Natural Resources and Environment	http://www.jmg.gov.my

List of Panel Member on Area BCP

Country	Field of Specialty	Name	Organization and Designation	Note
Philippines	Policy	Undersecretary Corazon T. Jimenez	General Manager, Metropolitan Manila Development Agency (MMDA)	Former head of the Policy Center of the Asian Institute of Management http://www.mmda.gov.ph http://www.aim.edu
Vietnam	Chamber of Commerce and Industry (Private Sector)	Mr. Dau Anh Tuan	General Director of Legal Department, Viet Nam Chamber of Commerce and Industry (VCCI)	http://vccinews.com
Singapore	Emergency Services	LTC Chua Swee Leong (Col. Anwar Abdullah)	Assistant Director, Plans and Projects, Operations Department, Singapore Civil Defence Force (SCDF)	http://www.scdf.gov.sg/content/scdf_internet/en.html
Singapore	BCM, Disaster Recovery Plan (Private Sector)	Dr. Goh Moh Heng	President, BCM Institute	http://www.bcm-institute.org/bcmi10/
Malaysia	Risk Assessment, Risk Management of Corporates	Prof. Dr. Mohd Rashid bin Hussin	Prof. , Risk Management Department, School of Economics, Finance and Banking, College of Business, UUM	UUM: University Utara Malaysia (The Eminent Management University) http://cob.uum.edu.my

Delegates

Country	Name	Organization and Designation
Indonesia	Mr. Janggam Adhityawarma	Senior Disaster Monitoring and Analysis Officer, ASEAN Coordinating Centre for Humanitarian Assistance (AHA Centre)
Vietnam	Mr. Nguyen Huu Phuc	Director, Disaster Management Centre – Water Resources General Department, Ministry of Agriculture and Rural Development
Vietnam	TBC	Ministry of Planning and Investment
Vietnam	Mr. Le Huu Phuc	Ministry of Industry and Trade
Vietnam	TBC	Ministry of Transport
Japan	Mr. Yusuke Fukushima	Second Secretary, Embassy of Japan in Vietnam
Japan	Mr. Hitoshi Baba	Senior Advisor, Global Environment Department, JICA HQ
Japan	Ms. Nozomi Ui	JICA Vietnam Office
Vietnam	Ms. Nguyen Thi Thu Le	JICA Vietnam Office

List of National Coordinators

Country	Name	Organization and Designation
Indonesia	Dr. Krishna S. Pribadi	Associate Professor, Construction Engineering and Management Group, Civil Engineering Department, Bandung Institute of Technology
Philippines	Mr. Ramon J Santiago	Advisor to the MMDA on Disaster Preparedness and Risk Reduction Advisor for Flood Control Information Center, the K9 Search and Rescue Team and the MMDA's Disaster Preparedness and Risk Reduction Training and Emergency Response Center
Vietnam	Mr. Nguyen Thanh Ha	Director, VIETBID Consulting Firm

List of Junior Researcher

Country	Name	Organization and Designation
Indonesia	Ms. Aria Mariany	Student, Urban & Regional Planning, School of Architecture, Planning and Policy Development, Bandung Institute of Technology
Philippines	Ms. Ma. Lynn P. Melosantos	Senior Science Research Specialist, Philippine Institute of Volcanology and Seismology (PHIVOLCS), the Department of Science and Technology (DOST)
Vietnam	Ms. Nguyen Phuong Nhung	Researcher, Faculty of Hydrology, Meteorology and Oceanography, Hanoi University of Science

JICA Study Team and Staff

Country	Name	Organization and Designation
Japan	Dr. Masakazu Takahashi	Team Leader, JICA-AHA Project
Japan	Mr. Yoshiyuki Tsuji	Deputy Team Leader, JICA-AHA Project
Japan	Mr. Shukyo Segawa	Leader of Natural Disaster Risk Assessment, JICA-AHA Project
Japan	Ms. Akira Watanabe	Coordinator, JICA-AHA Project
Vietnam	Ms. Hoang Minh Nguyet	MC
Vietnam	Ms. Bui Bich Ngoc	Interpreter
Vietnam	Ms. Tran Thi Duyen	Rapporteur
Vietnam	Ms. Ngo Thi Ming	Assistant of National Coordinator
Vietnam	Ms. Nguyen Van Anh	Assistant of National Coordinator

**3rd Panel Meeting
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

June 20, 2014, Melia, Ha Noi, Viet Nam

*Under a Joint Program of Japan International Cooperation Agency (JICA) and
ASEAN Coordinating Centre for Humanitarian Assistance on disaster management
(AHA Centre)*

Agenda

June 18, 2014, Wednesday Arrival of the Panel members at Ha Noi

June 19, 2014, Thursday Field Trip in Hai Phong

June 20, 2014, Friday

Opening Session	
8:30-9:00	Registration
9:00-9:35	<p>Welcome Address (10)</p> <p style="text-align: center;">Mr. Yosuke FUKUSHIMA Second Secretary Embassy of Japan in Vietnam</p> <p>Opening Address (10)</p> <p style="text-align: center;">Mr. Nguyen Huu Phuc, Director Disaster Management Centre – Water Resources General Department Ministry of Agriculture and Rural Development</p> <p>Introduction of Participants</p> <p>Group Photo Session</p>

Session 1 Project and Area BCM	
09:45-10:30	<p>Project and Area BCM (25) including Video</p> <p>Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Q & A / Discussion (20)</p>
10:30-10:50	Coffee Break
Session 2 Developing Area BCP	
10:50-12:10	<p>Understanding the Area (20)</p> <p>Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment</p> <p>Determining Area BCM Strategy and Developing Area BCP (20)</p> <p>Mr. Yoshiyuki Tsuji Deputy Team Leader of the Study Team</p> <p>Q & A / Discussion (30)</p>
12:10-13:30	Lunch Break
13:30-14:45	<p>Practices in the Pilot Countries (45)</p> <p>Workshops and Draft Area BCP for Indonesia (15) Dr. Ir. Krishna S. Pribadi National Coordinator of Indonesia</p> <p>Workshops and Draft Area BCP for the Philippines (15) Mr. Ramon Santiago National Coordinator of the Philippines</p> <p>Workshops and Draft Area BCP for Viet Nam (15) Mr. Nguyen Thanh Ha National Coordinator of Viet Nam</p> <p>Q & A / Discussion (30)</p>
14:45-15:00	Coffee Break

Session 3 Strategies for Promoting Area BCM in the ASEAN	
15:00-15:30	<p>Exercising and Reviewing, Maintaining and Improving and Next Steps (15)</p> <p style="text-align: center;">Dr. Masakazu Takahashi</p> <p>Q & A / Discussion (15)</p>
15:30-16:50	<p>Strategies for Promoting Area BCM in the ASEAN (10)</p> <p style="text-align: center;">Dr. Masakazu Takahashi</p> <p>Discussion</p>
16:50-17:00	<p>Closing of the Panel Meeting</p> <p style="text-align: center;">Dr. Hitoshi BABA Senior Advisor JICA HQ</p>
17:00	Adjournment
18:00	Dinner

MC: Ms. Nguyet, Moderators : Mr. Ha, Dr. Krishna, and Mr. Santiago

June 21, 2014, Saturday Departure of the panel members from Ha Noi

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formulation for Industrial Agglomerated Areas in the ASEAN Region”

June 20th, 2014, Melia Hotel, Hanoi, Vietnam

Under a Joint Program of Japan International Agency (JICA) and ASEAN Coordinating Center for Humanitarian Assistance on Disaster Management (AHA Center)

Minutes of Meeting

09:00 am. MC Hoang Minh Nguyet started the panel meeting. First of all, she warmly welcomed all participants to take part in the 3rd panel meeting for the project “Natural Disaster Risk Assessment and Area Business Continuity Plan Formulation for Industrial Agglomerated Areas in the ASEAN Region” co-organized by Ministry of Agriculture and Rural Development of Vietnam (MARD), JICA and AHA Center. She gave an overview of topics which would be discussed in the Panel Meeting.

Then she introduced the attendance of delegates, especially Mr. Yosuke Fukushima, Second Secretary of Embassy of Japan in Vietnam, Mr. Dang Quang Minh, Vice Director of Disaster Management Center, Directorate of Water Resources-MARD and Mr. Masakazu Takahashi, Leader of JICA Study Team.

After that, she introduced Mr. Yosuke Fukushima, Second Secretary of Embassy of Japan in Vietnam to give his welcome speech.

09:05 am: Welcome Address- Mr. Yosuke Fukushima, Second Secretary - Embassy of Japan in Vietnam

In his speech, Mr. Fukushima emphasized that Vietnam and ASEAN countries have achieved remarkable development in some recent years. Hai Phong and other important economic areas were still attracting a lot of foreign investment. However, ASEAN countries were suffering many natural disasters every year such as typhoons, landslide or earthquake. To prevent and mitigate negative impact of such disasters, Japan Government has supported Vietnam and other ASEAN countries through technical and financial cooperation based on their experience. Japan has had suffered a lot of great natural hazards such as earthquake or floods, therefore they had much experience on this field to support other countries. And they considered the measures to recover from disaster as soon as possible. That was the basic concepts for Area BCP/BCM. This study started in 2013 and raised a number of interests and awareness from many people. By the way, through this panel meeting, with the attendance of experts and panelists from ASEAN countries, he hoped all participants would share useful information on disaster management to improve the Area BCP/BCM.

09:10 am: Opening Remarks- Mr. Dang Quang Minh- Vice Director of Disaster Management Center, Directorate of Water Resources-MARD.

Mr. Minh overviewed the current situations of Vietnam regarding to the natural hazards. He highlighted the efforts of Vietnam government, people with the support from international communities to prevent, response and mitigate the negative impacts of natural disasters. Mr. Minh also gave the basic background of Vietnam economy with many threats to the entrepreneurs and pointed out the necessity to protect them against the natural disasters. He hoped that via this panel meeting, the panelist would contribute ideas and

suggestions to improve Area BCP/BCM for ASEAN countries in general and in Vietnam in particular, discuss the strategies to promote Area BCP/BCM, and strengthen the cooperation & information sharing in the region.

09:15 am: Introduction of Participants

All participants of panel meetings were asked to introduce themselves for more convenience in communication.

09:20 am: Group Photo Session

All participants were invited to take group photos

09:25 am: Session 1: Project and Area BCM- Dr. Masakazu Takahashi, Team Leader of the Study Team

MC. Hoang Minh Nguyet introduced Dr. Takahashi to deliver his presentation on the Project as well as progress of Area BCM.

Firstly, Dr. Takahashi reviewed the field trip to Hai Phong in the previous day. All panelist had a trip to see the fact of infrastructures, lifeline in some main industrial parks such as Dinh Vu Industrial Zone, Hai Phong Port as well as potentially natural disasters and their disaster response plans.

Dr. Takahashi showed the video about the Area BCP/BCM, which indicated the background, concepts, objectives, necessity, benefits of the program.

Then, he reviewed the progress of project and Area BCM: about the stage of the Project, remaining activities with some seminars in August, 2014 in 3 pilot countries. He introduced the basic objectives of the project, 3 pilot areas, hazard simulations & disaster scenarios for each pilot area, activities of the Project through 02 components, workshops to form Area BCP, topics in each workshop and number of attendants in each workshops.

Regarding to Area BCM, he showed proposed Area BCM, organizational arrangement for Area BCM with 3 categories of stakeholders: leader, members and supporters. Furthermore, he mentioned detailed of organizations/ agencies in each category as well as their roles and responsibilities in Area BCM. And Dr. Takahashi indicated the keys for sustaining Area BCM.

Details of his speech: “Project and Area BCM”- PM3_VN_05

Q&A

After Dr. Takahashi’s presentation, some comments from panelists were raised.

Prof. Dr. Mohd Rashid Bin Hussin from University Utara Malaysia gave the first comments. He stated about benefit of Area BCP/BCM and confirmed his interests to introduce and promote Area BCP/ BCM in Malaysia.

Dr. Renato U. Solidum, Director of Philippines Institute of Volcano logy and Seismology concerned about the national level- how the local Government (“supporter”) could deal with Area BCM/BCP. First

thing to do in Philippines was to ensure that the local government have the same understandings about business continuity with private enterprises and other organizations. He introduced Area BCM/BCP to local government in almost regions of Philippines in three months ago. And he hoped that it was needed to engage the local government and private sectors as much as possible.

Dr. Takahashi replied that this project was the first step of developing BCM. The plan was required to localize step by step: the stakeholder would review plan first, then disseminate the Area BCM/BCP to their own organizations, implement Area BCM/BCP by members. During the process, such concepts would be disseminated to other organizations, other parties.. and all of them would be mentioned in next step: Sustaining of Area BCM/BCP.

Dr. Renato added his comment about the position of leader of Area BCM/BCP. In case of Philippines, it was very important to show who the leaders were. He wanted to know about the possibility to take relief of organizations/agencies listed as the leader.

Dr. Takahashi answered that about this matter, it was required tactics, the basic background and knowledge.. to implement so it needed more discussions.

Then Dr. Renato said that he was asked by his minister for further continuity, about their activity of management of science technology on discontinuity, about the leader.

Ms. Corazon T. Jimenez, General Manager for Metropolitan Manila Development Agency (MMDA) supplemented her ideas about the leader in Philippines. She made sure that MMDA would endeavor to implement the Area BCM/ BCP as the roles of leader. They had 17 local government units. In the south of Metropolitan Manila, when the pilot project would be done, the local government should acknowledge about the risks and implement it. And she suggest that for the other areas, it was not sure, needed to talk more with local leaders.

Mr. Ramon J Santiago, Advisor to the MMDA on Disaster Preparedness and Risk Reduction, International Coordinator of this project gave his desires on the actions from the leader's local governments regarding to the natural disaster management to sustain the continuity of the business.

Dr. Hitoshi Baba, Senior Advisor from JICA Headquarter explained about JICA's contribution in this project. As an international agency of Japanese Government, now they were considering the way to make business continuity management to be internationally recognized, framework for public - private cooperation. The international standards for individual BCP might be the ISO22301 regarding to business continuity. Based on the international standards, many private companies acknowledged the importance of this activity. Same as that, JICA was running to make new approach like an international standard. Now JICA promoted it to many workshops for discussions, introduced to all ASEAN countries. To make it to become an international standard, our aim was to establish the acknowledgment of both public sector and private sector. After understanding the importance of the Area business continuity, many entities would be the leader to conduct this plan. And JICA also would continue to support.

Prof. Dr. Mohd R. B. Hussin commented that as the panel meetings in Jakarta and Manila, he reconfirmed the high importance to have a top-down approach. And he asked AHA Center to work closely with ASEAN Ministry meeting and Asian Ministry Meeting. He also mentioned that Malaysia should

publicize new concepts of Area BCP. And in the Area BCP/BCM, he required more actions from AHA Center because AHA Center played an very important role in this project.

In his point of view, Area BCP should be the benchmark for international stakeholders, especially for Western stakeholders and Western countries. No need to be the follower any more. Dr. Mohd shared that he involved in the development of the world risk management standard, ISO 31000, ISO 31004 and ISO 310010 which were more specific and detailed guidance for organizations. And such international standards could be adopted in case of risk management. And they also adopted ISO31000 into Malaysia, but ISO 31000 was still non-compliance.

He highly appreciated the support from JICA and necessity for the cooperation among partners. Once again, he talked about the leader (champion) and the member, supporters (driving force) in Malaysia. National Security Council would be the leader.

Mr. Janggam Adhityawarma, Senior Disaster Monitoring and Analysis Officer, AHA Center explained about the roles of AHA Center in this project. AHA Center was an international NGOs which was very operational, as an implementer with strategic level. From the beginning, AHA Center supported it because it related to risk assessment, early warning and monitoring activities. He hoped that in the future, JICA and AHA Center would have another working group meeting to discuss more and it should be added in the agenda in the next version then to follow up for the implementation of the project. AHA would continue to support as much as possible. Moreover, Mr. Janggam said about the importance of reviews and exercises of the plan. So, it would be also necessary to analyse the attendance of participants in each workshops in 3 pilot areas- stability or changes.

10:30 am: Coffee Break

10:50 am: Understanding the Area- Mr. Shukyo Segawa, Leader of Natural Disaster Risk Assessment

In his presentation, Mr. Shukyo Segawa summarized understandings about the stakeholders of the area, structure of the local industry and the disaster risks assessment to the local industry from the identification of natural hazard to hazard assessment, to risk assessment and then to disaster scenario creation. Moreover, he also mentioned the establishment of the system to implement Area BCM.

Details of his presentation: “Understanding the area”- PM3_VN_06

11:10 am: Determining Area BCM Strategy and Developing Area BCP- Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team

In his presentation, Mr. Tsuji introduced the background of project, contents, purposes of the plan. He clarified stakeholders of the Area with roles and responsibilities for each group respectively, structures of local industry, infrastructures in the area. He overviewed all topics discussed in previous workshops such as business resources, bottlenecks of local industry; impact to critical resources, to local society and industry...Mr. Tsuji gave proposed measures to implement Area BCM/BCP for each group of stakeholders.

Details of his presentation: “Determining Area BCM Strategy and Developing Area BCP”, PM3_VN_07.

Q&A

After presentations of Mr. Segawa and Mr. Tsuji, a lot of comments and questions were raised. The Q&A session were moderated by Mr. Ramon J Santiago, International Coordinator in Philippines.

Mr. Zamri Bin Ramli, Head of Engineering Geology, Minerals and Geo-science Department, Selangor, Ministry of Natural Resources and Environment, Malaysia asked Mr. Segawa about the source of hazard information whether in the local areas or outside of the boundary. Earthquake may relate to several countries, floods may be a local occurrence, so how to analyze it in his assessment. And during the study in several courtiers with the scale of thousand km, any hazard map was established in the report or not.

Mr. Segawa answered in the hazard assessment, especially for the earthquake, it related to many countries. For Hai Phong, for instance, when he did the study, a thousand of km were evaluated, so it would include the boundaries of Laos, Cambodia, China and so on... The same situations were for the Philippines and Indonesia. Furthermore, when the study team conducted the study, they collected information from the international database, and local database for the local areas if available for the efficient assessment. For the hazard map, if it was established for a wide areas including all local regions, it should expand in a large scale, not small scale.

Dr. Hitoshi Baba explained more information created from the process, especially for earthquake, was quite useful for the other industrial assessment if they wanted to make the same kind of Area BCP. For example, the earthquake in Manila could affect many courtiers, or storm in Hai Phong also affected Ad Nang area seriously. Therefore the information used in Area BCM was very useful.

Mr. Chua Swee Leong, Assistant Director of SCDF, Singapore showed his comments on the importance of the need for the stakeholder to sign off in the risk assessment as soon as possible. The stakeholders would implement the Area BCP first, and then expand to the higher level. Second comments were about the definitions. He paid much attention on this. As he said, the definitions showed in the promotion video on Area BCM/ BCP explained the best about the BCM, BCP. However, it was required the standardization about it, because the difference in understanding about BCM, BCP among the regions. So firstly, before the implementation of project, he suggested to build a baseline or general frame for what was BCM, BCP, Area BCP for the common understanding.

Moreover, the definition of “owner” was not the same as “owner” in their ISO, it may refer to the higher level of competent authorities, the leader of the project and so on. “owner” was a confused definition to clarify who was the real “owner” in each areas. And the responsibilities for the owner and member should be clearly defined. The question was how to find the right people to be the best fitted to “the member”.

For the local industry, he suggested JICA should closely cooperate with industrial areas to implement the disaster management. A lot of guidebooks and instructions were out of date now. Each industrial areas should have individual BCM. However, they still needed alternatives besides Area BCM because Area BCM actually did not cover all in terms of risk assessment.

Mr. Prakoso S. Mandala asked to put the epidemic disaster into the natural disaster assessment in Area BCM.

Mr. Segawa replied that the Area BCM focused on natural disaster, epidemic disaster was important things, but it was not in Area BCM at the moment, it should be in next steps or new cycle in the future. Mr. Tusuji said the nature of natural disaster and epidemic disasters was different. Natural disaster focused on the way to recover as soon as possible for the things related to infrastructure, utilities.. while epidemic disaster focused on the methods to survive and overcome the diseases which related to the lives.

Mr. Chua Swee Leong said that the definition of natural hazards did not cover the epidemic disasters. The natural disaster focused on earthquake, tsunami while epidemic related to health, therefore the scenario of them were different.

Ms. Cayanan from the Philippines wanted to be asked about the possibility of occurrence of worst scenarios for the natural disaster, not only based what we had experienced in the past and the plan to respond to it. Moreover, she hoped that it should have a system to remind all people about the historical records about the occurred natural disasters in the pasts, so they could acknowledge the damage of natural disaster as well as withdraw lessons from them.

Mr. Segawa answered that when considering the probability of natural disaster for Area BCP/BCM, they did not consider the worst, but the probability based on the business lifetime. It was not necessary to consider the worst with probability at once in thousand years. The more important was to consider the natural disasters with probability of every year or ten years. It was more practical and top priority to consider.

Furthermore, the duration of natural disasters was different for each type, the duration of earthquake was much longer than the floods or storm, so it was very important to remind the historical records to all people, and it would be put into the BCM.

Dr. Baba talked more about the probability used in Area BCP for the natural disaster. It was quite complicated in terms of the political decisions and local conditions. For examples, in the targeted areas, there were a lot of important facilities playing critical roles in the areas, so the targeted probability for such areas would be rare, maybe ten thousand year for once time of probability. It depended on the political decision, for example in the capital the probability should be very rare. But the local city would have lower level. In conclusion, it depended on the local condition, political priority to save such area. However, in this project we used 100-150 years of frequency of the natural hazards. If they wanted to apply another scenarios to a very important area, they could use 500-1000 years of probability. It based on the political decisions.

Mr. Krishna S. Pribadi, National Coordinator of Indonesia said that, besides the political decisions, sometimes due to the substandard infrastructure and utilities, so the probability for the earthquake in Indonesia at 200 years of frequency was good enough for the assessment.

12:10 pm -13:30 pm: Lunch Break

13:30 pm: Practices in the Pilot Countries

Mr. Tsuji changed the order of the presentation about the practices of Area BCM/BCP in the Philippines, Indonesia and Vietnam.

Firstly, Mr. Raymond Santiago, National Coordinator of the Philippines talked about the workshops and Draft Area BCP in the Philippines. He showed again the topics discussed in 3 workshops in the Philippines and outcomes of such workshops. Regarding to Draft Area BCP, he summarized the contents specified in the draft Area BCP for the Philippines, about the infrastructure, proposed measures, the implementation... He pointed out clearly the agency as Owner/ Co-owners for Area BCP in the Philippines and gave comments on the next steps.

Details of his speech: Report on ABCP Formulation Workshop in the Philippines- PM3_VN_09.

14:00 pm: Workshops and Draft Area BCP for Indonesia- Dr. Krishna S. Pribadi, National Coordinator of Indonesia.

With the same structure as Mr. Santiago's presentation in the Philippines, Dr. Krishna gave overviews on 3 workshops hold in Indonesia: about the number of participants, topics of discussion and outcomes respectively. The comments about workshops from stakeholders were collected. About the Draft of ABCP in Indonesia, he emphasized the owner/maintainer of Area BCM, understanding of Industry in Karawang and Bekasi as well as proposed measures.

Details of his speech: "ABCP Workshops and Draft ABCP Formulation in Indonesia"- PM3_VN_08

14:20 pm: Workshops and Draft Area BCP for Vietnam- Mr. Nguyen Thanh Ha, National Coordinator of Vietnam.

With the same structure as those in report of the Philippines and Indonesia, Mr. Ha skipped the same contents. He only focused on the understanding of disaster risk with 02 main risks: inundation by storm surge and floods; impact to the local society and Industry; bottlenecks for industry continuity, proposed measures...Through the field trip to Hai Phong in previous day, Mr. Ha explained more details about the roles of each stakeholder. He showed the comments about the workshop from stakeholder group.

Details of his speech: "ABCP Workshops & Draft ABCP Formulation in Vietnam"- PM3_VN_10.

After the presentations of 3 national coordinator in Vietnam, the Philippines and Indonesia, the panelists in the meeting gave a lot of questions and comments.

Mr. Zamri Bin Ramli asked Mr. Santiago about the recovery time objectives, because restore time for each infrastructure was different. It would be better to record how many resources to be recovered. About the category of improvement of measures, under the disaster time management, we had activities before and after disaster, no activities during the disasters.

Mr. Santiago said that the activities during the disasters was in the "Response" period. Specific areas would have specific requirement to do the specific preparedness.

Mr. Zamri advised to have the lists of assets and inventories to prepare or to mobilize in case of the disaster. The list would show the number of inventories (as power stations), which agencies owning such one... so it was very useful for enhance the recovery time. Like in Hai Phong, they had a list of alternatives in case of power failure, lists of inventories of each companies. It was very good and easy to mobilize such inventory in the case of emergency.

In Philippines, as information from Mr. Santiago, for the private sector, they also had plan to define what they should do, what they should prepare in the business continuity plan. However, it should have the public- private cooperation to mobilize the prepared inventories to recover as soon as possible.

Mr. Nguyen Thanh Ha, National Coordinator of Vietnam gave his explanation about the disaster management plan in Vietnam. In Vietnam, we had Steering Committee including a lot of parties from the central government such as the involvement of the Prime Minister, ministries, transportation, competent authorities, power supply etc.... For example in case of Port, the port authorities would prepare the list of inventories and submit it to Hai Phong People's Committee, but other stakeholders may not know about it. So in case of emergency, it was required to share the resources and coordination. So Port of Hai Phong may need support from the others such as Dinh Vu Industrial Zone because they were near each other with many similarities. However, now they did not know what the other could do in case of disasters. So the role of Steering Committee was to coordinate the stakeholder together. Now they wanted to know what are the commonly available inventories. And inventories of each stakeholder may become available for the others. Based on the actual situation, the competent authorities may ask the stakeholder to use their inventories or assets for other stakeholders in case of emergency and then would return the inventories to them.

Dr. Renator asked about the meaning of localized plan in the Area BCM. Mr. Santiago said that in the Philippines they would have the same policy as in Vietnam. However, the stakeholders wanted to know more details what they would have done and prepared in case of natural disaster.

Dr. Mohd gave one questions for all three coordinators regarding to the stakeholders, the criteria to select the stakeholders: authorities, experts or people with experience on disaster management or anyone. Because in the workshops, it was required to give disaster management plan, analysis to build up the Area BCP. Now if we wanted to promote Area BMP to the areas, it required the support and participation of all stakeholders. During the workshops, any idea different from the proposed fundamental policy or not.

Dr. Krishna said that in Indonesia, in working groups, they chose the authorities by the responsibilities for the government and infrastructure sector. In private sector, it was based on the interest of enterprises, they called the participation of industrial parks and then the management board of industrial parks would introduce some tenants to come. As his understanding, some participants in private sector had their own BCP, some did not have. Regarding to the process, some local government had more experience then they could share the information, knowledge and understanding to the others. Related to business continuity and area BCP, it was still new concept in Indonesia. They just had plan to response to the natural disaster from the local government. When they brought Area BCP concept to Indonesia, they still had a lot of things to adjust, firstly more discussion about the difference between disaster mitigation plan and business continuity plan.

Mr. Mohd agreed with Mr. Leong about the definition system for Area BCM. It was required to do the right in the first time. And he mentioned to the important roles of getting experience on natural disaster from other countries as well as the contribution from the inside stakeholders. Japan suffered a lot of great disaster like earthquake, flood, Indonesia suffered from a lot of typhoons every year. Therefore, they would have a lot of lessons and experience to share the others.

Mr. Santiago wanted to mention about the selection of stakeholders. First of all they had a series of meetings. They invited a lot of stakeholders to joint stakeholder engagement meeting. However, during the course of workshop, the stakeholder would find their roles in the Area BCP. It was possible to invite new participants to join the workshops to give their comments and contribution. However, through workshops, we could know that who would be the appropriate stakeholders for this project. It was a process. For the private sectors, some of them had their own business continuity plan, but just only within their organization only. They needed to cooperate with other to strengthen their capabilities to response to the natural disaster.

Mr. Chue Swee Leong commented that this project was very difficult one. JICA did a new approach for many countries. But it was so complicated because of different countries with different cultures, different condition. It was impossible to bring system of one country to apply into other country, for example Vietnam is socialist while Indonesia is demographic country. So, just sharing the respective, not imposing. He also asked the coordinator to explain more about the legal frame work and any natural disaster response system in Area BCP. While in Vietnam, under the centralization, they had steering committee to prepare everything. But to Indonesia and the Philippines, no organization specified in this task, he suggested to raise support from the navy, military to use their inventory in case of emergency.

Mr. Santiago answered that with the legal frameworks, it would be the ground to convince people to adopt, it may be the amendment to the law to ask people to follows. For the natural disaster response system, the local authorities may take responsibilities for restoring the lifeline and other bodies would take care to mobilize other inventories to save the life...If it required, they could mobilize the external resources from other regions to recover such as from Manila..

Mr. Krishna added some explanation about the legal framework in case of Indonesia. The local authorizes may need local regulations to mandate, mobilize and do some procedures. So, it should be added into the existing laws and regulations. Many participants in workshops mentioned about the need of operating procedure- what to do during the natural disaster situations. And the operational procedure should be enforced by local government. Related to the assets, they understood that to mobilize the assets and inventories in emergency, they needed the support from the local government and other regions.

Mr. Ha shared the stories about Vietnam. Because of high centralization, legalization meant that the plan had to be signed and chopped by the competent authorities, then all people would follow such plan. Because of the centralized system in Vietnam, we had a Steering Committee with the participants from the central level (the Prime Minister) to the provincial level, to commune level with the coordination of military, defense, navy...every year, plan on the flood and storm response/prevention was prepared and submitted to the competent authorities. It was legalized. So, for Area BCM, BCP, it should be signed and chopped to be a legal documents.

15:30 pm: Coffee break

15:50 pm: Exercising and Reviewing, Maintaining and Improving and Next Steps- Dr. Masakazu Takahashi

Dr. Takahashi said that the Area BCM/BCP was just the first step, it needed reviews, exercise to improve. He mentioned about the methods of exercising, proposed activities for exercising, examples of lesson

learned report in the world. He also talked about next stages of Area BCP/BCM with reviewing, maintaining, improving and reporting activities. Lastly, he recommended some next steps for the sustainability of Area BCM in 2014 and 2015.

Details of his speech: “Exercising and Reviewing, Maintaining and Improving and Next Steps”- PM3_VN_11.

Some questions and comments were raised after Dr. Takahashi’s presentation.

Dr. Renato asked about the reason to choose disaster type in Vietnam (floods and storm surge), earthquake in the Philippines... Dr. Takahashi said that it was due to the choice of the stakeholders. If they evaluated flood as important disaster, they would choose such type, and they would implement Area BCP for it.

Mr. Janggam from AHA Center, exercise usually used for test the action. So, it should have some appropriate trials before conducting the exercise. And at the moment, it was very limited to do the exercise, impossible to go further for drills or functional exercise. But in the future, when we had enough sources and concrete actions in Area BCP adopted by the stakeholders, it could combine the function of exercise and drills.

Dr. Takahashi replied about the exercise, he concerned about the involvement of all stakeholders and many aspects of disaster management. We needed to select one aspect to do the exercise and the preparation also. It meant that it would take times to do exercise for Area BCP.

16:20 pm: Strategies for Promoting Area BCM in the ASEAN- Dr. Masakazu Takahashi

To promote the Area BCM, Dr. Takahashi emphasized to the requirement to localize BCP, stakeholder would implement Area BCM by themselves and then improve BCM. For each stakeholder group, he gave some suggestions for them to promote Area BCM in their countries, the way to introduce Area BCM to other ASEAN countries. He mentioned about the legal framework and international system, and introduction of this Area BCM to international organization, donors, NGOs, to implement Area BCM in other countries and areas.

Details of his speech: Strategies for Promoting Area BCM in the ASEAN”- PM3_VN_12

Q&A

After Dr. Takahashi’s presentation on strategies for promoting Area BCM in the ASEAN, the discussion among panelist began. Dr. Mohd R.B. Hussin from Malaysia gave some comments. He said that there were a lot of inputs from 3 workshops in Indonesia, the Philippines and Vietnam. For Vietnam, it was not really a problem because the political policy was directive, top- down management. He asked more inputs from 2 other pilot areas.

Mr. Ramon Santiago, national coordinator of the Philippines replied that, from the process it could be seen that there was a lot of difference in each pilot areas which needed the closely study about the political structure. For the strategies to promote Area BCM in the Philippines, besides these things mentioned in his speech, one more importance was the detailed documents and guidance to encourage the implementation of Area BCM in the respective country.

Mr. Chua Swee Leong, from Singapore Civil Defense Force commented about the presentation of Dr. Takahashi. At the end of implementation of each stage of the Area BCM, it was required to take place the table-top exercise to all leaders ensure the project in the right direction. It was a logical approach. But they still needed to study about the reason of occurred errors, to sum up the objectives to be met...The top-table method was good enough for the reviews of Area BCM.

Another suggestion was about the possibility to provide self-check lists for all stakeholders, in this case, the leader/owner may check everything to make sure that the objective would be met.

Next, about the documentation, he suggested that it should have some type of documents which were available any time for the people concerning could easily refer. It was very difficult for other people to follow up the Area BCM within one hour. And no one would make the copy of Area BCM. Therefore, it was very important to have free access to approach documents of this Area BCM. He emphasized the roles of information sharing.

Because the project did not move so fast, so to push up the progress, training of trainer in countries was so important. The coordinators, moderators could be the trainer to multiply the number of them. They would be the core center of each region. That would secure the control of JICA in term of the quality. But to implement the TOT, the guidebook was essential to develop to use for such activities.

Regarding to the guidebook, in his opinion, it should contain everything. Area BCP needed localization, but it was required to be standardized. We allowed the standardization across the ASEAN region, but we still maintained the level of standardization with culture and politics of each country.

One more thing, what Chua Swee Leong concerned about was how to ensure to have the right person from the right department at the right level to represent the entity to take the responsibilities in Area BCM. The roles and responsibilities should be standardized, so the agencies in country could combine to implement it in case that such countries did not have specific department dealing with it, for example navy in cooperation with the power in Singapore.

About the leader, in his point of view, the leader would take heavy responsibilities, to ensure the people to follow up his instruction. The leader should be a big organization, not a mandate of the government or authorities.

He highly appreciated the comment about the care of the family in Area BCP. It was also important matter but beyond the objectives of Area BCP. However, Area BCP would help the worker to take care of their house, give medical care...

Furthermore, he explained the reason of the involvement of government or competent authorities in the Area BCM to ensure the support to the investors. For the recovery time objectives within 45 days, it was defined in ISO 23001.

Then Dr. Mohd R.B. Hussin gave the comments. The strategic direction was so nice, but how about the strategic deliverables? A lot of potential natural hazards, so it required people, parties from many divisions to implement it in term of risk management.

About the adoption, the primary goals were to look more in term of strategic deliverables, in long- term period, not short term. Primary goals of the project was providing a map, an operational guidebook, toolkits for ASEAN countries.

Another problem was that a lot of scientists still did not engage much on climate change education or natural disaster reduction. Integrated information about the Area BCP/BCM, cooperating at the ASEAN level was very important.

Ms. Corazon from the Philippines confirmed that after the discussion, on behalf of her agency, now they felt very confident to implement the Area BCM/BCP.

Mr. Prakoso Sawarda Mandala from the Indonesia recommended about the necessity to set up the early warning system in the region.

From Vietnam, Ms. Ha said that besides the advantages of good centralization policy, they still needed better cooperation among stakeholders and raise awareness/understanding about the Area BCM/BCP.

16:50 pm: Closing Remarks of the Panel Meeting- Dr. Hitoshi Baba, Senior Advisor from JICA Headquarter

Mr. Ba Ba highly appreciated the attendance of all participants and panelists in the panel meeting in Hanoi and their valuable contribution about the appliance of Area BCM/BCM to 3 pilot countries and ASEAN countries as well. He confirmed that BCM/BCP got more and more attentions from international organizations because it referred to a lot of natural disasters such as floods, tsunami, earthquake, storm... with global impact. The academic society considered the new approach which concerned about private sector particularly in disaster management. A lot of international conferences were hold with introduction about the Area BCM/BCP in ASEAN region. And he got high level of interest and request from other organizations to introduce Area BCM to their own organizations such as in America, Ecuador... they also concerned not only saving the life but also sustaining the business continuity. JICA was planning to introduce new approach with new framework in big conferences in the near future. Area BCM would become new indicator for disaster management.

Furthermore Dr. Ba Ba asked all of panelists to keep moving forward to introduce and disseminate to the Area BCM such as explanation to politicians in term of governmental agencies, introduction to other private companies in term of private sector...Area BCM was a scale across sector coordination, the framework for business continuity. It could start in a small group, in small areas but it can expand the scale based on each situation.

Dr. Baba expected the contribution from all of panelists even after the completion of project and JICA still continued to support all of ASEAN countries.

17:00 pm: Adjournment



“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”



A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

The 4th Panel Meeting

The Westin Grande Sukhumvit Bangkok, Bangkok, Thailand, January 30, 2015

Attendees List

No	Country	Name	Organization	Position
Panel Member				
1	Indonesia	Dr. Haji Pariatmono Sukamdo	Empowering Science and Technology for Government Institutions, Ministry of Research and Technology	Director
2	Malaysia	Prof. Dr. Mohd Rasid bin Hussin	School of Economics, Finance and Banking, College of Business, UUM	Prof. , Risk Management Department
3	Malaysia	Dato' Haji Zakaria Bin Mohamad	Minerals and Geoscience Department Selangor, Ministry of Natural Resources and Environment	Director
4	Philippines	Ms. Corazon T. Jimenez	Metropolitan Manila Development Agency (MMDA)	General Manager
5	Philippines	Dr. Renato U.Solidum, Jr	Philippines Institute of Volcanology and Seismology (PHIVOLCS), Department of Science and Technology (DOST)	Director
6	Singapore	AC Anwar Abdullah	Singapore Civil Defence Force (SCDF)	Director of Operations Department
7	Singapore	Dr. Goh Moh Heng	BCM Institute	President
8	Singapore	Prof. Pan Tso-Chien	Institute of Catastrophe Risk Management, Nanyang Technological University (NTU)	Executive Director
9	Thailand	Mr. Chukiat Sapphaisal	Water Development Consultants Group Co. Ltd	Managing Director of Technical Sections
10	Vietnam	Mr. Dau Anh Tuan	Viet Nam Chamber of Commerce and Industry (VCCI)	General Director of Legal Department
11	Vietnam	Dr. Dang Thanh Mai	National Centre for Hydro-Meteorological Forecasting (NCHMF)	Deputy Director
Thailand Delegates				
12	Thailand	Ms. Ladawan Kumpa	National Economic and Social Development Board (NESDB)	Deputy Secretary-General
13	Thailand	Mr. Chamnong Paungpook	National Economic and Social Development Board (NESDB)	Policy and Plan Analyst
15	Thailand	Ms. Phitsanu	National Economic and Social Development Board (NESDB)	Policy and Plan Analyst
16	Thailand	Ms. Aim-on Pruksuriya	National Economic and Social Development Board (NESDB)	Policy and Plan Analyst
17	Thailand	Ms. Panittra Ninpanit	National Economic and Social Development Board (NESDB)	Policy and Plan Analyst
18	Thailand	Ms. Nuchada Charuenpanich	National Economic and Social Development Board (NESDB)	Policy and Plan Analyst
19	Thailand	Mr. Chainarong Vasanomsiri	Department of Disaster Prevention and Mitigation (DDPM)	Director of Research and International Cooperation Bureau
20	Thailand	Mr. Paasin Boonchoo	Department of Disaster Prevention and Mitigation (DDPM)	Policy and Plan Analyst
21	Thailand	Ms. Anunya Tianhom	Department of Disaster Prevention and Mitigation (DDPM)	Policy and Plan Analyst
22	Thailand	Mr. Pisuth Wannachtrasiri	Department of Disaster Prevention and Mitigation (DDPM)	Policy and Plan Analyst
23	Thailand	Ms. Wiphavee Sriprapai	Department of Disaster Prevention and Mitigation (DDPM)	Social Worker

No	Country	Name	Organization	Position
24	Thailand	Mrs. Phanphen Wongwattanan	Department of Disaster Prevention and Mitigation (DDPM)	Officer
25	Thailand	Ms. Ratchaporn Promtong	Department of Disaster Prevention and Mitigation (DDPM)	Officer
26	Thailand	Mr. Buntoon Wongseelashote	Thai Chamber of Commerce	Chairman of Business Continuity Committee
27	Thailand	Mr. Parin Muangsung	Department of Industrial Works (DIW)	Engineer
28	Thailand	Ms. Ngarmnet Worakijcharoenchai	Department of Industrial Works (DIW)	Scientist
29	Thailand	Mr. Kritkamel Kamalat	DLA	Policy and Plan Analyst
30	Thailand	Mr. Raksakol Wongwatsan	Federation of Thai Industries (FTI)	Officer
31	Thailand	Mr. Sutat Weeschl	Hydro and Agro Informatics Institute (HAI)	Deputy Director
32	Thailand	Ms. Sarasiri Detittikul	Industrial Estate Authority of Thailand (IEAT)	Director
33	Thailand	Ms. Siriporn Wongwiseskul	Industrial Estate Authority of Thailand (IEAT)	Analyst
34	Thailand	Mr. Natthapong Phongwitthayanukit	Ministry of Information and Communication Technology (MICT)	Computer Officer
35	Thailand	Captain Song Ekmahachai	National Disaster Warning Center (NDWC)	Acting Director, Warning and Dissemination Section
36	Thailand	Mr. Vaninthorn Hongskul	Office of the Small and Medium Enterprises Promotion (OSMEP)	
37	Thailand	Ms. Natthamone Poomichai	Office of the Small and Medium Enterprises Promotion (OSMEP)	Specialist
JICA and JICA Study Team				
38	Japan	Dr. Hitoshi Baba	Japan International Cooperation Agency (JICA) HQ	Senior Advisor
39	Japan	Mr. Yoichi Inoue	Japan International Cooperation Agency (JICA) HQ	Deputy Director
40	Thailand	Mr. Yasumitsu Kinoshita	JICA Thailand	Senior Representative
41	Thailand	Mr. Katsuya Miyoshi	JICA Thailand	Project Formulation Advisor
42	Thailand	Mr. Kobchai Songsrisanga	JICA Thailand	Senior Program Officer
43	Thailand	Mr. Masanori Takenaka	JICA Thailand	Senior Program Officer
44	Japan	Mr. Yoshiyuki Tsuji	JICA Study Team	Deputy Team Leader
45	Japan	Mr. Shukyo Segawa	JICA Study Team	Disaster Risk Assessment Leader
46	Japan	Mr. Shiro Matsunami	JICA Study Team	General Coordinator
47	Japan	Ms. Akira Watanabe	JICA Study Team	General Coordinator
48	Indonesia	Dr. Krishna S Pribadi	JICA Study Team	National Coordinator (Indonesia)
49	Philippines	Mr. Ramon J Santiago	JICA Study Team	National Coordinator (Philippines)
50	Vietnam	Mr. Nguyen Thanh Ha	JICA Study Team	National Coordinator (Vietnam)
51	Thailand	Ms. Rosemalin Sirikanjanapong	JICA Study Team	Rapporteur

Total Participants :51 persons, Including:

Panelists	11
Thailand Delegates	26
JICA and JICA Study Team	14



**4th Panel Meeting
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

January 30 2015, The Westin Grande Sukhumvit, Bangkok, Thailand

*Under a Joint Program of Japan International Cooperation Agency (JICA) and
ASEAN Coordinating Centre for Humanitarian Assistance on disaster management
(AHA Centre)*

Agenda

January 29, 2015, Thursday Arrival of the Panel members at Bangkok

January 30, 2015, Friday

Opening Session	
8:30-9:00	Registration
9:00-9:40	Welcome Address (10) Mr. Yasumitsu Kinoshita Senior Representative JICA, Bangkok Office Opening Address (10) Ms. Ladawan Kumpa Deputy Secretary-General National Economic and Social Development Board(NESDB), Thailand Introduction of Participants Group Photo Session

Session 1 Project and Area BCM	
09:40-10:40	<p>Project and Area BCM, and Guide for Today's Discussion (15)</p> <p>Mr. Yoshiyuki Tsuji Deputy Team Leader of the Study Team</p> <p>Review of the Plans by the Working Group Members (15)</p> <p>Mr. Yoshiyuki Tsuji</p> <p>Tools for Area BCM (15)</p> <p>Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment</p> <p>Q&A / Comments on Area BCM, the Plan and Toolkits (15)</p> <p>Moderator Dr. Krishna Pribadi</p>
10:40-11:00	Coffee Break
Session 2 Approaches for Area BCM and BCM in Thailand	
11:00-12:00	<p>Approach for National BCM in Thailand (15) Ms. Ladawan Kumpa Deputy Secretary-General National Economic and Social Development Board(NESDB)</p> <p>Current Approaches for BCM in Thailand (15) Mr. Chainarong Vasanasomsithi Director of Research and International Cooperation Bureau Department of Disaster Prevention and Mitigation(DDPM), Ministry of Interior</p> <p>Lesson Learned from the 2011 Thailand Flood (15) Mr. Buntoon Wongseelashote, Chairman of Business Continuity Committee Thai Chamber of Commerce</p> <p>Q&A and Discussion (15)</p> <p>Moderator Mr. Ha Nguyen Thanh</p>



12:00-13:00	Lunch Break
Session 3 Discussion	
Discussion 1 “Next Cycle of Area BCM in the Pilot Countries”	
13:00-13:50	<p>Provision of Topics for Discussion (30)</p> <p>Ways Forward in Indonesia (10) Dr. Krishna Pribadi National Coordinator, Indonesia</p> <p>Ways Forward in the Philippines (10) Mr. Ramon Santiago National Coordinator, the Philippines</p> <p>Ways Forward in Viet Nam (10) Mr. Ha Nguyen Thanh National Coordinator, Viet Nam</p> <p>Q&A and Discussion (20)</p> <p>Moderator Mr. Ramon Santiago</p>
Discussion 2 “Tools for Risk Informed Decisions”	
13:50-15:10	<p>Provision of Topics for Discussion (60)</p> <p>Dr. Haji Pariatmono Sukamdo Director Empowering Science and Technology for Government Institutions, Indonesia</p> <p>Dr. Renato U. Solidum, Jr Director Philippine Institute of Volcanology and Seismology, The Philippines</p> <p>Dr. Esperanza Cayan Head, NCR, Geophysical & Astronomical Services Administration, The Philippines (Presentation by Mr. Ramon Santiago)</p>

	<p>Dr. Dang Thanh Mai Deputy Director National Centre for Hydro-Meteorological Forecasting, Viet Nam</p> <p>Prof. Pan Tso-Chien Executive Director Institute of Catastrophe Risk Management Nanyang Technological University (NTU), Singapore</p> <p>Mr. Chukiat Sapphaisal Managing Director of Technical Sections Water Development Consultants Group Co. Ltd, Thailand</p> <p>Discussion (20)</p> <p>Moderator Dr. Krishna Pribadi</p>
15:10-15:30	Coffee Break
<p>Discussion 3 “Beyond Area BCM (Integrating Area BCM into Your Approach)”</p>	
15:30-16:50	<p>Provision of Topics for Discussion (60)</p> <p>Usec Corazon T. Jimenez General Manager Metropolitan Manila Development Agency (MMDA), Philippines</p> <p>AC. Anwar Abdullah Director of Operations Department Singapore Civil Defence Force (SCDF), Singapore</p> <p>Dr. Goh Moh Heng President BCM Institute, Singapore</p>

	<p>Dato' Haji Zakaria Bin Mohamad Director Minerals and Geoscience Department Selangor, Ministry of Natural Resources and Environment, Malaysia</p> <p>Prof. Dr. Mohd Rasid bin Hussin Professor of Risk Management School of Economics, Finance and Banking, College of Business, Universiti Utara Malaysia (UUM), Malaysia</p> <p>Mr. Dau Anh Tuan General Director of Legal Department Viet Nam Chamber of Commerce and Industry (VCCI), Viet Nam</p> <p>Discussion (20)</p> <p>Moderator Mr. Ha Nguyen Thanh</p>
Closing Session	
16:50-17:20	<p>Address of Thanks from JICA</p> <p>Dr. Hitoshi Baba Senior Advisor Japan International Cooperation Agency (JICA) HQ</p> <p>Closing of the Panel Meeting</p> <p>Mr. Chainarong Vasanassomsithi Director of Research and International Cooperation Bureau Department of Disaster Prevention and Mitigation(DDPM), Ministry of Interior</p>
17:20	Adjournment

MC: Mr. Santiago, Moderators: Mr. Ha, Dr. Krishna, and Mr. Santiago

January 31, 2015, Saturday Departure of the panel members from Bangkok

4th Panel Meeting

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

The Westin Grande Sukhumvit Bangkok, Thailand

January 30, 2015

A Joint Program of Japan International Cooperation Agency (JICA) and ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Center)

Welcome Address by Mr. Yasumitsu Kinoshita, Senior Representative of JICA, Bangkok Office

Mr. Kinoshita thanked all organizations, including Thai government agencies and Thai Chamber of Commerce for preparing the event, as well as the participants. 2011 Great Flood in Thailand showed that the disaster caused heavy damages to private enterprising and world economy in the supply chain. Since individual corporate had limitations to cope with disaster by itself, the new collaborative effort called Area BCM proposed by JICA would enhance economic resilience of country and business of the area as a whole. It needed strong commitment and participation by all stakeholders. Therefore, it needs to better understand current situation in ASEAN. Therefore, the objective of this seminar was to share approaches of Area BCP and BCM in Thailand and to discuss tools for risk-informed decision and Area BCM for fast implementation.

Because of Thailand's status as an upper-middle income country, JICA's cooperation in Thailand has been changing the direction from government to government cooperation to strengthening the networking of partnership through various development players. It was the roles of Thailand and Japan to share experiences and lessons learned in social economic development. As a result, this seminar was very significant because a number of players from Thailand, ASEAN and Japan gathered and collaborated in discussing Area BCM. The introduction and implementation of BCM concept will contribute to the development of ASEAN competitiveness. This attempted to give everyone the insight of reconstruction economic resilience.

Opening Address by Ms. Laddawan Kumpa, Deputy Secretary-General of National Economic and Social Development Board (NESDB)

Ms. Laddawan was honored to be at the event. On behalf of NESDB, she thanked JICA for arranging panel meeting in Bangkok and the participants for their time. This gathering would provide important suggestion to implement Area BCP in Thailand. Flood in 2011 damaged economy and lives of Thai people. The business and partners, especially industrial estates in Thailand, were severely affected. This was one of the most severe disasters in 50 years and the 4th highest damage in the world since 2005. Area BCM, new approach initiated by JICA, would help reduce the impact of any disasters. Since Area BCM is collaborative approach,

knowledge sharing among pilot countries, together with recommendations from JICA experts and participants in this seminar, would help the countries deal with future disaster. Eventually, Area BCM would be extended to the national level.

Session 1: Project and Area BCM (Dr. Krishna Pribadi as the Moderator)

Project and Area BCM and Guide for Today's Discussion by Mr. Yoshiyuki Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team, Deputy Team Leader of the Study Team

For the progress, the project conducted four workshops in pilot countries of Area BCP. Area BCP + 1 was reviewed during the 4th workshop and JICA prepared guidebook in the last panel meeting.

Area Business Continuity Management System (Area BCMS) is a management process that helps to manage the risk of continuity/early recovery of businesses of an area in an emergency, such as natural disasters that affect the entire area. Its cycle consists of five major steps, namely understanding the area, determining Area BCM strategy, developing Area BCP, implementing and reviewing, and improving Area BCM.

Area Business Continuity Plan (Area BCP) is a documented set of procedures and information intended to promote continuity/early recovery of businesses of an area in emergency such as natural disasters that affect the entire area. Its cycle follows five steps of ABCM. In the step of developing Area BCP, the project conducted four workshops, each of which touched upon each step of cycle. The presentation also showed the utilization of tools for implementation in each step.

Distinctive features of Area BCM include cooperative approach, information sharing among stakeholders, and risk-informed decision making. Moreover, Area BCM can be integrated into the approaches of each country.

After providing the overview of Area BCM, Mr. Tsuji gave the topics for discussions - Next cycle of Area BCM in the pilot countries, tools for risk-informed decision making, and integrating Area BCM into your approaches.

Review of the Plans by the Working Group Members by Mr. Yoshiyuki Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team

Area BCP Version 1 was formulated after three workshops were held. At the 4th workshop, the outline of review will be introduced and Area BCP Version 2 was issued afterward.

In reviewing Area BCP Version 1, WG member / National coordinator provided inputs in each organization before functional review of mandates and roles were conducted with individual review or group review. Next, the editorial in each organization and integrating corrections/changes into Area BCP were conducted. The future activities are to disseminate draft Area BCP to others and generate consensus for adopting Area BCP among stakeholders. 40 organizations responded to review the Area BCP.

The proposed changes were integrated. For example, at the title page, the names of four leaders were written though it was a blank at Version 1. In Section 1, Purpose of the Plan, three points were emphasized for contributing to sustainability, namely promotion and practice of BCP within each company or organization, cooperation and close coordination among local and national government, and implementation of disaster reduction measures.

In Section 2.1, Organization, four leaders and other stakeholders were written with their responsibilities. In addition, hazard was revised to be earthquake, flood and tsunami. In the Section 3, Understanding of the Area, MERALCO were added among lifeline/infra organizations. The future role of technical support agencies like PHIVOLCS, PAGASA and MGB were also indicated.

In Section 5, Strategies for the Industry Continuity, Policy Statement were restated and elaborated on actions to be undertaken. In the Section 7, Implementation of the Plan, some expressions were inserted. For example, organization is a crucial factor for sustainability of ABCM and Extensive capacity building was required. In the Appendix B, List of Stakeholders, some organizations were added. In Section 6.2, Progress Management of Improvement Measures, added were the improvement of dikes and sea embankment, and solutions to coordinate road and maritime traffic.

Members pointed out the following contents to Area BCP version1. The role of each organization and the action of each stakeholder should be clearer. The central governments have the authority to main infrastructure and Area BCP should be contributed to other plans.

Remaining tasks to revise the Area BCP include review by members, roles/responsibility of members, and information by members.

Tools for Area BCM by Mr. Shukyo Segawa, Leader of Natural Disaster Risk Assessment

In this project, JICA is preparing three kinds of tools for Area BCM.

The first one is Guide Book. The guidebook is a reference document to help starting and implementing Area BCM. It gives step-by-step guide following 5 elements of the Area BCM cycle. An approach can be applied to any countries and modified to fit other types of disasters. Guidebook is composed of Main volume and Tools volume. Main volume includes Area BCM, procedure for Area BCM and the appendices (procedures for developing Area BCP). For Tool volume, Tool 1 contains Area BCP prepared for the pilot areas and Tool 2 describes methodologies of hazard assessment in the pilot studies.

The second one is Risk profile report for three pilot areas. It is the reference document for individuals and organizations of the pilot area who are wishing to integrate disaster risk information for their decisions. It contains profile of pilot area and natural hazard assessments.

The third one is Country report for 10 ASEAN countries. It is the reference document for individuals and organizations who are wishing to integrate disaster risk information for their

decisions. The report contains information of the country level, namely natural disaster risk, industrial agglomerated areas and investment risk, relevant infrastructure and natural disaster, economy, industry and trade, physical distribution network, legislative systems and implementation of BCP.

The situation of logistics, legislative systems concerning disaster management, BCP and development, and current status of BCP implementation were written.

All the GIS data in Risk Assessment report and Country Report would be handed over to AHA Center.

Q&A and Comments on Area BCM, the Plan and Toolkits

Dr. Renato U. Solidum, Jr, Director of Philippine Institute of Volcanology and Seismology, the Philippines:

The project should also refer to risk assessment documents of each country. When this is adapted to other businesses in the region, many other groups also do the same thing.

Mr. Shukyo Segawa, Leader of Natural Disaster Risk Assessment, JICA:

The local risk assessment is included in guidebook.

AC. Anwar Abdullah, Director of Operations Department, Singapore Civil Defence Force (SCDF), Singapore:

How can the participants ensure that the tools remain updated for the sake of sustainability?

Dr. Hitoshi Baba, Senior Advisor of Japan International Cooperation Agency (JICA) HQ:

JICA is now ending this project, with the guidebook as an output. However, it is the initial one and still needs to include the content and experience in pilot areas. JICA expects some organization will use it as a reference and it will be included in international standard, such as ISO.

Mr. Buntoon Wongseelashote, Chairman of Business Continuity Committee, Thai Chamber of Commerce:

The concept should be adopted by all ASEAN countries and the related parties should continue the work to benefit from this idea.

Dr. Renato U. Solidum, Jr, Director of Philippine Institute of Volcanology and Seismology, the Philippines:

What is the plan of AHA center?

Dr. Hitoshi Baba, Senior Advisor of Japan International Cooperation Agency (JICA) HQ:

JICA is thinking about contributing the concept of ABCM in the new plan of AADMER, which will offer an opportunity for cooperation.

Dr. Renato U. Solidum, Jr, Director of Philippine Institute of Volcanology and Seismology, the Philippines:

AADMER is driven by disaster management but BCM should involve the industry. Counterpart of ABCM must be brought into at ASEAN level.

AC. Anwar Abdullah, Director of Operations Department, Singapore Civil Defence Force (SCDF), Singapore:

ABCM, beyond disaster management, is the disaster prevention and mitigation. This is about risk reduction.

Prof. Dr. Mohd Rashid Bin Hussin, Professor of Risk Management, School of Economics, Finance and Banking, College of Business, Universiti Utara Malaysia (UUM), Malaysia:

There should be a uniform standard of best practice as stakeholders' point of reference. Despite being in the initial stage, this is a good example of good practice in three pilot countries and can be the reference source of other countries. The next step is to get together and check and balance in term of best practices. If able to consolidate all efforts, the participants can take pride of ASEAN best practice. It is time for the West to look upon Asia. When he was with ISO Geneva for eight years, only few Asian countries were included. However, he saw the potential and felt it was time to show the world that this was the best practice. Everyone should take this as an example because it trains them to be resilient. ASEAN should be benchmarked by others instead of benchmarking others all the time.

Usec Corazon T. Jimenez, General Manager of Metropolitan Manila Development Agency (MMDA), the Philippines:

What would be a good approach to put people in the same understanding of BCP before proceeding to ABCM?

Dr. Goh Moh Heng, President of BCM Institute, Singapore:

The formal capability is required to assess BCP in the organization and see which one needs help and which one does not. It is necessary to put more processes to ensure the feasibility. If the country does not have BCP, it should build from the ground by taking the existing risk assessment as a start point or scenario and build according to this model. Even though it is wrong, it can be the quick fix. Another thing, two more standards have recently been issued. The first one is 2317, which is BCM standard for supply chain, and the other is 2318, ISO standard for business. Therefore, it should align with ISO and be feasible and auditable.

Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team, JICA:

For private companies, internal and external issues, such as disaster scenario, are very important but it may be difficult for those private companies to gather a lot of information by themselves. However, it can be provided by Area BCM. Therefore, BCP and Area BCM should be promoted together.

Dr. Haji Pariatmono Sukamdo, Director of Empowering Science and Technology for Government Institutions, Indonesia:

How will this concept be implemented in the country since it is a long way to go from the concept to implementation? The project should go to public policy but are there any identified steps?

Dr. Goh Moh Heng, President of BCM Institute, Singapore:

Singapore implements the extreme model because it is very centralized in the government. First, the government funds the businesses to form BCP. Secondly, Singapore considers on what basis it is funding. To ensure the most effective spending of fund, it has the benchmark, such as some audit in affordable price. Even though each country has different implementation, there must be some form of push by the government while the other party must contribute. The, the baseline is required to make sure these companies meet the requirements and get the country to the next level. Thirdly, the industrial parks need to integrate the resources based on the scenario, such as owning boats in case of flood. However, the interpretation to fit each country is very hard.

Session 2: Approaches of Area BCM and BCM in Thailand (Mr. Ha Nguyen Thanh as Moderator)

Approach for National BCM in Thailand by Ms. Ladawan Kumpa, Deputy Secretary-General of National Economic and Social Development Board (NESDB)

A number of countries around the world, including Thailand, have encountered a series of severe and more frequent natural catastrophes, which will harm human security. Thailand faces several kinds of disasters, such as forest fire, flood, drought, tropical cyclone and storm, and tsunami. In 2011, it had a great flood, the largest one in the history, which affected the economy, public health facility, housing sector, education sector and cultural heritage and sites.

For the current status of Business Continuity Management in Thailand, at national level, The National Disaster Prevention and Mitigation Act 2007 authorized the establishment of the National Disaster Prevention and Mitigation Committee to formulate a disaster prevention and mitigation policy and National and Provincial Disaster Prevention and Mitigation Plans. However, the Plans mainly focused on disaster management but did not mention about BCM. Therefore, Thailand tries to include BCP in the national plan and it is now in the stage of preparation.

At governing level, in practice, only banking sector has been urged to create and utilize BCP clearly. Although most crucial infrastructure organizations and governmental agencies develop organizational BCP, the process is still at the beginning and not very effective. At organizational level, large enterprises have enforced BCM. However, SMEs do not because of the lack of awareness and budget. In the future, Thailand needs to conduct Area BCP and encourage SMEs to do BCP.

In December 2014, JICA offered assistance to the government to conduct BCM in Thailand. Several government agencies, such as NESDB, RAD, DWR, AOT, EGAT and BMA discussed on BCM and held two seminars, with JICA providing implementation guidance step by step. In January 2015, 22 agencies established the criteria to choose the pilot area. First, it must be located in industrial areas affected by disaster (flood) and have high foreign investment, such as industrial estate in Ayudya, industrial estate in Pathumthani, Chiang Rai, Phuket, and Map Ta Put (Rayong). Finally, Pathumthani was chosen as the pilot project because it consists of one million people and has 403,408-million-baht value of investment. The loss from the flood is 93,207 million baht.

To start the pilot project, JICA discussed with concerned agencies, namely Pathumthani governance and Ministry of Transportation, to educate them. The responsible agencies will be identified and the structure for operating the pilot project will also be established. If Thailand has knowledge, it can expand to other areas.

Current Approaches for BCM in Thailand by Mr. Chainarong Vasanasomsithi, Director of Research and International Cooperation Bureau, Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior

The 11th National Economics and Social Development Plan 2012-2016 includes the effects of a global warming and a climate change, but not Business Continuity. Moreover, the country has Disaster Prevention and Mitigation Act 2007.

Among different kinds of disaster, flood is in the highest rank of intensity and risk level. It also causes the highest economic loss, 359 billion USD.

Lesson learned from Disaster Management (DM) in Thailand is that the trend has increased due to deteriorated environment and climate change. Disaster Management requires collaboration from agencies concerned. First, structure, organization and mechanism of DM must be unified. Planning, resources mobilization and logistics support are also needed. For knowledge and Information accessibility, the government makes the database accessible, for example mapping, knowledge dissemination via website and other communication channels.

For the new era of DM in Thailand, the country has improved early warning system. After great flood, Thai government has improved DM system in Thailand and earthquake in Chiang Rai triggered the public awareness.

Thailand National Policy and Strategy on Disaster Risk Reduction sets the objectives to integrate all inclusive stakeholders within domestic and international agencies for equitable and transparent victim assistance, to create learning society and community resilience in Thailand, and to initiate safety awareness, safety society and resilience society.

Four strategies in disaster risk reduction include focusing on Disaster Risk Reduction, integrating among agencies concerned during Emergency Management, increasing the effectiveness of sustainable rehabilitation, and promote international cooperation.

For the situation of BCP in public sector in Thailand, after flood 2011, it is compulsory for the public sector to prepare its own BCP. However, the purpose of BCP preparation is the backup plan during the emergency response and emergency crisis to resume the normal system. However, BCP is confused with emergency plan. In the private sector, large companies, such as SCG and Toshiba, started to implement BCP. Their successful plans are used as the model for other companies. However, SMEs do not recognize the necessity to implement BCP.

Way forward:

1. Thailand has opportunity to learn from JICA how to implement BCP.
2. New HFA 2015 also mentioned the public and private partnership.
3. The 12th National Economics and Social Development Plan 2012-2016 has additional chapter for BCM.

Lesson Learned from the 2011 Thailand Flood by Mr. Buntoon Wongseelashote, Chairman of Business Continuity Committee, Thai Chamber of Commerce

The flood caused lots of money and lives. The storm came from the east and attacked Vietnam first. However, why did Thailand suffer the most? The possible causes were excessive rainfall (5 storms), poor land-use planning caused rice fields inundated, insufficient drainage, poor water resource management, multiple government agencies' overlapping responsibilities but little cooperation, and government's rice subsidy program, which allows the smugglers to store the rice/corruption.

Five storms and water level in dams was high. In 2010, Thailand had a draught. When there was flood in 2011, there was the political campaign promoting rice subsidy program to ensure that the farmer would sell more rice. Then, the storm came in and increased the water level. However, the cabinet did not release the water from the dam. Unfortunately, three more storms came in and the dam could not hold the water. Therefore, Thailand was suffered from flood because of the mismanagement.

Considered the world's 4th costliest disaster, the flood posed devastating impacts - 13 million people affected, 884 lives lost, 575,000 SMEs affected, and 346,500 job lost.

In the government's plan for water management, the procurement is prone to corruption due to unreasonable pre-qualification for bidding participants and undisclosed criteria for selecting winners. Therefore, the project was terminated.

BCM is the new context and only large corporations are aware of this. However, SMEs are not. So, it is the job of Thai Chamber of Commerce to educate them because the counter measure by single company is ineffective and impossible. The private sector needs government assistance.

Hazard & risk in the area of business location must be determined. In addition, the related parties need to consider whether there will be an Area BCP. For response & recovery, what

are networking and information-sharing procedures already put in place among the stakeholders? Lastly, what are government's incentives for insurance, subsidy?

Q&A and Discussion

Dr. Goh Moh Heng, President of BCM Institute, Singapore:

For question one is about the tools data and data storage for the hazards and risks in the area of business location? How to retrieve, manage, and keep it updated? Where the project is and what does the project have in plan?

Question two is about the incentive. It is possible to conduct the research on DM for regional risk assessment without details of individual companies. They gather information for their own interest, less likely for BCM purpose. The project will never work unless it brings the stakeholders in the picture. Finance industry, heavily regulated, is required to annually submit the information about their risk and investment to find the common risk for the industry as a whole. However, there is no common agreement. He suggested the participants to find someone to reconstruct this issue and fund the program.

Dr. Haji Pariatmono Sukamdo, Director of Empowering Science and Technology for Government Institutions, Indonesia:

Regarding the lack of SMEs' involvement, it is nice to see the follow-up on this issue. Moreover, he would like to learn more about corruption issue. In Indonesia, the corruption takes place in the emergency stage because a large amount funding during the emergency triggers corruption. This is big issue for developing countries.

Dato' Haji Zakaria Bin Mohamad, Director of Minerals and Geoscience Department Selangor, Ministry of Natural Resources and Environment, Malaysia:

Malaysia suffers loss from flood and draught. As a result, the Prime Minister has 5-year plan, which includes DM. After the country has Area BCP, the country formulated the costly master plan and water resource plan. Area BCP can be used as the starting point. Also need good risk assessment. Although the business may not recognize the importance of Area BCP at the early stage, they will in time because it benefits the industry.

Dr. Goh Moh Heng, President of BCM Institute, Singapore:

First, Thailand has a lot of opportunities with the change of Act. BCM framework in Thailand focuses on capability and infrastructure. It is the government's responsibility to make this national security as a law. Then, Thailand can come down to next level, provincial government. However, the key factor is infrastructure. Secondly, the challenge might concern putting BCP inside Hyogo. Thirdly, the related parties must understand basic of BCP. Therefore, Thailand should write the definition in Thai and reinterpret into Thai culture. The government can encourage SMEs to conduct this by decreasing the insurance premium and the Chamber of Commerce should also raise awareness. Lastly, for the national standard,

each country takes the different roles. For example, Abu Dhabi pushes the national standard into its own economy and has the national security councilor to run the infrastructure.

Mr. Buntoon Wongseelashote, Chairman of Business Continuity Committee, Thai Chamber of Commerce:

Regarding the question how the corruption is related to the disaster, it is just a theory. Vietnam faced storm first but Thailand was more affected. Without the subsidy program, the damage would not have been that severe. Because of the cabinet's decision to keep the water in the dam and the rice smuggling, they have to ensure that the farming and production is good. So, it has to be something about corruption but this theory has not been proved.

Ms. Ladawan Kumpa, Deputy Secretary-General of National Economic and Social Development Board (NESDB)

She thanked Dr. Goh Moh Heng for the comments. Since language is very important, she will personally go to talk to the local government to make sure they are on the same page.

Session 3: Discussion (Dr. Krishna Pribadi as Moderator)

Discussion 1: "Next Cycle of Area BCM in the Pilot Countries"

Ways Forward in Indonesia by Dr. Krishna Pribadi, National Coordinator, Indonesia

ABCP Pilot Project was conducted in three locations of Indonesia after considering several factors, including flood that affected the access to the industrial parks. It is now in phase two, which includes review by work group members, workshop 4 and revision of ABCP Version 2. The country formulated ABCP working group, consisting of working group coordinator (West Java Province Planning Agency), JICA and national coordinator as liaison.

The project conducted four workshops, with the last one discussing the result of the review of ABCP, defining roles and responsibility of working group members, and defining the next cycle of the ABCM.

As the way forward for ABCM in West Java Province in 2015, the country will strengthen coordination and communication of WG members and stakeholders, raise an awareness and commitment of stakeholders and WG members through meeting, workshops and seminars, and discuss with national stakeholders to obtain support. In 2016, it will initiate the 2nd cycle of ABCM to produce ABCP (Version 3) for new conditions, with the support from BAPPENAS and JICA.

Activity Plan for 2015 and 2016

1. Raise awareness of Area BCM among local governments and private sector in West Java, and ministries and agencies of the central government
2. Prepare proposals for implementing the second cycle of Area BCM in West Java for foreign assistance (JICA) for the project in FY 2016
3. Implement second cycle of Area BCM for new conditions in West Java

Ways Forward in the Philippines by Mr. Ramon Santiago, National Coordinator, the Philippines

Industrial zones in the South of the Philippines are selected as pilot site. The work group comes from different sectors, divided into sub-groups. The number of a sub-group member is around six. When the number exceeds, the sub-group is divided into two or more.

Four workshops were held under several topics and the last one took place in Manila. It focused on how to improve ABCM Plan Version 1, roles and responsibilities of related parties and the next cycle.

In the 4th workshop, members reviewed the plan and updated it to Version 2. The next step is to review and update the plan by the stakeholders to get an agreement on commitment and approval of the plan by the owner.

In 2015, the leader will prepare an updated plan (Version 2) by studying and improvement of the plan (Version 1) by the members and reviewing the plan. In 2016, the leader will initiate activities towards the Improvement of Area BCP Version 2.

Ways Forward in Vietnam by Mr. Ha Nguyen Thanh, National Coordinator, Vietnam

In terms of raising the awareness and human resource development, the project enhanced capacity of disaster management activities for business owners and government officials at all levels. Furthermore, it raised awareness of business and community on disaster prevention, response and mitigation of damages. Vietnam also organized specific professional training for staff working in disaster management and formulated and issued Guidebook for stakeholders to implement BCM and Area BCP for Haiphong.

In implementing ABCP and individual BCPs, it established institutional mechanisms for Area BCM, equip with facilities to serve disaster response, gained better coordination among stakeholders, and Appoint specific and dedicated teams for BCP at each of government organizations and businesses to act promptly.

For the information dissemination and exchange, it made hazard map and vulnerability status as well as guidelines of the basic steps of preparation, response and recovery in disaster areas in each industrial zone. It also had early warning systems on disaster. Furthermore, the activities of disaster management are promoted through several media. Lastly, the project maintained the annual report of Area BCP.

For the institutional development, Haiphong People Committee (HPPC) and its departments should be more proactive in promotion and implementation of ABCP. Moreover, Hai Phong Steering Committee for Natural Disaster Prevention and Search and Rescue and Department of Dyke Management and Flood & Storm Control under HPPC should better coordinate with other government bodies, industrial zone management and businesses in making and implementing ABCP.

Q&A and Discussion

Dr. Renato U. Solidum, Jr, Director of Philippine Institute of Volcanology and Seismology, The Philippines:

He expressed the concern if the project would like to scale up to other areas. This year, his schedule was fully booked and it needs to be scheduled in advance.

Dr. Krishna Pribadi, National Coordinator, Indonesia:

Magetan area is for next year.

Dr. Haji Pariatmono Sukamdo, Director of Empowering Science and Technology for Government Institutions, Indonesia:

The role should be clarified. Who is the main counterpart in the next study? Will it be the same party? From which industry? Moreover, he commented that SMEs were not aware of ABCM and 99% of businesses in Indonesia are SMEs. Next question, in Indonesia, changing the government means changing the policy. Now, there is a policy on science and technology besides industry. There will be a lot of efforts on this, including in the university. Therefore, he would like to see if the future study will also include this issue.

Mr. Ramon Santiago, National Coordinator, the Philippines:

In national disaster risk management, his country uses forces from the Ministry of Industry. In the discussion with DM agencies, SMEs were their main concern. However, ABCM did not touch on this issue. How can the participants bring together SMEs? They should raise awareness among SMEs. About science and technology development, there are some initiatives. This is a good chance to introduce the concept of ABCM and ABCP and discuss how to integrate the process of technological part with ABCM as the part of planning process. All participants should work together.

Mr. Yoichi Inoue, Deputy Director, Japan International Cooperation Agency (JICA) HQ:

How can BCP be operationalized in terms of critical facilities? The participants must make sure that the plans are brought up to the mindset of the company's leadership. Besides taking care of their own assets and people, they need to interface with suppliers in time of crisis. Now, the management tries to prioritize risks, facilities or areas and to power up.

Dr. Renato U. Solidum, Jr, Director of Philippine Institute of Volcanology and Seismology, the Philippines:

The project has to bring in the stakeholders. Even though the corporate can restore the line and resume operation, there are still some limitations.

Mr. Yoichi Inoue, Deputy Director, Japan International Cooperation Agency (JICA) HQ:

Do we have a plan to make sure the top management knows about this?

Dr. Renato U. Solidum, Jr, Director of Philippine Institute of Volcanology and Seismology, the Philippines:

Yes. The process is continuing thing. Plan is identified. In Philippines, it was quite a success and the information moves up to the management. This will help the development of new tools or exercises. The country has information to share with stakeholders and senior management.

Usec Corazon T. Jimenez, General Manager of Metropolitan Manila Development Agency (MMDA), the Philippines:

How does Hanoi intend to fast track the implementation of ABCM?

Mr. Ha Nguyen Thanh, National Coordinator, Vietnam:

Vietnam has centralized DM system, cascading down from central government to provincial government. With annual plan, it is institutionalized in the government bodies at each level. If Vietnam has some problems with the power or infrastructure in one province, the whole system may be disrupted. Without the central government's support, it is impossible to do anything. Vietnam tries to integrate BCM into existing national disaster management plan. It is easier to implement BCM. If Vietnam start afresh, it will be very difficult. If it can introduce the notion into system, it will be easier to run in the whole system. Once everybody in the system understands, it is easier to move forward.

Discussion 2: "Tools for Risk Informed Decisions" (Dr. Krishna Pribadi as Moderator)

Adopting Area BCP for Science and Technology Park in Indonesia by Dr. Haji Pariatmono Sukamdo, Director of Empowering Science and Technology for Government Institutions, Indonesia

With the new president and administration, Indonesia has plans to improve people's productivity, which means developing science and technology parks in addition to industrial parks. Science Park is an area managed professionally to create sustainable economic growth by diffusion relevant science and technology. The definition is related to SMEs. The duty to develop the Science and Technology Park goes to the universities. The President would like 54 science parks in the municipality. There are three stages for Science Park.

The presentation also showed the recovery of critical resources in assumed flood. During the disaster, the employees and toll roads were down and the country needed to discuss how to increase the employee aspect. As a suggestion, Indonesia can reduce the employee impact by having industrial allies, which can be applied for SMEs.

As a result, the President issued the initiative of 1-747. The country will spend 1% of GDP to support innovative program. Furthermore, it introduces seven steps of innovation system improvement, especially improving the quality and flexibility of human resource movement. Moreover, it conducts four modes of economic growth acceleration, especially local capacity base industry. The last component is seven objectives of Indonesia's vision 2025.

For the toll road, it relies on the government's initiative and the next study will consider additional gate for industrial area, Cilamaya Port.

Geologic Hazards in the Philippines and Tools for Hazard and Risk Assessment by Dr. Renato U. Solidum, Jr, Director of Philippine Institute of Volcanology and Seismology, the Philippines

The Philippines is full of natural disasters. Among 300 volcanoes, 23 are still active. Earthquakes are recorded 20 times a day. They also face 40 tsunami for the past 400 years and the inside coastline is affected by tsunami. Most activities of the last workshop in Manila were done. Now, it is in the stage of ABCP development. Everyone adopts the workshop and agrees with the continuous processes. 39-40 stakeholders come from businesses, technical agency and communities are participating in the plan.

Four ABCP workshops were held in Philippines. In the last workshop held in Manila, something needed to be identified in the future, such as cooperate time, objectives and benchmark. Since they also needed the resolutions to share to stakeholders, some seminars should be held for this purpose.

The plans of risk reduction are as follows:

- Hazards and risk assessment - Potentially affected areas as well as who and what will be affected.
- Monitoring – Real time instrumentation for early detection and process understanding
- Warning and dissemination – Forecasting and communicating down to local residents the warning and actions to take.
- Proper response – Awareness, preparedness, and planning for efficient and effective response

Hazard and Impact Assessment Software (REDAS by Dost -Phivolcs) consists of hazard assessment module, impact assessment module, and exposure data base module.

Area BCP on hydromet hazards in the Philippines by Dr. Esperanza Cayanan, Head, NCR, Geophysical & Astronomical Services Administration, the Philippines (Presentation by Mr. Ramon Santiago)

The hydromet hazard is a major concern in Philippines. This presentation showed what the Philippines intends to do, with AHA-JICA contributing their expertise to help all stakeholders come up with ABCP regarding hydrometeorological concern.

Several workshops were held in Manila, with several stakeholders joining. Each year, the country is visited by several typhoons, which also affect neighboring countries. Since typhoons cause severe loss annually, the opportunity loss and economic sustainability should be mentioned. Furthermore, they talked about lessons learned. The concerns and critical facility were also included in ABCM development process, ranging from lifeline services to infrastructure. The particular concern was the people lack of understanding.

When involved with ABCM, Pagasa put the entire nation, not only pilot areas, to join. Since the city faced disaster, the case could be applied to all over Philippines. In the next few years, after synchronizing with the stakeholders, it would like to provide information and analysis

on those areas affected by typhoons. The way forward is to provide technical support for those involved in enhancing the city, such as forecast, risk-based warning, communication system and protocol on how to disseminate warning and information. Moreover, it will raise public awareness, especially the decision makers, and enhance the capacity of private sector.

**National Disaster and Risk Assessment in Vietnam by Dr. Ms. Dang Thanh Mai,
Deputy Director of National Centre for Hydro-Meteorological Forecasting, Vietnam**

Vietnam is one of the most natural disaster-prone countries. Disasters triggered by typhoons and floods are most frequent and severe. Dr. Mai provided the information on serious natural disasters from 1945 – 2014 and the assessment of disaster severity in different areas of Vietnam. The disasters have caused casualty and economic loss to the country. For the past 30 years, about 500 people died or were missing and economic loss is about 1.0 to 1.5% of GDP annually.

In terms of typhoon, more than 50 typhoons hit Vietnam in 500 years. Typhoon's landfalls are usually accompanied with high tide and heavy rain. Therefore, the country comes up with the flood prevention and mitigation measures. For example, in central Vietnam, the disaster can be mitigated by the reservoir only in connection with power generation and irrigation.

In addition to flood from Typhoon, the country faces flash flood and mud flood. In recent years, flash flood has become more frequent, with 10 flash floods in eight provinces in 2013. As another common disaster in Vietnam, Landslide can be prevented and mitigated by upgrading the early warning systems, reorganizing the residential areas, and conducting the reforestation project. More disasters Vietnam faces include droughts and desertification, cyclone, and salinity intrusion along the coastline.

The presentation showed flood hazard and risk assessment of Hoang Long River in North Vietnam, together with the information on rainfall and flood flow simulation, design flood estimation, flood inundation, flood damage and classification of hazard factors. Furthermore, flood hazard mapping (in central area of Vietnam) includes terrain survey, flood investigation, digitize floods mapping and floods warning station.

Development of a GIS-Based Earthquake Response Monitoring System by Prof. Pan Tso-Chien, Executive Director, Institute of Catastrophe Risk Management (ICRM), NTU

General framework for Seismic Risk Assessment starts from EQ source modeling to risk assessment and loss estimate (HAZUS). After the source of earthquake is identified, the path, effect, exposure and estimated loss can be seen.

Since the giant earthquake in 2000, Singapore has observed until year 2004-2005 and found that some areas (blue patch) are never broken in the last 300 years but it starts to have earthquake now (prediction pattern). The country has to observe every 10 years to find the trend.

Why and how does Singapore do that? People become active and it shows the sign in the 60s, classic change in urbanization. In 2000, there were three biggest earthquakes and many buildings responded to Benkulu earthquake.

In terms of surface geology of Singapore, a lot of motions were felt around soft surface and the people normally put the development in the most convenient areas, which is soft surface.

The country has to monitor on the police report and newspaper and make a comparison to buildings' response with the almost real time. Then, it will have sufficient data for the scenario analysis and response planning.

Mr. Chukiat Sapphaisal, Managing Director of Technical Sections, Water Development Consultants Group Co. Ltd.

He shares experience of using tools for risk information decision, especially from the year 2011 flood in Thailand.

There are 4 topics:

1. To understand of disaster in Thailand
2. The risk decision in Thailand
3. Key information for risk decision
4. Needs for risk reduction in the future

For Thailand, the extreme disaster is flood, which is unique because it is long-term inundation. Since the most productive areas are established in downstream side of flood-risk areas, such as Ayudhya, Nonthaburi, Pathumthani Samutprakarn and Bangkok. In 1995, Thailand could manage huge flood because productive areas were only 10% of flood-risk areas. Then, the tools for the risk decision are flood-risk map and land-use guide in flood-risk area. Thailand also has been studying with JICA to estimate industry in Thailand for more than 20 years. In 1995, JICA studied how to alleviate the flood. Thailand tried to develop flood measurement and land-use guidance. However, the key information for risk decision should be implemented as well. If not strictly practice, it will be risky.

If the flood alleviation program is not developed, it will be the key risk. If industrial areas are in flood area and the logistic system is not fully developed, it will cause problems. However, it is different in Thailand. The country has learned everything and has a lot of experiences. Unfortunately, it did not do it properly. That is why Thailand could not reduce the risk of 2011 flood even though it was not bigger than 1995. The second factor is the dissemination of risk information to public is necessary. Thirdly, benefit of flood alleviation should be explained properly to the public. Fourth, the responsible authority must be clearly identified and integrated.

Q&A and Discussion

Dato' Haji Zakaria Bin Mohamad, Director of Minerals and Geoscience Department Selangor, Ministry of Natural Resources and Environment, Malaysia:

He asked Philippines about risk assessment and if the country has the database to reach the target group.

Dr. Renato U. Solidum, Jr, Director of Philippine Institute of Volcanology and Seismology, the Philippines:

Since it is a process, people do not know what to do as a group. So, it takes time for collaboration.

Dr. Krishna Pribadi, National Coordinator, Indonesia:

Since the system becomes more complex and a lot of people do not know how to use the information in the complex system, collaboration should be developed.

Dr. Hitoshi Baba, Senior Advisor of Japan International Cooperation Agency (JICA) HQ:

The participants need to develop more opportunities to deliver information, including tools. Normally, SMEs are not interested in this. So, the project can deliver the message in the academic conferences.

Discussion 3: “Beyond Area BCM (Integrating Area BCM into Your Approach)” (Mr. Ha Nguyen Thanh as Moderator)

Promoting ABCM in ASEAN 10 and MMDA experience by Usec. Corazon T. Jimenez, General Manager of Metropolitan Manila Development Agency (MMDA), the Philippines

Currently, six out of ten ASEAN countries are practicing ABCM and the other four would follow. The Philippines has risk profile for national hazard with Manila being the 20th largest metropolitan area of the world. Based on JICA’s studies, Philippines is number three of the most exposed country worldwide and number two most at risk worldwide on The World Risk Index 2014. Philippines experienced a 7.2-magnitude earthquake, which caused severe damage to the country, both infrastructures and people. After the incident, the country was urged to use ABCM, which provides the opportunity for all stakeholders (leaders, members, support providers) within the area to cooperate and establish the protocol for inter-operability. It clarifies the measures and roles of companies, national/regional government agencies and infrastructure and service providers in solving the issues through examination process. It also hastens the recovery time and facilitates a more enabling business environment.

Philippines should adopt the model (SCHEMA of ABCM) to identify the area that relevant agencies need to be involved and this process is part of Manila Disaster Management. The model consists of strategic, tactical and operational processes. The idea is to show over all objectives to make sure that the mechanism is in place in order to properly raise the fund. The steps to achieve this goal are to mitigate, prevent and prepare for the disaster.

It is important to practice ABCM as related agencies will reunite and set up risk assessment. The information will be communicated and disseminated at conferences. The trainings will

be conducted and will result in the hazardous areas to have best preparation and response in times of disaster.

Beyond Area BCP by AC. Anwar Abdullah, Director of Operations Department, Singapore Civil Defense Forces (SCDF)

BCP was introduced to Singapore more than a decade ago. Singapore's risks are more associated with technology than natural disaster. Singapore shared framework in undertaking BCP. Everything in Singapore is linked to the economy and the practice of sustainability is a part of the progress in Singapore. With good BCP, it shared the issues of emergency response with relevant stakeholders and continues to support for businesses and develop residential area after the disaster.

Jurong Island produces petrochemical products and exports them around the world. In 2011, there was fire incident and the country used BCP to manage the problem; therefore, it had an experience for the optimization of BCP.

The high risk is due to a large volume of petrochemical and it is one of the largest LNG terminals in the world. BCP is needed for the safety of the people on the island, with emergency response and mutual aid framework. With the latter, different companies assist one another in times of emergency. These actions in turn create ownership of the island, which the government is promoting. The key players under this management are police force, two fire stations. The fire stations on the island do not only manage regular fire incident, but also the fire under special circumstances. These agencies ensure that lives on the island are safe.

There is also contingency plan. Should something happens, everyone involved will be aware of the steps needed to follow. This plan must be effective and integrated into the master plan. Jurong Island is connected to one causeway to main-island. Therefore, proper evacuation must be done according to plan.

Singapore requires incident management structure as there are many foreigners working on the island and the people need to know the procedures to take in the case of emergency. There are other ways to evacuate from Jurong Island, which are by sea and by air. The knowledge should be validated through exercises to familiarize people with these procedures.

There is also Mutual aid agreement for the island. Should anything happen, various players could assist with resources shared under mutual aid transportation. Since the island has critical infrastructure network, during one incident, the company on the island sent assistance with the transportation to other islands. The optimization of BCP starts with individual and the knowledge will be spread through national level.

BCM Implementation for SMEs: Why and How by Dr. Goh Moh Heng, President of BCM Institute, Singapore

BCM needs to be implemented for SMEs. Many organizations believe that BCM is the management of incidents, emergencies, events and disasters. BCM constitutes of the

management of unexpected events that interrupt key business processes, often those, which are vital to maintaining cash flows. 80% of businesses in Singapore (65% in USA) that experience disaster go out of business within 18 months.

Most SME operators do not clearly understand the concept of BCM because they do not know what it means and often question on what to do after the disaster regarding to IT. Moreover, they do not see any relevance. It is multi-national approach, so they need to know what the benefits are for them.

The reasons why SMEs are not implementing BCP is because it is too expensive to implement. Even when Singaporean government offers 70% fund for BCM usage, SMEs are not interested. Moreover, the impact is underestimated. Therefore, the number should be shown to draw their attention. Furthermore, the magnitude of the scenario planning is either too large or too small. SMEs also live within the comfort zone and lack the sense of urgency. BCP should be stated in the contract for businesses as an indirect force.

To get SMEs involved, the project should motivate them by upstream requirement, simplify the process, and provide them with a simple step-by-step guideline. SMEs should be aligned with International Standards (ISA 22301). There should be boundaries of knowledge for BCM practitioner to do.

In the supply chain, corporate transferred it to their small component suppliers (SMEs). The Supply chain is the weakest link in the whole business continuity process as SME is the single source of supplies and impose a high risk of process interruption.

Hazard Assessment and Area BCM: Malaysia Perspective by Dato' Haji Zakaria Bin Mohamad, Director of Minerals and Geoscience Department Selangor, Ministry of Natural Resources and Environment, Malaysia

Disaster risk in Malaysia is potentially increasing due to the growing population and rapid urbanization, leading to natural disasters, such as flood, drought, landslides, and earthquake. Many meetings and discussions have been held regarding trends and intensity of hazard and mechanism to prevent disaster in Malaysia. Many agencies are associating with various types of hazards. National Security Council (NSC) is mainly responsible for disaster on land. It is responsible for coordinating steps involved in crisis, public safety, state of emergency and disaster. The information is disseminated to various other agencies.

Disaster Risk Management (DRM) is based on preparedness, response and relief, recovery and rehabilitation. This focuses on strategy and mainly on key risk management. The main concerns are on how to shut down operation, move people out of the area, and disseminate the information. Currently, many agencies are using various programs, which are being combined into one program with national scope, with the emphasis of information sharing. Malaysia has taken steps towards the multi hazard assessment driven by modern and advanced geospatial technology, aiming to develop and manage local and regional for DRM and assist in the decision-making processes.

National Risk Management Program (Integration of Area BCP – BCM with Risk Management) by Prof. Dr. Mohd Rashid bin Hussin, Professor of Risk Management, School of Economics, Finance and Banking, College of Business, Universiti Utara Malaysia (UUM), Malaysia

Global strategic intent and strategic deliverables focus on policies. It starts from global level and cascades down to the national and regional level. Key players are The United Nation office for Disaster Risk Reduction, United Nation with four people representing each Asian country (Ministers), and ISO&G30000.

Following the 2011 World Reconstruction Conference (WRC) and The Global Platform for Disaster Risk Reduction (GPDRR) UNISDR, Malaysia has been coordinating with different stakeholders, such as HFA and GPDRR, regional platforms and national platforms. Furthermore, the country introduced several campaigns in this issue, namely Make Cities Resilient and International Day for Disaster Reduction. Malaysia also advocated climate change adaptation, sustainable development and disaster risk reduction. Lastly, it informed the project via communication, channel, focus on stakeholders, and mode (in various forms).

National risk management strategy and roadmap consists of Engagement and Participation. Engagement includes regular meeting with relevant stakeholders. The venues are ready but the mechanism is needed (the right people). Something new must be learned all the time. Participation includes involvement of the people with enthusiasm and positive energy. With all preparation, it would lead to advancement of the outcome. The Q-H concept is used with the involvement of the government and the people by using academic aspect through universities to enable the program, for example the idea to turn Malaysia to be high-income level country.

National Platform for Disaster Risk Reduction is the cycle to deliver information to public forum, consisting of full integration in national governance structure, continual improvement (through researches), full accountability for risks, and application of risk management in decision-making.

Promoting ABCP in Vietnam for SME Development by Mr. Dau Anh Tuan, General Director of Legal Department, Vietnam Chamber of Commerce and Industry (VCCI), Vietnam

Vietnam has about 600,000 enterprises, mostly SMEs, and three million households. Most are young, weak and vulnerable. Disaster wise in Vietnam, it is one of five most heavily affected in the world. It also causes damage to SME. 85% of enterprises were hit by seasonal storms, 45% by floods and 12% by cyclones. After the disaster, these SMEs went bankrupt. For the past four years, Vietnamese government has taken steps for DRM (Disaster Risk Management) by investigating the actual state of Vietnam SMEs in DRM, organizing training courses on DRM for SMEs, and integrating DRM for business into a wider range of training educations, policy advocacy, workshops on Laws and Regulations related to DRM and policy recommendations to the government.

BCP, ABCP is a very new approach. Most SMEs are not aware of it due to lack of information. It also seems to be expensive for SMEs. Therefore, proper promotion of BCP and ABCP should be done. The pilot project was implemented in Haiphong and turned out to be very successful. The project should be expanded to other provinces of Vietnam. JICA has helped promote them in Vietnam, as Japan is a big investor in Vietnam.

BCP and ABCP should be promoted more because of the lack of knowledge and skills about BCP, information about BCP and ABCP, and training courses. If the resources or knowledge are shared among other areas, they will be very beneficial to Vietnam. That is because the benefits cover not only investors, but also local business community. Currently, there are nine regional offices of BCP in Vietnam. The scope will bring great benefits to Vietnam.

Discussion

Dr. Hitoshi Dr. Hitoshi Baba, Senior Advisor of Japan International Cooperation Agency (JICA) HQ:

He thanked the participants for the invitation to bring JICA's contribution on BCM to all countries. It is important to continue this support for ASEAN.

Dato' Haji Zakaria Bin Mohamad, Director of Minerals and Geoscience Department Selangor, Ministry of Natural Resources and Environment, Malaysia:

The project needs to organize the team with key players and proper equipment to convince the government to help. Then, the success of the project should be evaluated regularly.

Prof. Dr. Mohd Rashid Bin Hussin, Professor of Risk Management, School of Economics, Finance and Banking, College of Business, Universiti Utara Malaysia (UUM), Malaysia:

Malaysia anticipates ABCP. Dr. Hussin may not represent Malaysia next year. To ensure the project continuity, he suggested all participants to bring in the new generation to be educated about this. The participants should get them involved with this group. The team will be formidable force in the future and the younger generation will appreciate the project's achievement. It can also ask for government's assistance because it will go beyond national level. Lastly, he would like key people in this meeting to speak at his university.

Dr. Goh Moh Heng, President of BCM Institute, Singapore:

He paraphrased the details of ISO22301 in simple English and would give the booklets to all participants.

Closing Session

Address of Thanks from JICA

Dr. Hitoshi Dr. Hitoshi Baba, Senior Advisor of Japan International Cooperation Agency (JICA) HQ, Senior Advisor of Japan International Cooperation Agency (JICA) HQ

Dr. Hitoshi thanked everyone for its contributions for this two-year project. It was the start of the new management approach in ASEAN. JICA was pleased to contribute and would continue to do so. Hyogo Framework for Action (HFA) has three strategic goals. It ensures that DRM is national or local policy and is the priority as it is the strong institutional basis for the implementation. It identifies ASEAN and monitors DRM; uses knowledge, innovation, and education to build the culture of safety at all levels; reduces the underlying risk factors; and strengthens disaster preparedness for effective responsive assistance at all level. At Sendai conference in 2015, the conference will discuss the roles of stakeholders, such as business, professional association, private sector, financial institutions and philanthropic foundation, and other institutions. It is apparent that economic experience and the participation of the business society, private sector, are quite new. However, the confidence should be in place for this economic strength.

JICA has developed four strategic goals to establishment and strengthen leadership management, sustainability, laws, migration in order to correct the understanding of DR (disaster risk) and promotion of common understanding based on the background and identification to respond and recover effectively in disaster areas, and rebuild society in a better way. ABCM guidelines should be used be in emergency information sharing, communication and preparedness for organization and set as international standard.

Closing of the Panel Meeting

Mr. Chainarong Vasanasomsithi, Director of Research and International Cooperation Bureau, Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior

He expressed, on behalf of director-General of DDPM, sincere appreciation to JICA on guidance and excellent meeting organization. He also thanked ASEAN member states and their speakers for the contribution in this meeting. Participants had an opportunity to learn and discuss about BCP for industrial agglomerated area from ASEAN countries, such as Vietnam, Philippines and Indonesia. They also shared ideas with experts from other ASEAN countries. The fruitful of this meeting has derived from international, domestic by both public and private sectors. Sharing and exchanging the data as BCP was new to ASEAN and this concept would be expanded and promoted within the region soon. Furthermore, the participants would bring back the knowledge to improve BCP in their organization.

A3 Record of Workshop

A3-1 Record of 1st Workshop

A3-1.1 Record of 1st Workshop (Indonesia)

A3-1.2 Record of 1st Workshop (Philippines)

A3-1.3 Record of 1st Workshop (Viet Nam)

A3-2 Record of 2nd Workshop

A3-2.1 Record of 2nd Workshop(Indonesia)

A3-2.2 Record of 2nd Workshop (Philippines)

A3-2.3 Record of 2nd Workshop (Viet Nam)

A3-3 Record of 3rd Workshop

A3-3.1 Record of 3rd Workshop (Indonesia)

A3-3.2 Record of 3rd Workshop (Philippines)

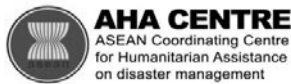
A3-3.3 Record of 3rd Workshop (Vietnam)

A3-4 Record of 4th Workshop

A3-4.1 Record of 4th Workshop (Indonesia)

A3-4.2 Record of 4th Workshop (Philippines)

A3-4.3 Record of 4th Workshop (Vietnam)



**“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”**

A Joint Project of Japan International Cooperation Agency (JICA) and
the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

1st WORKSHOP for Area BCP Formulation

December 17, 2013, Hotel Savoy Homann Bidakara, Bandung, Indonesia

Participants

No	Name	Organization	Position
1	Lina Yulianty	Bappeda West Java	Staff Bidang Fisik Bappeda Jabar
2	Agustien N.	Bappeda Karawang Regency	Kasubid Evaluasi dan Pelaporan
3	Suwarli	Bappeda Bekasi Regency	N/A
4	Rd. Trian Suburiani	BPBD West Java	N/A
5	Idit Gunawan	DISHUB West Java (Department of Transportation)	N/A
6	Setya Dharma	DISHUB Karawang (Department of Transportation)	Kadishub
7	Supriatna	Dinsos PB Karawang (Social Affairs Office)	N/A
8	Anna Oktavia	BPLHD West Java	PPLH
9	Aton S.	POLDA West Java (Regional Police)	Dir.Pamobuti
10	Anny Isgiati	BNPB	DirPM
11	Kol. Inf. Arif F.M.	KODAM III/SLW (インドネシア国軍)	Staff Ahli PANGDAM III/SLW
12	Letkol Arm. Fauzi K.	KODAM III/SLW (インドネシア国軍)	WAASRENDAM III/SLW
13	Ateng Musthafa	Jasa Marga	RBD Advisa
14	Encep Budiman	PT. Telkom	Asmas SAS.
15	Rachmat Saleh	PT. Telkom	Aggt SAS.
16	Irwansyah	PT. Maligi KIIC	Deputy GM
17	Nanang	Sharp Electronics Indonesia	PM
18	Cahyatih K.	Sharp Electronics Indonesia	Internal Control
19	Herlyna Septiani	Sharp Electronics Indonesia	N/A
20	Metri	Kemenko Ekon	Konsultan Kemenko Ekon
21	Diaz Sikar	Kemenko Ekon	Konsultan Kemenko Ekon
22	B. Andy Musaffa	AHA Center	N/A
23	Janggam Adhityawarma	AHA Center	Senior Disaster Monitoring and Analysis Officer

No	Name	Organization	Position
24	Norio Matsuda	JICA Indonesia Office	Principal Representative for ASEAN Coordination
25	Yoko Yamoto	JICA Indonesia Office	Representative for ASEAN Coordination
26	Masakazu Takahashi	AHA Center -Jica Study Team	Team Leader
27	Yoshiki Kinehara	AHA Center -Jica Study Team	Team Member
28	Shukyo Segawa	AHA Center -Jica Study Team	Leader of Disaster Risk Assessment
29	Kouichi Hasegawa	AHA Center -Jica Study Team	Team Member
30	Kotaro Fukuhara	AHA Center -Jica Study Team	Team Member
31	Krishna S. Pribadi	AHA Center -Jica Study Team	Coordinator, MC
32	Aria Mariany	AHA Center -Jica Study Team	Facilitator
33	Anin Utami	AHA Center -Jica Study Team	Facilitator
34	Nimas Maninggar	AHA Center -Jica Study Team	Facilitator
35	Rienna Oktarina	AHA Center -Jica Study Team	Facilitator
36	Gerry Andrika Rismana	AHA Center -Jica Study Team	Facilitator
37	Mona Foralisa	AHA Center -Jica Study Team	Facilitator
38	Pribasari Damayanti	AHA Center -Jica Study Team	Staff
39	Bayu Novianto	AHA Center -Jica Study Team	Staff
40	Lusiana Rumintang	AHA Center -Jica Study Team	Intepreter
41	Salim Mustofa	AHA Center -Jica Study Team	Intepreter

**Workshop 1 for Area BCP Formulation, Indonesia
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

December 17, 2013, Embassy Room, Savoy Homann Bidakara, Bandung, Indonesia

Agenda

December 17, 2013, Tuesday

Agenda	
9:30-10:00	Registration
10:00-10:10	Welcome Address Ms. Linda Al Amin Head of Physical Division Regional Development Planning Board (BAPPEDA), West Java Province
10:10-10:30	Orientation for the Workshop Dr. Masakazu Takahashi Team Leader of the Study Team
10:30-11:40	Inputs from the Study Team and Q&A Introduction of Area BCP Mr. Yoshiki Kinehara Team Member, Area BCP Natural Disaster Risk Assessment and Disaster Scenario Mr. Shukyo Segawa Team Member, Leader of Disaster Risk Assessment Introduction of Group Work and Presentation Mr. Yoshiki Kinehara
11:40-12:40	Lunch



12:40-14:00	Group Work
14:00-14:45	Presentation by the Groups and Q&A
14:45-15:00	Wrap up Dr. Masakazu Takahashi
15:00-15:10	Closing of the Workshop Mr. Norio Matsuda Principal Representative for ASEAN Coordination JICA
15:10	Adjournment

MC: Dr. Krishna S. Peibadi

Workshop 1 Area BCP Formulation in Indonesia
**“Disaster Risk Assessment and the Formulation of Area Business Continuity Plan of
Industry Area in Asean”**

Tuesday, 17th December 2013

Embassy Room, Savoy Homan Bidakara, Bandung

Time (09.30 – 15.10)

Moderator (Khrisna S. Pribadi)

Introduction of Topic

Dr. Masakazu Takahashi (Study Team Leader)

This firstworkshop will elucidate about ABCP (Area Business Continuity Plan). ABCP is the first initiative in the world that holds different ideas compare with others and the cooperation of all stakeholders should be required due to this concept establishment. This workshop will be divided into sections: workshop orientation, explanations about ABCP and disaster scenarios, and followed by group discussion. It was held in various countries, like Philippines, Indonesia (especially Karawang and Bekasi), and Vietnam. The assessment process was conducted in Karawang and Bekasi as a basic procedure to support this ABCP program, and we believe that the feasibility assessment of the airport and the port area should be done.

At the moment, the ABCP scenario will only concentrate on flood disaster risks and it will be organized into three workshops. All participants were asked to think about the main points that are related to flood, which they may interfere with the agency performance. First they will be sorted into groups, such as advocate, infrastructure, private, and other lifelines utilities. Teams will be separated based on the total number of attendants and the facilitator will be present to support every group. To start things off, Jica Team will provide basic information to help with the discussions and each group must answer three questions that will be asked by the organizer.

Everybody will be given more or less than 80 minutes for discussions and only five minutes for making a presentation.

ABCP Explanation

Yoshiki Kinehara (Study Team Member)

BCP and ABCP will be explained in this session. BCP (Business Continuity Planning) is a plan to guarantee of the continuity of the company even at the times when disasters exist. As for ABCP, it is a plan that encompasses all stakeholders in a certain area for the company to remain operating at the occasions of the disasters. ABCP actually increases the capacities of every sector (private, government, etc.) for dealing with this matter and it was known that those companies without BCP will need more time in their recovery process from the diagram of the business continuity. On the other hand, they may have disadvantages like downsizes, contracts delays with the consumers, and many more. The company with BCP should have more resistance and need a small amount of time to resume from disasters.

Along with the business continuity, all resources are necessary either from banks, properties, humans, and/or other important things. If there is one missing, then the business continuity will become problematic and might end up getting shut down. Therefore, BCP want to make sure that the business is still continuing when disasters occur. There is something called business impact analysis (BIA), which is an essential component within the BCP concept that can identify the penalties of disruption of a business function and develop recovery strategies to minimize risks. Different amount of time is necessary for different aspect like electricity, gas, telephone communications, water supplies, and many more. The duration of the recovery time takes about 14 days where usually gas, technologies, and water supplies need more time to regenerate. Core business, recovery time, and resources are the three keywords that elucidate BCP. Preventive action, fast recoveries, and possible solutions are the three steps that need to be done in order to secure resources.

ABCP is expected to increase the time of low capacities of the recoveries, expand some resources that require alternatives, and develop the capacity of business continuity from all stakeholders. It requires cooperation from the stakeholders and it will give benefits for every

party if this concept is performed continuously. The company still can achieve the desired profit and the government can fashion recovery process in advance, which it leads of having reciprocates in the end.

ABCP is a framework and a course of actions for all stakeholders. Along with the implementation, there are some data that needs to be disseminated. The first thing is about hazards of an industry area, which will be directed into risk mapping process. The second thing is about business impact analysis (BIA), which is used to estimate the upcoming occurrences in the future. The last part reveals about recognizing the detention of all around the area and performing the appropriate actions to deal with the problems.

DISCUSSION

1. Idit Gunawan (West Java Transportation Agency)

The transportation section is tangent together with the actions for overcoming problems. It is more difficult to change when an organizational culture is already established (bad culture),. As an example, how could there be people out there earning profits in a time where there is a flood while the majority suffer from it? What do you think about this situation? The other question is about budgeting and how is it related to the BCP concept?

Response:

In related to budgeting, "In Japan the budget for Disaster" was already allocated in order for us to have some estimation on how much we need to prepare. If it is accomplished successfully, it will be so helpful of performing appropriate actions in Disaster risk reduction(DRR). When it comes to culture, the Japanesegovernment stated the system is forsupporting the livelihoods of people who got endangeredfroma disaster and the majority takes disaster risk insurance.

2. Irwansyah (KIIC)

BCP is an interesting concept; unfortunately,there was small number of participants. You have explained earlier that it takes about 15 days for recoveries. Is the duration an international

standard or not? ABCP requires a lot of participation from the stakeholders, but who will be the leader in the end?

Response:

People involve in BCP can be an employee or other stakeholder as long as they are related to the industrial area. 15 Days is not international standard. This number stated by each company (which depends on how long consumer will wait, etc). However time suggested by Jica Team is not longer than 2 weeks

Risk Assessment and Disaster Scenarios

Shukyo Segawa (Study Team Member)

There are certain steps of risk assessment, which is start from identifying a support system in particular area. When a disaster occurs, the infrastructures or lifelines are the most important things in BIA. The airport, port, and road infrastructure are one of the significant infrastructures around Bekasi and Karawang while the existence of power plants in Muara Karang and electrical substations near that area are essential. The next step is by identifying dominant hazard and eventually it had been known that dominant hazard in Bekasi and Karawang is flood.

In Karawang and Bekasi, there are areas with inundations of more than 4 m which have remained for more than two weeks. Based on the past flood occasions, we formulated the forecasting scenario, which it has been developed from experiences in Japan and the United States. However, we believe that everyone has their own opinions regarding this scenario so we hope that the participants in this workshop could give feedbacks for this scenario.

In this workshop, we will take Karawang International Industrial City (KIIC) as a case study. The conditions for the infrastructure are the electric power that is supplied by the KIIC electric station and water that is supplied by the water treatment in KIIC. The building, the electric station and the water treatment are totally unharmed; however, Jakarta–Cikampek Toll Road (west and north KIIC) was closed for more than two weeks. Toll Road number 1 was closed for

more than two weeks, causing the employees in KIIC cannot be present in their work life or either ending up being late. There are additional scenarios, but we still need more feedbacks from participants about these situations in Bekasi and Karawang.

The Division of Participants into Working Group

YoshikiKinehara (Study Team Member)

There will be 3 workshops regarding BCP concept implementation. All of hazards in a particular area will be discussed during the first workshop, while the output and the weakness of the area in cases of a disaster that was previously shared from the first workshop will be settled during the second. As an example, both West Java and Jakarta only have one airport and a port, which might be vulnerable for their business continuity if there is a catastrophe. In the third workshop, there will be discussed about the course of actions that should be done in order to deal with a disaster, such as what kind of transportations should be taken. In addition, formulating course of actions in the future, like how the commitment from the stakeholders can become unanimous will be shared along with the other topics.

Working Group Outline

It was expected that participants should be able to understand regional risks and other key issues that need to be solved through (BCM). Issues, such as critical hazards to be reviewed in BCP/BCM area, fundamental policies of an area business continuity, and important issues that will become obstacles for their business continuity will be addressed from group discussions.

Every group will have 80 minutes and the participants will be divided into 4 or 5 groups. During this period, each group should have a leader, a presenter, and a timekeeper along with slide presentations ready to be presented for five minutes.

There was homework given to the participants in the past group meeting and so far, only eight repondents submitted during the previous group meeting.

The obtained results were as following:

- Earthquakes, fires, and floods are considered as hazards in the Bekasi and Karawang industrial area
- It was assumed that this workshop may possibly help participants to understand and form BCM activities in their area

Back to working group discussion; There were three questions asked about critical hazards, fundamental policies in ABCP, and the main issues that affect the sustainability of ABCP. Group presentations began at 2 pm.

Working Group (*3 groups formed in the end*)

A. Advocacy and Observer Group

B. Infrastructure and Lifelines Group, as well as West Java Planning and Development Agency

C. Private Sector and Karawang Planning and Development Agency Group

Outline of Discussion:

- Introduction (name and agency of the participant)
- Descriptions of what must be done from the groups
- Leader, presenter, and timekeeper elections
- Participants were to answer the three questions that have been asked

Questions:

- Fundamental policies that are related to business continuity area
- Critical hazards that should be considered to implement BCP/ BCM area
- Main problems that might disturb business continuity

Question 1

Revised Design



In order to develop industrial areas, there are a number of points that should be prepared as anticipation actions, including monitoring disaster victims and damages that were caused by a disaster in order for every single company must have command lines, disaster management plan, and evacuation routes.

Question 2

Top Priority of BCP/BCM area	Second Priority	Not to consider
Earthquake (1 person)	Earthquake (2 people)	
Flood (5 person)	Fire (1 person)	
Hurricane (1 person)	Hurricane (1 person)	
	Power outage (1 person)	

Notes:

This group was decided that the priority hazard for the area is flood that causing power outage, unsustain production and consumption, and severe change to the environment. Shaking and ground rupture are the main effects established by earthquakes, mainly resulting in more or less critical damage to buildings and other rigid structures. They are also capable of causing a domino effect. As an example, Cirata Dam bursted, causing to flood in surrounding areas.

Another thing to be aware of is an earthquake may cause a major explosion and burn surrounding areas in Bekasi and Karawang since Karawang crosses gas line(s).

Question 3

	Critical Hazard when Disaster Occur	Further Information
Lifeline Infrastructure	Electricity,telecommunications cut off, etc.	
Transportation Infrastructure	Road disconnection	
Human (Employee)	Worker is coming late or even not able to work	
Property (Facilities Equipment)	Safety and security of employee in workplace, facilities damaged, and caused discontinuation of production.	
Local Community		
Others	No guarantee of compensation	

Notes:

The main problem of a disaster is always about humanitarian aspects, as infrastructure is just basically a supporting system. Emergency responses and other activities that should be achieved at the time of a pre-disaster are additional things to notice .

**Infrastructure and Lifelines, as well as West Java Planning and Development Agency
Group**

Question 1

Revised Design

We all approved the concept of BCP in a principle. However, our feedback is about the scope of people involved in this concept was only for industry only. Whereas the most endangered when disaster occur is the civilians, and of course it will affect industry as well when they get hampered.

Question 2

Top Priority of BCP/BCM area	Second Priority	Not to consider
Flood (5 person)	Tsunami (1 person)	Volcano (1 person)
Earthquake (1 person)	Facility Accident (1 person)	Political Unrest (1 person)
Storm Surge (1 person)	Power Outrage(1 person)	Financial Crisis (2 person)
Facility Accident (1 person)	Political Unrest (1 person)	
Power Outrage (1 person)	Labor Dispute (1 person)	
Political Unrest (1 person)		
Labor Dispute (1 person)		
Others		

Notes:

Floods are the most important things to keep in mind. Problems, regarding public discipline also need to be emphasized. The next thing that needs to remember is transportation issues. We need

to have an agreement between the government, the private sector, and the society to address the catastrophic problems.

Question 3

	Critical Hazard when Disaster Occur	Further Information
Lifeline Infrastructure	Gasscarcity, telecommunication, power, and water outages	Information about recovery durations and evacuations
Transportation Infrastructure	Less income, road disconnection and traffic jam	Accessible infrastructure and facilities
Human (Employee)	Employee presence,health level	Fatality level information
Property (Facilities Equipment)		
Local Community	People get less attention, food and medical supplies, and physical health	First aid, evacuations, and evacuation directions
Others		

Notes:

Many problems, such as lives of innocent people, resources (electricity, gas, telecommunications, transportations, and water), and work force arises when a disaster strikes down. Information, especially about recovery time and factors that accelerate recovery, community empowerment evacuation, andfirst aid are the things that you should look up. Furthermore, is it necessary to form a new institution to overcome a disaster risk in an industrial area? The answer is no, because the disaster management action should be handled by BPBD and the other advice that we can give about this BCP concept is to must emphasize about people or the surrounded community even more since it only focuses on business aspect. The industry is located in highland while settlements are located in lowlands.

Private Sector and Karawang Planning and Development Agency Group

Question 1

Revised Design

Basically agree with basic concept of BCP, but it should be refined more. For the implementation, we should forming teams of all stakeholders and government in accordance with its capacity. It also need to find who is the coordinator. We also need the establishment of SOP, example: for the disaster information. And it also need to be reviewed periodically.

Question 2

Top Priority of BCP/BCM area	Second Priority	Not to consider
Flood (5 person)	Earthquake (4 person)	Labor Dispute (1 person)
Power Failure (2 person)	Power Failure (1 person)	
Water Outage (1 person)	Water Outage (1 person)	
Other, road disconnection (1 orang)	Political Unrest (1 person)	

Notes:

Flood is a major problem, where it has happened several times. Karawang crossed by Citarum River, where there is a lot of settlements in that area, so that flood becomes priority. Earthquake is other thing we should consider, however since Karawang located far from earthquake epicentrum, so that earthquake is not becomes priority.

Question 3

	Critical Hazard when Disaster Occur	Further Information
Lifeline Infrastructure	Electricity, transmissions, water	
Transportation Infrastructure	Road conditions	Alternative roads
Human (Employee)	Employees being unpresent to work, number of workers get affected from a disease, etc.	Information about treacherous areas
Property (Facilities Equipment)	Damages of public facilities	Data about road disconnections
Local Community	Criminals, security	Anticipation and evacuation
Others	Early warning system	Early Warning System

Notes:

There is necessary information about the alternative ways for every employee to look at in order for him or her can reach their work place safety. Protection also becomes an importance that one should keep in mind since evacuation is might be possible to take cover whenever a disaster occur.

Workshop Summary

- Today's Participants (inside Dr. Masakazu Takahashi slides)
- Today's Topics of Discussion
 - o Fundamental Policy of Area Business Continuity
 - o Critical Hazards to be Considered in Area BCP/BCM
 - o Critical Problems for Business Continuity
- Summary from each Groups (inside Dr. Masakazu Takahashi slides)
- Explanation of Workshop 2 with the topic discussion:
 - o Disaster Impact to Industrial Area
 - o The weaknesses of Industrial area regard to business continuity
- The next workshop will held at 6th March 2014
- Homework for Participants
 - o Homework delivered by Study Team (Jan 31 2014)
 - o Homework received by Study Team (Feb 14, 2014)
 - o Workshop 2 (proposed) (Mar 6, 2014)

Feedbacks from participant:

- Look at the small number of participants; yet, there were some people who want to attend this workshop due to bad weather conditions
- It would be better if the next workshop takes place in someplace else, not in the core of city

Closing

Representative of JICA in Indonesia

Since it is not that easy to comprehend about the BCP/ABCP concept, it is natural for participants to have difficulties understanding the context. In addition to BCP/ABCP, it is a new model known throughout the world. The concept focuses on business continuity, as we become more familiar with common disaster risk management concept. When a disaster strikes Manila, I just realized the benefit of this concept. When a catastrophe occurs, there are obviously casualties, but we need to think about economic viabilities as well. It would be better if this ABCP concept will be applied not only in South East Asia, but also in every country around the world. All participants here have already contributed very well to the formulation of the BCP/ABCP concept in Karawang and Bekasi that could be used in other places. All applicants were to be expected to attend the second workshop and cooperate well enough to do the assigned homework. Thank you so much for your motivation and presence in this workshop.

Feedback:

It would be better if you put name inside the invitation. If the invitation addresses to the Head of the Agency, it is not necessarily the invitation that will come to those who were present today.

LIST OF ATTENDANCES

1. Ministry of Economic
2. National Disaster Mitigation Agency
3. Disaster Mitigation Agency – West Java Province
4. BPLHD – West Java Province
5. Transportation Agency – West Java Province
6. Transportation Agency – Karawang City
7. Development and Planning Agency – West Java Province
8. Development and Planning Agency - Karawang City
9. Development and Planning Agency – Bekasi Regency
10. Social Services Agency – Karawang City
11. Jasa Marga
12. POLDA Jabara
13. PT. Telkom
14. PT. Maligi KIIC
15. KODAM 3
16. AHA Center
17. Sharp Electronic Indonesia



“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”

A Joint Project of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) and
Japan International Cooperation Agency (JICA)

Workshop 1 for Area BCP Formulation, Manila

Crimson Hotel, Filinvest City, Manila, Philippines, December 3, 2013

Participants

Country	Name	Organization	Position
Advisory Sub Group 1			
Philippines	Fredericiz Bragas	Office of Civil Defense	
Philippines	Vicente F. Tomazar	Office of Civil Defense (Region IV-A)	Regional Director
Philippines	Corazon T. Jimenez	Metropolitan Manila Development Authority	Undersecretary/General Manager
Philippines	Erlinda O. Tobias	Province of Laguna Fire Marshal	Provincial Fire Marshal
Philippines	Richard P. Engasa	National Economic Development Authority (Region IV-A)	EDS
Advisory Sub Group 2			
Philippines	Haidee M. Masulit	Office of Civil Defense, National Capital Region	Chief, Operations Division
Philippines	Cecil D. Miranda	Cavite Provincial Government	Provincial Disaster Risk Reduction Mngt Officer/Head, Public Safety Office
Philippines	Claudette Trixia M. Flores	Cavite Provincial Government	PR Officer
Philippines	Farida B. Ymballa	Laguna Fire Marshal	San Pedro Laguna Municipal Fire Marshal
Philippines	Edward B. Aguinaldo	Mines and Geosciences Bureau	Senior Science Research Specialist
Philippines	Adelaida C. Duran	Philippine Atmospheric, Geophysical and Astronomical Services Administration	Weather Specialist
Private Sector Sub Group 1			
Philippines	DDG J Porfirio Ll Yusingco	Philippine Economic Zone Authority	Deputy Director General
Philippines	Virgilio Lorenzo	Laguna Chamber of Commerce and Industry	President
Philippines	Rodolfo Grutas Jr.	Laguna Chamber of Commerce and Industry	Ex-Officer
Philippines	Edwin Tirona	Laguna Techno Park	Vice President for External Affairs
Philippines	Sheila Marie Pidlaon	Laguna Techno Park, Philippine Economic Zone Authority	Officer-in-Charge
Philippines	Eric Dave D. De Pedro	ROHM Electronics Phils., Incorporated	Section Manager
Philippines	Emerline Malicden	ROHM Electronics Phils., Incorporated	
Philippines	Fidel Eblasin	Yazaki-Torres Manufacturing, Incorporated	

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Workshop 1 for Area BCP Formulation, Manila

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Participants

Country	Name	Organization	Position
Private Sector Sub Group 2			
Philippines	Engr. Ronald Flores	Philippine Economic Zone Authority -Cavite Economic Zone	Officer-in-Charge, DM
Philippines	Engr. Ramon S. Laeap, Jr.	Philippine Economic Zone Authority-Cavite Economic Zone	Engineer III
Philippines	Rona S. Sañez	Laguna Techno Park	Marketing Manager
Philippines	Richard Castro	Laguna Techno Park	Security Manager
Philippines	Dr. Fe Bandoy	Yazaki-Torres Manufacturing, Incorporated	Co. Doctor
Philippines	Gerardo Castillo	Yakazi-Torres Manufacturing, Incorporated	ADR/ Safety Officer
Lifeline Group			
Philippines	Arnel C. Antonio	Department of Energy	Senior SRS
Philippines	Jason Villegas	Department of Energy	Senior SRS
Philippines	Engr. Aristeo F. Lao	Local Water Utilities Administration	WUM-Chief
Philippines	Antonio I. Cruz	National Transmission Corporation	Corporate Staff Specialist C
Philippines	Conrad p. Soriano	Maynilad Water Services, Inc.	Head, Safety Health Dept.
Philippines	Jommel Omal A.Gomez	Manila Water Company, Inc.	Business Continuity Head
Infrastructure Group			
Philippines	Jesus T. Tamang	Department of Energy	Director
Philippines	Engr. Michael Angeles	Department of Public Works and Highways (Region IV-A)	Engineer II
Philippines	Engr. Conrad Joseph Perez	Department of Public Works and Highways (Region IV-A)	
Philippines	Moises F. Rubio	National Transmission Corporation	Corporate Staff Officer
Philippines	Alain A. Ngaosi	National Transmission Corporation	Engineering Assistant A
Other Group			
Japan	Tsunekazu Matsui	Nippon Express Phils Corp.	Asst. General Manager
Japan	Toru Kubota	Terumo Corp (Phils)	President
Japan	Tsuneo Yoneyama	Terumo Corp (Phils)	Undersecretary (Gen. Manager)

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Crimson Hotel, Filinvest City, Manila, Philippines, December 3, 2013

JICA and JICA Study Team

Country	Name	Organization	Position
Japan	Masahito Miyagawa	JICA Headquarter Office	Disaster Management Division1
Philippines	Catherine Palanca	JICA Philippine Office	Program Officer (Disaster Management)
Japan	Takaaki Kusakabe	JICA - Office of Civil Defense	JICA Expert
Japan	Masakazu Takahashi	JICA - AHA Centre Study Team	Team Leader
Japan	Yoshiyuki Tsuji	JICA - AHA Centre Study Team	Deputy Team Leader / Area BCP
Japan	Shukyo Segawa	JICA - AHA Centre Study Team	Expert on Risk Assessment
Japan	Shiro Matsunami	JICA - AHA Centre Study Team	Coordinator
Philippines	Ramon J. Santiago	JICA - AHA Centre Study Team	National Coordinator
Philippines	Josephine R. Sy	JICA - AHA Centre Study Team	Project Staff
Philippines	Rizza Mae C. Yson	JICA - AHA Centre Study Team	Project Staff
Philippines	Lynn P. Melosantos	Philippine Institute of Volcanology and Seismology	Facilitator
Philippines	Alex Nicolas P. Tamayo	University of the Philippines	Facilitator
Philippines	Claire Pantoja	University of the Philippines	Facilitator
Philippines	Mari Aven Perez	University of the Philippines	Facilitator
Philippines	Tiffani Nicole Corrales	University of the Philippines	Facilitator

Workshop 1 for Area BCP Formulation, Manila
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”

December 3, 2013, Crimson Hotel, Filinvest City, Manila, Philippines

Agenda

December 3, 2013, Tuesday

Agenda	
8:30-9:00	Registration
9:00-9:10	Welcome Address Bgen.(Ret) Romeo F. Fajardo Deputy Administrator Office of Civil Defense
9:10-9:30	Orientation for the Workshop Dr. Masakazu Takahashi Leader of the Study Team
9:30-10:20	Inputs from the Study Team and Q&A Mr. Yoshiyuki Tsuji Deputy Leader of the Study Team Mr. Shukyo Segawa Leader of natural disaster risk assessment Grouping and Instruction for Group Work
10:20 -10:40	Coffee Break
10:40-12:00	Group Work
12:00-12:45	Presentation by the Groups and Q&A
12:45-13:00	Wrap up Dr. Masakazu Takahashi Leader of the Study Team
13:00	Adjournment
13:00-14:00	Lunch

MC: Ramon Santiago

Advisory Sector Group 1
 MMDA General Manager (chairperson)
 Regional Director
 Staff of the OCD
 Officers of the Bureau of Fire Protection (2 officers)
 NEDA Region IV-A representative (rapporteur)
 Tiffany CORRALES (facilitator, timekeeper)

Q1.

- Addition of the 3Cs: collaboration, cooperation, coordination
- Functions are not specific for each organization. Make it clearer especially the thrusts of each shareholder

Q2.

Critical hazards to be considered in Area BCM/BCP

Need to be considered top priority:

Type of Hazard	Comments
Earthquake	<ul style="list-style-type: none"> - Will set a chain reaction - Will not be noticed (regional occurrence) - West Valley Fault is near a pipeline - Based on simulations
Flood	<ul style="list-style-type: none"> - Past experiences (Ondoy, Habagat...) - Near bodies of water - Climate change
Facility accident	<ul style="list-style-type: none"> - Response time - Presence of hazardous materials (chemicals) - Risk of fire - Unpredictable

Need to be considered as the secondary priority

Types of Hazards	Comments
Volcanic eruption	Presence of dormant volcano (Mt. Makiling)
Power Failure	Effect on industrialist
Pandemic	Infectious diseases
Financial crisis	<ul style="list-style-type: none"> - Risk of job loss - Looting - Absence of workers

Q3.

Critical problems for business continuity

	Critical problems under the disaster situation	The information that participants want to learn more
Lifeline Infrastructure	<ul style="list-style-type: none"> - Communication availability - Leadership – who leads? 	<ul style="list-style-type: none"> - All operating manuals of different sectors - Can mobile networks converge in case of

	<ul style="list-style-type: none"> - Medical & health structures - Integrity of structures 	<p>emergency?</p> <ul style="list-style-type: none"> - Contingency plans per sector
Transportation Infrastructure	<ul style="list-style-type: none"> - Fuel shortage - Bridges are destroyed - Cleanup operations 	<ul style="list-style-type: none"> - How can transport operators help? - How can relief be transferred? - How did Japan do it in 10 hours?
Human	<ul style="list-style-type: none"> - Guarantee of work - Loss of livelihood (e.g. farmers, fishermen) - how can they learn new industries - Outside intervention - Where to evacuate? - Inventory of death, injured, missing - Provision of insurance & "assurance" - Identification of victims and survivors 	<ul style="list-style-type: none"> - Role of embalmers - Role of canine to search for dead bodies
Property (facilities, equipment)	<ul style="list-style-type: none"> - Damage assessment - Inventory of damage facilities 	-
Local community	<ul style="list-style-type: none"> - Engage them (management of dead, missing, injured) - Staging areas/open locations – location? - Refrain community as far as competency skills are concerned - Economic flow can go back easily if identification/info of available work are posted 	-
Others	<ul style="list-style-type: none"> - Law and order - Presence of mind of authorities - Command of Control 	-

Advisory Sector Group 2
 Representative, Office of Civil Defence- NDRRMC (chairperson)
 Representative, Department of Energy (rapporteur)
 Representatives from the Local Government Unit of the Cavite Economic Zone (3 representatives)
 Aven PEREZ (facilitator, timekeeper)

Q1.

- No proposed revisions

Q2 Critical hazards to be considered in Area BCM/BCP

Need to be considered top priority:

Type of Hazard	Comments
Earthquake	- CEZ is in the middle of multiple fault lines
Typhoons	- For Cavite, it only becomes worse when the heavy rainfall is coupled with the high tide - Recent experiences brought about concerns (last Habagat rainfall)

Need to be considered as the secondary priority

Types of Hazards	Comments
Facility Accidents	
Water Outage	Water could be contaminated by people; maybe the pipeline breaks after a calamity
Power failure	
Effects of the main hazards stated previously provide a chain reaction of events (power outages, water contamination etc)	

Q3. Critical problems for business continuity

	Critical problems under the disaster situation	The information that participants want to learn more
Lifeline Infrastructure	- Energy Supply; how soon can the affected restore the power	
Transportation Infrastructure	- Road clearing; how long will it take for a vehicle to transport from point A to B after a calamity happens - Liquefaction; this makes the alternative routes dangerous because it may happen in a short period of time	
Human	- Employee safety/security; are the employees going to be able to go to work, will their families be safe	
Property (facilities, equipment)	- Equipment/property assessment	

	<ul style="list-style-type: none"> - Rapid Damage Assessment and Needs Analysis (RaDANA) - Do they have back up equipment 	
Local community	<ul style="list-style-type: none"> - Pre-emptive Evacuation - Damage Assessment in Communities 	
Others	<ul style="list-style-type: none"> - Peace and Order - Incident command system - There should be a definite chain of command for the responders 	

Private Sector 1

Q1:

For the sustainable development, and to achieve continuity and rapid recovery during emergencies such as natural or manmade disasters in local government, including industry, and infrastructure operators, industrial parks and companies should understand, cooperate and share important information to promote BCM or disaster mitigation measures.

Q2: Critical hazards to be considered

Need to be considered at the top priority

- Earthquake
- Flood

Need to be considered as second priority

- Volcanic eruption
- Tsunami
- Storm surge
- Facility accident 1
- Facility accident 2
- Power failure
- Water outage
- Pandemic
- Terrorism
- Labor dispute

No need to be considered

- Political unrest
- Financial crisis

Comments:

- Based on hazard map MMI 1
- Likelihood is high and impacts are costly

Q3

	Critical problems	Information needed
Lifeline infrastructure	Power	BCP of cooperating agencies/companies/LGUs
	Water supply are cut-off	
	Communication	

	Medical service	
	Fuel	
	Food	
	Medicine	
	Substations are down, stops operation by 2 weeks.	
	Mobile / wired phones not functioning	
Transportation Infrastructure	Access road	Alternative routes
	Damaged to ports	
	communication	Emergency communication system
Human	Availability of employees both of the companies and concerned offices (gov't)	Information dissemination
	Availability of rescue and medical services	Evacuation centers
Property	Damage to equipment and spareparts	LGU/ agencies capabilities and resources
Local community	General welfare of local community specifically peace and order	Population
		Preparedness programs

Facilitator: Mon SANTIAGO

Private Sector Group 2

- Rona Sanez – Laguna Technopark
- Richard Castro – Ayala land
- Edwin Tirona – Aichi Forging
- Fide Eblasin – Yasaki Torres
- Fe Bandoy – Yasaki Torres
- Gerry Castillo – Yasaki Torres

Fidel – Chairman

Rona – Rapporteur

Alex Tamayo – facilitator, time keeper

Q1

- Protects the interest of the business
- Align with the government system
- The statement is a vision rather than a policy
- “For a sustainable development in the industry, in times of emergency such as natural and man-made disasters that affects the entire area, business continuity should be achieved to rescue, relieve, rehabilitate, rebuild and reform the industries functions in cooperation with the local government and industrial parks and private companies to share important information and assistance to their own BSM or disaster mitigation measures with cooperation.”

Q2 – Critical hazards to be considered in area BCP/BCM

Need to be considered at the top priority in ABSP/ABCM

		Company	Reason
Earthquake (4)	Fe	Yazaki Torres	Happened in Bohol
	Richard	Laguna Technopark	Increased number of high-rise buildings Presence of huge number of personnel
	Gerry	Tazaki Torres	Our location is Laguna, prone to earthquake due to nearby fault lines and Mt. Makiling (inactive volcano)
	Edwin	Aichi Forging	Because of our huge machineries and LPG tanks Can cause great damage to infrastructure and lives of members working
Flood (4)	Fe	Yazaki Torres	Due to increase in number of subdivisions and faulty drainage
	Rona	Laguna Technopark	Effects on business, community, personnel, belongings, emotional

	Richard	Laguna Technopark	effects of affected individuals Increase number of dev't No detention pond in some dev't
	Edwin	Aichi	Affects workers , attendance, tardiness, productivity
Labor Dispute (4)	Fidel	Yazaki Torres	Industrial peace and harmony is a top priority for every business
	Rona	Laguna Technopark	Effect on business and economy
	Richard	Laguna Technopark	It focus directly with a specific area that may lead to a wide sector effect
	Edwin	Aichi	Can be contagious and extremist group can disrupt operations of business supply
Volcanic Eruption (3)	Fe	Yazaki Torres	Proximity to Taal and Makilin
	Gerry	Yazaki Torres	Our location is Laguna, prone to earthquake due to nearby fault lines and Mt. Makiling (inactive volcano)
	Fidel	Yazaki	Ash fall particulates if Taal, Makiling would erupt will affect all employees
Facility accident(1)	Gerry	Laguna Technopark	Effects on business, community, personnel, belongings, emotional effects of affected individuals
Political Unrest (1)	Fidel	Yazaki	A government instability affects business decisions and activities

Need to be considered as the second priority

Power Failure (3)	Rona	Laguna Technopark	Inconvenience effect on business/mfg. industry
	Gerry	Yazaki	In the past experiences, every time there is a calamity, there is power failure
	Edwin	Aichi	Disrupt operations and productivity /quality
Volcanic Eruption (1)	Edwin	Aichi	The location of Laguna to Mt. Makiling greatly affects Laguna, Cavite and Batangas
Tsunami (1)	Fidel	Yazaki	If it occurs in Manila bay, affecting the port areas, our container deliveries will be halted
Storm Surge (1)	Fe	Yazaki	Due to visits of typhoons
Pandemic (1)	Fe	Yazaki	In case of illness from other countries

Financial Crisis (1)	Rona	Laguna	which need to be identified Affect on economy and laborers
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Q3 – Critical problems for business continuity

	Critical Problems under the disaster situation	The Information that the participant want to know more
Lifeline Infrastructure	– Unavailability of electricity due to damaged electricity infra	– Are the power providers and electricity infra providers also being consulted on their respective contingency plans? – Are the LGUs equipped with generation test
	– Potable water is not available	– Do the government have the contingency to support an immediate and sustainable water supply? – Will potable water be available? – When? – Who should provide? – How will it be provided? – How soon? – How do we sustain? – What are the contingency plans?
	– Food	–
	– Shelter	–
	– Medical	–
	– Communication	– How fast can telecommunications be restored? – Who will provide emergency sites or satellite phones?
Transportation	– Lack of transportation will affect mobility of people, goods, and food stuff	– How do we transport employees to work and back home? – How do we establish link with suppliers and customers
	– Main roads will be blocked	– Can there be heavy equipment available to move debris and obstacles? – How fast to clear the roads of rubbles – How fast is the reconstruction – Do the gov't have operational readiness plan for cleaning roads immediately – What are the private sector commitment to provide needed facilities and equipment – Are gov't agencies like the DPWH capable of quick response to solve the problem of road

		rehabilitation
Human	- Loss of lives, injuries and accounting of deaths	-
	- Evacuation plan not properly communicated	- What is the timetable of NDRRC to disseminate evacuation plan
	- Responding to affected victims of disaster	- Do we have enough trained responders in the event of an earthquake?
	- Majority of employees will be absent , and some living nearby are in danger	- Will there be a gov't policy that will disallow residence on villages that are disaster prone?
	- Program for education of community and population for disaster, the proper agency and also	- Are all our hospitals equipped?
Property	- destruction of houses (total and partial) leading to lack of proper dwelling	- Are equipment and vehicles properly insured?
Local Community	- Dike destruction and properties and impassable roads due to floods	-
	- There are no designated evaluation in areas in the municipality or city	- Can gov't identify them and study if they will be safe? - Are the local gov't units fully equipped and is proper coordination well established?
Others	- Hospitals are not operable	- Availability of medical services including supplies and equipment - How prepared are the primary facilities in responding to emergencies?
Other questions:	-	- Is there a recovery policy or procedure that will improve the Bohol or Tacloban disaster experiences? - Is there a plan to incorporate in the educational system how to manage disaster after a calamity?

AREA BCP FORMULATION

Workshop 1, 3 December 2013

Summary of Break-out Results

Lynn Melosantos

LIFELINE GROUP

Chair: Eric – ROHM

Rapporteur: Ramon - CEZ

Members: Adel – PAGASA

Aristeo – LWUA

Ronald – CEZ

Antonio – TRANSCO

Em – ROHM

Facilitator: Lynn Melosantos

Question 1

Specific Suggestions for the Policy Statement

- Infrastructure Operator changed to Utility or Facility Operator
- Include National-level government agencies – because local government can be incapacitated as they become victims themselves
- ADD ...”and other supply chain” players

Other ideas that can be part of Policy Guidelines, if such were developed

- Share important information – This include sharing the style of BCM, so others who are still crafting theirs can have some templates
- What are the potential impacts or effects of a disaster specific to their companies

Suggested statement by LWUA

“For sustainable economic development, in the CAVITE-LAGUNA-south of Metro Manila area, an area BCP must be formulated, in order to achieve rapid or soonest recovery of economic functions. In this regard, the concerned LGU (provincial to the barangay), all lifeline operators (water supply provider, power supply distributor and telecomm operators) transportation companies (land, sea, air), industrial companies and other stakeholders must understand ABCP and share important information to mitigate any disaster.”

Question 2

Top Priority

- Earthquake (5)
- Flood (3)
- Storm surge (2)
- Power failure (2)
- Water outage (2)
- Terrorism (1)

2nd Priority

- Water outage (3)
- Storm surge (1)
- Power Failure (1)
- Facility accident (1)
- Political unrest (1)
- Labor dispute (1)

Question 3

		Water		SYNTHESIS OF GROUP CONTRIBUTION
Lifeline infrastructure	Power -Damaged power plant; -Toppled transmission line; -Fuel shortage; -insufficient or interrupted power supply	Water -damage water infrastructure -Interrupted water supply -stopped operation (of company processes)	Communication -damaged lines and towers; -problem of coordination	DAMAGED INFRASTRUCTURE LEADS TO LACK OF SUPPLY FOR PRODUCTION
Transportation infrastructure	-Damaged roads and bridges; -impassable because of debris and other blockage -airport and seaport have no power and communication -national roads are clogged; -export-oriented companies have stopped operations			DAMAGED INFRASTRUCTURE LEADS TO LACK OF MOBILITY
Human (employee)	-personal self-preservation, survival, family shelter and food are priority of employees – prevent them from going to work and would delay business recovery -employees cannot report for work, not enough manpower for operation -quick response team and skilled personnel are not available -disoriented (casualties)			AFFECTED HUMAN RESOURCE LEADS TO LOW OR NO PRODUCTIVITY
Property (facility and equipment)	-Collapsed facilities, (local) power supply equipment and machine	-chemical leakage	-damaged raw materials and finished products	Company-specific concerns that would be addressed individually by company BCP
Local community	-May panic -may also be part of rescue and relief operations -will have food and shelter needs -lack of organized workforce and labor -politically motivated actions of local government officials			Lack of training of community; ADJACENT COMMUNITIES AS SOURCES OF RELIEF, FOOD AND LABOR
Others	-how to provide shuttle service for employees -where to get food and water supply for employees	How to arrange national government and NGO support		FROM DAY-TO-DAY CONCERNS TO NATIONAL AND FOREIGN ACTIONS

What participants want to know

1. What will they do? – preparedness and mitigation
2. What lifeline facilities are affected?
3. Damaged lifeline infrastructures – who are responsible for repair, how soon?
4. Local governments to identify where are the evacuation areas, food supply, rescue teams
5. When do national government and NGO support come in
6. How to coordinate foreign assistance

[Q1] Fundamental policy of Area Business Continuity

Please write the revised policy against the draft of JICA Study Team if necessary.

Draft by JICA Study Team	For the sustainable development of area industry, in emergency such as natural disasters that affect the entire area, in order to achieve continuity/rapid recovery of industry function, local government and Infrastructure operators, industrial parks, companies in the area would understand and share important information to promote their own BCM or disaster mitigation measures with cooperation.
Revised policy (Results of group work)	<p>"The LGUs (local government units), infra operators, industrial parks, companies in the area should not only share and understand information but already establish a <u>mechanism</u> for immediate activation for rapid recovery of functions (TRANSCO, 2013)."</p> <p>"(1) Need to identify who will be issuing the policy; (2) repository w/ information for storage, update and access; (3) institutional mechanism setup (DOE, 2013)."</p> <p>"Draft is currently too long. May need recording (PPA, 2013)."</p> <p>"What would be the institutional mechanism? What are the levels of triggers and intervention? From within and outside? How would or what is the overall plan if responders (implementers of the BCP) are also victims? Rephrase into second sentence (DOE, 2013)."</p>

[Q2] Critical Hazards to be considered in Area BCP/BCM

Please give either of the following marks in the column of *A to each hazard.

◎ : Need to be considered at the top priority in Area BCP/BCM ○ : Need to be considered at the second priority × : No need to be considered

Types of hazards	*A	Comments in the group work (ex. reason)
<input type="checkbox"/> Earthquake	◎◎	<ul style="list-style-type: none"> - Geological condition; location; Various faults in the area that can trigger moderate to strong earthquakes (DOE, TRANSCO) - Aside from its impact on land, it can cause tsunamis (TRANSCO) - Earthquake-related hazards: areas with loose and unconsolidated materials (DOE) - Will result to damage or loss of properties and lives as well (DPWH) - Damage to natural roads and bridges will affect businesses in the area (DPWH)
<input type="checkbox"/> Volcanic eruption	◎	<ul style="list-style-type: none"> - while [Taal] is located in Batangas, its impacts could easily affect airports, visibility, etc. (DOE, DPWH)
<input type="checkbox"/> Tsunami	◎	<ul style="list-style-type: none"> - Manila Trench can generate one (DOE) - a lot of coastal houses and facilities may be affected (TRANSCO)
<input type="checkbox"/> Flood	◎◎	<ul style="list-style-type: none"> - Cavite-Laguna are both low areas (TRANSCO) - Flood in the towns of Bacoor, Kawit, Noveleta, Rosario, and Cavite City results to loss of lives and

		properties and (DPWH) - Impact can be localized however could have radiating effects (DOE)
<input type="checkbox"/> Storm surge	◎	- The area is frequently subject to strong storms (PPA, TRANSCO)
<input type="checkbox"/> Facility accident (ex: explosion, chemical leakage)	○○	
<input type="checkbox"/> Facility accident	○○	- A lot of factories in the area (TRANSCO) - There is no quality risk assessment for the entire complex (DOE)
<input type="checkbox"/> Power failure	◎	- It will affect the factories, work of the people (DOE, TRANSCO) - If prolonged, will put a stop to business, services (DOE)
<input type="checkbox"/> Water outage	○	
<input type="checkbox"/> Pandemic (infectious disease epidemic)	○○	- Cavite-Laguna are contiguous areas. Travel within/thru the area could spread pandemic situation. (DOE) - half of the population may be affected making it a big challenge to implement BCP (DOE)
<input type="checkbox"/> Political unrest	○	
<input type="checkbox"/> Terrorism	○	
<input type="checkbox"/> Labor dispute	○	
<input type="checkbox"/> Financial crisis	○○	- Cavite-Laguna major industries in the local market account for big share with national GDP (DOE)
<input type="checkbox"/> Others	◎	Landslide - Road closure due to landslide at Tagaytay-Taal Lake Road and Tagaytay-Talisay Road (DPWH)

More often than not the “○ : Need to be considered at the second priority” hazards ensue or arise after the “◎ : Need to be considered at the top priority in Area BCP/BCM” hazards

[Q3] Critical problems for Business Continuity

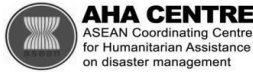
What are the critical problems for business continuity under the disaster scenario shown by JICA Study Team ?

	Critical problems under the disaster situation	The information that participants want to know more.
Lifeline Infrastructure	<ul style="list-style-type: none"> - power, water outages; damaged medical facilities; no communication (DPWH) - no electricity can cause traffic, no work, shutdown of facilities (TRANSCO) - access to damaged facilities for restoration (PPA) 	<ul style="list-style-type: none"> - mechanism (coordination with outside) (PPA) - What support are needed by the lifeline operators to restore services? (TRANSCO)
Transportation Infrastructure	<ul style="list-style-type: none"> - availability and safety of damaged/closed infra (PPA) - access to damaged/closed infra e.g. ports, roads, bridges (DOE) - damage hinders delivery of goods and services as well as work (DPWH, TRANSCO) 	<ul style="list-style-type: none"> - alternative routes/facilities (DOE, PPA, TRANSCO) - are the alternate routes secured? (TRANSCO) - availability of vehicles (PPA) - who will direct? (PPA) - reconstruction (DPWH)
Human (Employee)	<ul style="list-style-type: none"> - “accounting” for warm bodies e.g. where they are, what are their condition (DOE) 	<ul style="list-style-type: none"> - where are the “safe” places to go? (DOE) - what/where are food, water, hospital... (DOE)

	<ul style="list-style-type: none"> - no income for the people in the community (DPWH) - business will be affected due to employees' hard time to go to their respective offices (TRANSCO) 	<ul style="list-style-type: none"> - are there enough human resources to provide repair work for the damaged lifeline structures (TRANSCO)
Property (Facilities, equipment)	<ul style="list-style-type: none"> - breakdown of equipment (DPWH) - no available back-up equipment (DOE, DPWH) - damage buildings w/c is critical to employees to work (DPWH) - damage to storage facilities of basic goods will hinder/emergency work (TRANSCO) 	<ul style="list-style-type: none"> - storage areas of basic goods should be accessible and secured (TRANSCO) - who has available replacement units for quickest delivery? (DOE) - are there pre-positional items? Where and how many? Who controls it? (DOE)
Local community	<ul style="list-style-type: none"> - readiness of LGU to respond (DOE) - access to required funds (DOE) - shortage of evacuation centers (DPWH) - shortage of basic goods (DPWH) - displacement of the population (TRANSCO) 	<ul style="list-style-type: none"> - where can the affected members of the community be temporarily relocated (TRANSCO)
Others	<ul style="list-style-type: none"> - sanitation and hygiene facilities (DOE) - peace and order concerns (DOE, PPA) 	<ul style="list-style-type: none"> - who to recognize as deputized/legal peace and order keepers? (DOE)

Lifeline and Transportation Infrastructures, Human, Property, etc. concerns are highly interrelated.

Facilitator: Claire PANTOJA



“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”



A Joint Project of Japan International Cooperation Agency (JICA) and
the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Working Group Member for the 1st Area BCP Formulation, Vietnam

Nam Cuong Hotel, Hai Phong City, Vietnam, December 11, 2013

Participants

No	Country	Name	Organization	Position
Advisory Sub Group 1				
1	Vietnam	Do Trung Thoai	Hai Phong People Committee	Vice Chairman
2	Japan	Eiichi Yumoto	JICA	Jica Expert
3	Vietnam	Nguyen Ba Tien	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department	Director
4	Vietnam	Nguyen Thanh Phuong	DMC- Ministry of Agriculture and Rural Department	Chief of Department
5	Vietnam	Pham Thanh Binh	DMC- Ministry of Agriculture and Rural Department	Officer
6	Vietnam	Pham Cong Minh	VCCI Hai Phong	Expert
Private Sector Group 1				
7	Vietnam	Tran Vinh Hoan	Hai Phong Economic Zone Management Board	Vice Director
8	Vietnam	Bui Van Ly	Industry and Trade Dept.	Vice Hrad of Division
9	Vietnam	Le Doan Tam	Dai Duong Building Ship Joint Stock Company	Director
10	Vietnam	Luong Trong Mai	VIJA Group	Director
11	Vietnam	Nguyen Thi Thu Hien	Nam Cau Kien Industrial Zone	Officer
12	Vietnam	Vu Dinh Toi	VCCI Hai Phong	Ex-Officer
Private Sector Group 2				
13	Japan	Takashi Kawai	Yazaki HP VN Co., Ltd.	Director General
14	Japan	Kunio Mitobe	Tohoku Pioneer Co., Ltd.	Director General
15	Japan	SATO	Toyota Gosei Hai Phong Co., Ltd	Director General
16	Vietnam	Pham Doan Tung	PVTEX	Vice director of Department
17	Japan	Takashi Masuno	Nomura Hai Phong Industrial Zone	President
18	Vietnam	Nguyen Xuan Truong	Management Board of the Project for Infrastructure Construction of Industrial Zone of Hai Phong	Director
19	Vietnam	Vu Xuan Binh	VCCI Hai Phong	Head of Director

No	Country	Name	Organization	Position
Infrastructure and Lifeline Utility Sub Group				
20	Vietnam	Nguyen Duc Tho	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department	Head of Administration Officer
21	Vietnam	Nghiem Quoc Vinh	Hai Phong Port Holding Limited Liabilities Company	Deputy Director
22	Vietnam	Nguyen Quoc Tuan	Cat Bi Airport	Deputy Director
23	Vietnam	Pham Anh Tuan	Hai Phong Electric One Member Limited Company	Deputy Director
24	Vietnam	Le Anh Tuan	Hai Phong Electric One Member Limited Company	Officer
25	Vietnam	Pham Van Tien	Information and Communication Dept.,	Deputy Director
26	Vietnam	Nguyen Van Trung	Hai Phong Radio and Television	Reporter
27	Vietnam	Trinh Ngoc Bich	Hai Phong Radio and Television	Reporter
28	Vietnam	Tran Phuong	Hai Phong Security Newspaper	Reporter
29	Vietnam	Nguyen Thi Hong Thanh	Hai Phong Newspaper	Reporter
Other Group				
30	Japan	Minoru MIYASAKA	JICA Headquater	Senior Advisor to the Director General, Global Environment
31	Japan	Hitoshi BABA	JICA Headquater	Expert
32	Japan	Masakazu TAKAHASHI	AHA Center -Jica Study Team	Team Leader
33	Japan	Yoshiyuki TSUJI	AHA Center -Jica Study Team	Deputy Team Leader
34	Japan	Shukyo SEGAWA	AHA Center -Jica Study Team	Leader of Natural Disaster Risk
35	Japan	Akira WATANABE	AHA Center -Jica Study Team	Coordinator
36	Vietnam	Pham Viet Hoa	Vietnam Academy of Science and Tecnology (VAST)	Vice Head of Department
37	Vietnam	Truong Kien Trung	Asia Foundation	Expert
38	Vietnam	Hoang Minh Nguyet	MC/Facilitator	-
39	Vietnam	Nguyen Thanh Ha	Facilitator	-
40	Vietnam	Thai Minh Huong	Facilitator	-
41	Vietnam	Nghiem Ba Hung	Facilitator	-
42	Vietnam	Nguyen Tien Dung	Facilitator	-
43	Vietnam	Nguyen Phuong Nhung	Facilitator	-
44	Vietnam	Ngo Thi Minh	National Coordinator	-
45	Vietnam	Bui Bich Ngoc	Intepreter	-
46	Vietnam	Tran Ha My	Intepreter	-
47	Vietnam	Tran Thi Duyen	Facilitator	-
48	Vietnam	Ms. Tran Thi Duyen	Rapporteur	-

**Workshop 1 for Area BCP Formulation, Hai Phong
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

December 11, 2013, Nam Cuong Hotel, Hai Phong, Viet Nam

AGENDA

December 11, 2013, Wednesday

MC: Hoang Minh Nguyet

Agenda	
7:30-8:00	Registration
8:00-8:10	Welcome Address Mr. Do Trung Thoai Vice Chairman, Hai Phong People's Committee
8:10-8:30	Orientation for the Workshop Dr. Masakazu Takahashi Leader of the Study Team
8:30-9:30	Inputs from the Study Team and Q&A Mr. Yoshiyuki Tsuji Deputy Leader of the Study Team Mr. Shukyo Segawa Leader of natural disaster risk assessment
9:30 -9:40	Coffee Break
9:40-11:00	Group Work
11:00-11:45	Presentation by the Groups and Q&A
11:45-12:00	Wrap up Dr. Masakazu Takahashi Leader of the Study Team
12:00	Adjournment
12:00-	Lunch

WORKSHOP 1

for Area- BCP Formulation, Hai Phong

for

**“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation
for Industrial Agglomerated Areas in the ASEAN Region”**

December 11, 2013, Nam Cuong Hotel, Hai Phong, Viet Nam

Minute of Meeting

MC: Ms. Hoang Minh Nguyet

On 8:15 am, Ms. Hoang Minh Nguyet started to invite participants to start the workshop for formulation Area BCP for “Natural disaster risk assessment and area business continuity plan formulation for industrial agglomerated areas in the Asean region”. She emphasized that it is the coordination between JICA and AHA Center. And this is the first workshop in the series of 03 workshops to be organized in Hai Phong in order to formulate Area Business Continuity Plan (ABCP) for industrial agglomerated areas in Hai Phong, and today many peoples could see each other again after previous work group meeting.

Ms. Nguyet welcomed and introduced all participants of this workshop today, including officers from central Government and local authorities, representatives from related enterprises, organizations; industrial parks, infrastructures operators and lifelines; members of JICA and members of JICA Study Team, together with correspondents.

And then, on behalf of JICA team, she invited Dr. Do Trung Thoai, Vice- Chairman of Hai Phong People’s Committee to deliver his welcome speech.

8:20 am: Welcome speech delivered by Dr. Do Trung Thoai

First of all, Dr. Thoai specified all the information on economy- society in Hai Phong. He highlighted critical roles of Hai Phong province as an important port city, an industrial city in the line of our country’s development. And he summarized unforeseeable disasters and devastating consequences of natural disasters in the world and in Vietnam. He has expressed deep concern about the negative impact of natural disasters on production and

business activities of industrial parks in Hai Phong. Therefore, he thanked and highly appreciated the necessity and practice of this research as well as all the supports from JICA to Haiphong ever. Finally, on behalf of Hai Phong authorities, Dr. Thoai committed that they would try to support more and more to JICA's activities in process of research in order to achieve the highest efficiency and consensus, to call the cooperation from all agencies, units, organizations and businesses to implement this pilot project successfully.

8:35 am: Orientation of workshop- Dr. Masakazu Takahashi (from JICA-AHA center, Project Leader of ABCP)

Next, Dr. Masakazu Takahashi, Project Leader of ABCP has mentioned to the orientation for the workshop. To implement this project, JICA and center AHA selected 03 pilot centers to implement the project, including Hai Phong, Vietnam. The project selected key industrial zones Hai Phong and mainly essential infrastructure such as ports, airports, roads ... The project was conducted to identify and analyze the risks to Hai Phong, in which the most typical disasters chosen for the construction of disaster scenarios in Hai Phong are storms and storm surges. Mr. Takahashi showed a number of objectives to be discussed in the workshop today, including the risks of natural disasters to industrial areas, business environment in natural disasters and the impact of natural disasters. The parties participating in the workshop will be divided into some groups to give their comments such as advisory group, private sector group, infrastructure group and lifeline utility groups. He also gave the overall direction for the group discussion which would be taken place at the workshop, asked the participants to develop a plan to ensure business continuity for companies in industrial parks under the scenarios provided by JICA team.

In addition, Dr. Takahashi referred to the severe consequences of HaiYan typhoon to the Philippines in term of human, property, infrastructure, essential resources. Another example is Isewan storm occurred in 1959 in Japan. They are valuable lessons about natural disasters around the world, hence it is necessary to have response plans to ensure business continuity, minimize losses to the industrial zone in Hai Phong in particular and other industrial areas in Vietnam under the threats of natural disasters.

8:55 am: Provide basic information for group work

1. Overview about Area BCP- Mr. Yoshiyuki Tsuji- Project Deputy Leader

Mr. Tsuji has introduced the overview of business continuity plan and area business continuity plan, and method of Area BCP formulation for Hai Phong. He analyzed the data and made comparisons among the companies with and without BCP and then pointed out the purposes, importance and benefits of participating in

BCP. Furthermore, he also talked about the difficulties in maintaining business continuity in disaster situations when business resources were destroyed or cut down. Besides that, he also offered business impact analysis- BIA which showed the recovery time for each resource and methods to solve bottlenecks. In addition, Mr. Tsuji also analyzed the correlation between BCP and Area BCP, method of Area BCP formulation for Haiphong, as well as the need to share information as building Area BCP.

2. Natural Disaster Assessment and Disaster Scenarios- Mr. Shukyo Segawa, Leader of Natural Disaster Assessment

Mr. Shukyo Segawa presented the infrastructure allocation system, lifeline resources in Haiphong such as industrial parks, airports, highways, ports, power plants. Based on the research, statistics on natural disasters occurred in Haiphong, the research team chose the floods, storm, storm surges and tidal surges to be typical disaster for building disaster scenarios for Hai Phong. They analyzed, evaluated the possibility, magnitude and impact of natural disasters to Hai Phong. Then, they has built up a disaster scenario to Hai Phong when the storms comes together with rising tide leading to the flood in some days which could cause damages to the power supply station, communication systems. And of course, the traffic system would be frozen, activities in Dinh Vu Port would be affected and the workers are unable to work or coming in late. And the research team chose Nomura- Hai Phong Industrial Park as a certain pilot areas to provide more specific scenarios for group work afterwards.

3. Topics in workshops- Mr. Yoshiyuki Tsuji- Project Deputy Leader

Mr. Tsuji explained in more details on the topics of 03 workshops held in Hai Phong. The first workshop is to talk about the policy, and knowledge of business risks. The second one is to talk about the supply bottlenecks and final workshop is to mention the guide for implementation of the plan.

Next, Mr. Tsuji summarized the results obtained from the previous survey, relating to the policies to response disasters of the organization, the natural disasters often affecting to the enterprises and desires of organizations in the workshop. He also clarifies work group's rules and activities of each group participating in group work in the aim of sharing the experience on natural disaster response and severe problems need to be solved in Areas BCP. There are three questions stakeholder groups need to answer: fundermantary policy of regional business continuity, serious disaster considered in Areas BCP and business continuity management; the key issue in business continuity.

Question and Answer:

Q: After the presentation of Mr. Tsuji and Mr. Segawa, one question was raised by Mr. Pham Doan Tung - Deputy Director of TVTECH Company, a tenant located in Dinh Vu Industrial Zone raised 3 questions and comments to the Team and to the related stakeholders:

1. The situation of infrastructure in industrial areas in floods are very serious: flooded roads, congestion, unstable power system, broken machinery, the poor services from industry parks, stuck alluvial in the river ... causing huge damages to the enterprises.
2. Everyone is aware of the negative effects of natural disasters, but in the current economic situation, due to lack of financial resources, these bottlenecks are not improved.
3. Mr. Tung asked the JICA experts to advise Industrial Park to improve the service quality and consult the city authorities as well as industrial park management Boards to seek for financial resources to develop and implement the A-BCP.

A1: Mr. Tran Vinh Hoan, Deputy Director of the Management Committee of Hai Phong Economic Zone firstly answered some issues in Mr. Tung's question as follows: with the problems related to power supply, due to huge capacity of tenants's equipments, the industrial park management board had held meetings with the Electricity Department to advise the enterprise in the industrial park to find a solution to increase capacity of power supply for tenant who request. Regarding to stuck vessels occurring in Dinh Vu Port, the Management Board will remind the Dinh Vu Port for handling it and make the dredging plan to improve the river flow.

A2: Regarding to other issues, Dr. Takahashi on behalf of research team answered the question. He reminded the objectives of this project to be implemented in 10 ASEAN countries, including industrial parks in Hai Phong. This study aims to provide an activity framework for enterprise to maintain the business continuity and then the enterprise can seek financial resources to build and develop the model. Besides that, JICA –AHA center project shall provide a Guideline with suggestions about ABCP formulation and some organizations who can give support to the enterprises. However, at first the enterprise itself should take advantages all of their internal resources, from local authorities. The formulation of A-BCP requires the mutual support from all stakeholders.

Work group

After tea break, the workshop started to conduct group work, the most important part of the workshop. Mr. Tsuji reminded the rules of work group, and divided all participants into 04 groups: Advisory Group, Group of Private sector 1, Group of Private sector 2 and Group of Infrastructure and Lifeline Utility.

After 80 minutes of discussion, the groups presented their opinions on the issues set forward by JICA team.

1. Advisory Team

Question 01: Fundamental policies of Area BCP

First of all, the group agreed with policies made by JICA Study Team. In addition, Advisory group gave some other amendments and supplementations to these policies. Details are as follows:

- Responsibilities of local authorities on instruction, guidelines to ensure the supply.
- Make consensus; understand the implementation process of methods in order to minimize the negative impacts and these methods should be carried out under the mutual coordination.
- To infrastructure managers: it is required to clearly identify the roles of such organizations on the external resource supply in the industrial parks.

Question 02: Evaluate the serious level of natural disasters in Area BCP in Hai Phong

The Advisory Group evaluated the seriousness of natural disasters as follows:

- Disaster at 1st priority ranking, the most dangerous level included storm, storm surges and floods
- Other disasters from or in relation to human such as no power, fire, explosion, oil spills are not highly considered. However, the evaluation was based on the actual situation of Hai Phong, it is no need for other regions to apply the same evaluation.
- Disasters relating to social sector: labor or financial crisis.
- Regarding terrorism or law: no major impact
- About volcanic and earthquakes: Haiphong has no record on volcanic, the earthquakes occurred but with weak intensity so they are not main disasters.
- Tsunami- a consequence of the earthquake: because Hai Phong has a closed terrain, so the influences from the Pacific tsunami are not larges, not as the Central of Vietnam.

Question 03: Issues related to formulate A-BCP in disaster

- About infrastructure: Early recovery and safety for system
- Make sure of the water supply to the area under natural disasters
- Transport system: ensuring transport connections in the system
- Human Resources: To ensure the safety of people, provide lifeline utilities for workers and their families in natural disasters
- Property, machinery: safety for machinery and production recovery ability.
- Local communities: creating an intimate connection between the two sides and maintaining communications between the parties
- Raise awareness of business owners and community on in disaster risks to business operations.

2. Group of Private sector No.02:

Question 01: Fundamental policies of Area BCP

The group also expressed their concrete agreement with the policy given by JICA Study Team. And the group also made some comments as follows:

- It is necessary to have transparent mechanism from the Central to the local government, to each facilities of Industrial Park about the disasters.
- During a disaster, it is important to update official information on the website to inform all people about the disaster: about the location, influence...
- Authorized agencies should take action to raise people's awareness to share all information and experience to respond to disasters

Question 02: Evaluate the serious level of natural disasters in Area BCP in Hai Phong

The group evaluated the flood disaster as the most serious disaster in Haiphong. The other natural disasters such as earthquakes, volcanoes are less impact.

Floods lead to power loss, dehydration, to labor crisis... all of them would affect thereby causing industrial park should inform businesses about the impact of disasters.

Question 03: Issues related to formulate BCP in disaster

- When propose an investment project to construct Industrial parks, it is required to forecast all issues related to natural disasters.
- Lifeline utility: when power loss occurs, water supply interruption appears, it is necessary to make recovery plan and to inform to all the industrial parks management and tenants the repair time, repair duration.
- Transport, infrastructure: to make detailed plans to inform the internal and other companies, other industrial zones to acknowledge on recovery plan.
- Service life and culture: a similar deployment.

3. Group of Private sector no.1

Question 01: Fundamental policies of Area BCP

Group showed the agreement with the reference given by JICA Study Team. In addition, the group also made some additional comments as follows:

- There should be a unify of instruction system from central government to local authorities to each facility

For example: In the industry park, from the People's Committee to the Steering Committee of Industrial Parks to infrastructure management company to private enterprise: unified communications

- When a disaster occurs: set up a hotline with 24/7 operations
- Perform "04 things at a spot": the enterprises are proactive to make disaster prevention methods to protect their own assets.
- Necessarily to have legal documents, regulations and guidance on disasters to raise the awareness on the impact of the disasters. Enterprise should be more proactive in applying and raise awareness about the policy.

Question 02: Evaluate the serious level of natural disasters in Area BCP in Hai Phong

The group requires JICA team to categorize disasters into specific groups including natural disasters, man-made disasters and the consequences of the disasters.

The team separated the severity of natural disasters as the following: the most serious disasters are storms and storm surges, floods, power loss, dehydration

On social issues: labor dispute is under the most concern, because with the economic crisis at the moment, in a number of industrial zones, the strikes have occurred but has been resolved.

Question 03: Issues related to formulate BCP in disaster

- Lifeline utility: electricity, water, communication, lifeline utilities in which the communication needs to be frequent and continuous to announce the recovery time, recovery capacity, to inform the labor to know the production plan... therefore enterprise can make detailed plan.
- Transportation and Infrastructure: attention to all kind of transportation such as roads, waterways and railroads. Through the communication system, the recovery time and recovery capacity will be informed, notification on the escape way, support from government or ship rescue plan...
- Emphasize the activities of the government and the mass media: radio programs like VOV in Hanoi to widespread traffic problems, traffic congestion on the information systems in Hai Phong
- Properties: the IZ enterprises should overcome disasters by themselves and inform to other companies, contact the local authorities if they need any help or support ... It is better for enterprise to buy insurance for their properties and assets.
- Local communities: Through mass media system, update information on traffic jam, status, situation, methods to resolve problems.
- Providing public services in disasters: the ability to provide pure water, food ...

4. Group 04- Group of Infrastructure and Lifeline Utility

Question 01: Fundamental policies of Area BCP

The Group agreed with the point of views of group of private sector no. 1. And they also added comments such as to ensure sustainable development in the industrial sector, infrastructure operation. In addition, the group requested JICA team to clearly define disaster with recovery ability and disaster without recovery ability in the business. And as policy-makers, information will be share to each kind of partner and roles of each partner in business.

Question 02: Evaluate the serious level of natural disasters in Area BCP in Hai Phong

Divided disasters into the 02 categories: natural disasters and the consequences of natural disasters

Group ranked storm surges with the highest priority on disaster occurred in Hai Phong

Other risks such as port operations, transport, and communication are results of natural disasters.

Question 03: Issues related to formulate BCP in disaster

The problems arising in disasters: water, electricity and communications for local notifications about recovery time and a specific plan of recovery

- Transport: the extent of the damage, location & severity
- Human: Information on the number of casualties caused by natural disasters
- With assets of human beings: the information on policies and plans to protect equipments and to purchase insurance for mechanical systems, assets of the enterprises.
- Other: want to know the system of emergency relief and rehabilitation after the disaster
- It is required to have an official information channels to report on the impact of disasters, to avoid misinformation which may cause negative influence

Wrap up:

After the end of the 04 group discussions, Dr. Takahashi gave a summary of the results that the Study team collected through group discussions. Dr. Takahashi said that The JICA Study Team shall develop the plan refers to comments collected in this group discussion. In addition, Dr. Takahashi gave notice on framework schedule of second workshop, schedule to provide homework worksheet to working group member and schedule of receiving results from them, also he inform the tentative schedule of 2nd workshop on Feb. 28th, 2014 and hoped to continue to receive contributions from stakeholders.

Closing:

12:20 pm: Ms. Hoang Minh Nguyet summarized the workshop, thanked the enthusiastic participation of all groups, the delegates and attendants of the workshop today.

Workshop 2 for Area BCP Formulation, Indonesia
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

March 6, 2014, Citra Grand Hotel, Karawang, Indonesia

A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Participants

Country	Name	Organization	Position
Sub Group 1			
Indonesia	Lina Yulianty	Local Planning and Development Agency /Bappeda West Java Province	Staff
Indonesia	Ade Martadinata	Local Disaster Management Agency /BPBD Bekasi Regency	Kasi
Indonesia	Surahman	Natural Environment Management Agency / BPLHD Bekasi Regency	Pelaksana BPLH Kab. Bekasi
Indonesia	Eddy Sirotim	Natural Environment Management Agency / BPLHD Bekasi Regency	Staff
Indonesia	Hendry	Distric Water Company /PDAM Bekasi Regency	Staff
Indonesia	Wira Atmaja	Lookman Djaya (Transportation Company)	Wakil Direktur
Indonesia	Kyatmaja Lookman	Lookman Djaya (Transportation Company)	Direktur
Indonesia	Yusuf Widjaja	Lookman Djaya (Transportation Company)	Staff
Sub Group 2			
Indonesia	Supriatna	Dinsos Kab. Karawang	KABID PB
Indonesia	Donny S.	Distric Water Company / PDAM Tirta Tarum Karawang	Kabid Teknis Litbang
Indonesia	Asep Suntoro	Distric Water Company / PDAM Tirta Tarum Karawang	KA. Litbang
Indonesia	Nana Mulyana	Distric Water Company / PDAM Tirta Tarum Karawang	KA. Litbang
Indonesia	Purwoko Deni	PT. TMMIN	Manager
Indonesia	Nanang	PT. SHARP	New Factory Project Manager
Indonesia	Irwandi	PT. KBN	GM KBN Cakung
Indonesia	Rusdi	PT. KBN	SPV
Indonesia	Welly Wiryanto	PT. HM Sampoerna	Community Development Executive
Indonesia	Denny	PT. Toyota	Staff

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Participants

Country	Name	Organization	Position
Sub Group 3			
Indonesia	Suwartika	Diskominfo Kab. Bekasi	Kabid
Indonesia	Muttaqin	Diskominfo Kab. Bekasi	Sie penyajian data
Indonesia	Andi Irawan Ch.	KODAM III/SOPS	Pabandalayat SOPSDAM III/SLW
Indonesia	Bima Kawindra	Perum Jasa Tirta (Management of Jatiluhur dam)	Kabag. Teknik DPA II,
Indonesia	Edi R.	PT. Telkom Karawang	Staff
Indonesia	Wahyu M.	PT. SHARP	HSE-ICM
Indonesia	Muhammad Afdal	PT. SHARP	Business & Strategy Plan - AGM
Indonesia	Sonny F.M	HM. Sampoerna (Private Corporation)	Security Manager
Indonesia	Andy Yuseru	HM. Sampoerna (Private Corporation)	Staff
Indonesia	Lutfi	HM. Sampoerna (Private Corporation)	Staff
Sub Group 4			
Indonesia	Andy	KODAM (Military)	Staff
Indonesia	Bambang	Local Disaster Management Agency (BPBD Bekasi Regency)	Kabid
Indonesia	Heri	Agency of National Unity, Politics, & Civil Protection (Kesbanglinmas) of Bekasi Regency	KASI/Ketahanan Masyarakat
Indonesia	Irfan	Regency Water Company /PDAM	Staff
Indonesia	Rahmat Hidayat	Fire Brigade Agency of Bekasi Regency (Dinas Kebakaran)	Staff
Indonesia	Sihabudin	PT. Telkom Bekasi (Telecommunication Agency)	Staff
Indonesia	Tasiman	PT. Kereta Api Indonesia (Train Transportation Company)	Ks. Karawang
Japan	Tokunaga Yoshio	JICA-BNPB Consultant	Staff
Sub Group 5			
Indonesia	Lea Pungky R	PT. Jasa Marga	Ass.Manager Maintenance Program
Indonesia	Merry Adelia	PT. Jasa Marga	Ass.Manager Maintenance Program
Indonesia	Irwan Prasetyo	PT. Jasa Marga	AVP Reg.1 Toll Road Buss. Dev.
Indonesia	Muhradi S.	Dinas Perindustrian & Perdagangan Kab. Karawang	Kabid Perindustrian
Indonesia	Hanafi	Dinas Perindustrian & Perdagangan Kab. Karawang	KADIS
Indonesia	Acep Jamhuri	Dinas Bina Marga & Pengairan	Kabid BMP Karawang
Indonesia	Restu Titipan	Dinas Bina Marga & Pengairan Kab. Karawang	Staff
Indonesia	Sugiono	Disbimarta Kota Bekasi	Disbimarta Kota Bekasi

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Participants

Country	Name	Organization	Position
Sub Group 6			
Indonesia	Rudy Witjaksono	Deputi Pengkajian SD UKM Kemenkop & UKM (Ministry of Cooperation & Small-Medium Enterprise)	KABID 7.2.2
Indonesia	H. Sujana	Agency of National Unity, Politics, & Civil Protection (Kesbanglinmas) of Karawang Regency	Ka Kesbangpol
Indonesia	Fahmi A.	Local Planning and Development Agency (Bappeda) of Karawang Regency	Perencana Madya Bappeda Karawang
Indonesia	Agustien N.	Local Planning and Development Agency (Bappeda) of Karawang Regency	Perencana Madya Bappeda Karawang
Indonesia	H. Adang S.	Transportation, Communication, & Informatic Agency (Dishubkominfo) of Karawang Regency	Kabid Lalin
Indonesia	Ade Setiawan	Local Environmental Agency (BPLHD) of Karawang Regency	Kabid
Indonesia	Darwoto	MM2100 Industrial Park	GM
Other Group			
Indonesia	Linda Al Amin	Local Planning and Development Agency /Bappeda West Java Province	Kabid Fisik
Indonesia	Irwansyah	KIIC	Deputi GM KIIC
Indonesia	Rizky A.	Dishub Kota Bekasi	Staff
Indonesia	Yoyo Ismaya	Dishub Kota Bekasi	Staff
Indonesia	Cikwan Suwandi	Kabar Gapura	Wartawan
Indonesia	Irvan T.	PDAM Kab. Bekasi	Ka. Sub. Bagian
Indonesia	Hendry Ir.	PDAM Kab. Bekasi	KPS
Indonesia	Bariman	Bappeda Bekasi	Staff

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A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

JICA and JICA Study Team

Country	Name	Organization	Position
Japan	Hitoshi Baba	JICA Headquarter Office	Senior Advisor
Indonesia	Yoko Yamoto	JICA Indonesia Office	Project Formulation Advisor
Indonesia	Hiroshi Takabayashi	Local Planning and Development Agency /Bappeda West Java Province	
Japan	Masakazu Takahashi	JICA - AHA Centre Study Team	Team Leader
Japan	Shukyo Segawa	JICA - AHA Centre Study Team	Expert on Risk Assessment
Japan	Yoshiki Kinehara	JICA - AHA Centre Study Team	Area BCP
Japan	Kotaro Fukuhara	JICA - AHA Centre Study Team	Coordinator
Indonesia	Krishna S. Pribadi	JICA - AHA Centre Study Team	National Coordinator
Indonesia	Aria Mariany	JICA - AHA Centre Study Team	Facilitator
Indonesia	Mona Foralisa	JICA - AHA Centre Study Team	Facilitator
Indonesia	Anin Utami	JICA - AHA Centre Study Team	Facilitator
Indonesia	Rienna Oktarina	JICA - AHA Centre Study Team	Facilitator
Indonesia	Nimas Maninggar	JICA - AHA Centre Study Team	Facilitator
Indonesia	Gerry Andrika	JICA - AHA Centre Study Team	Facilitator
Indonesia	Bayu Novianto	JICA - AHA Centre Study Team	Project Staff
Indonesia	Lusiana Rumintang	JICA - AHA Centre Study Team	Interpreter
Indonesia	Pribasari Damayanti	JICA - AHA Centre Study Team	Note Taker

**Workshop 2 for Area BCP Formulation, Indonesia
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

March 6, 2014, Citra Grand Hotel, Karawang, Indonesia

Agenda

March 6, 2014 (Thursday)

Agenda	
09:00-09:30	Registration
09:30-09:50	<p>Welcome Address</p> <p>Ms. Linda Al Amin Head of Physical Division Regional Development Planning Board, West Java Province</p> <p>Dr. Hitoshi Baba Senior Advisor Japan International Cooperation Agency (JICA)</p>
09:50-11:05	<p>Inputs from the Study Team and Q&A</p> <p>Review of Area BCP /BCM and Orientation of Workshop Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Review of Disaster Scenario and Examples of Impact on Infrastructure Mr. Shukyo Segawa Team Member, Leader of Disaster Risk Assessment</p> <p>Bottlenecks, and Examples of Impacts on Local Economy and Industries (including Summary of Homework 2) Mr. Yoshiki Kinehara Team Member, Area BCP</p> <p>Grouping and Instruction for Group Work</p>



11:05-12:30	Group Work Guided by Mr. Yoshiki Kinehara
12:30-13:30	Lunch
13:30-14:25	Presentation by the Groups and Q&A Guided by Mr. Yoshiki Kinehara
14:25-14:35	Wrap up Dr. Masakazu Takahashi
14:35-14:45	Closing of the Workshop Dr. Masakazu Takahashi Group Photo Session
14:45	Adjournment
14:45-15:00	Coffee Break
15:00-15:15	Brief Explanation about KIIC Mr. Irwansyah GM of KIIC
15:15	Pick up Workshop Members at Citra Grand Hotel
15:15-16:30	Visiting KIIC and Its Surrounding Guided by Ms. Aria Mariany Junior Researcher of the project
16:30	Returning to Citra Grand Hotel

MC: Dr. Krishna S. Pribadi

Workshop 2 Area BCP Formulation in Indonesia
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formulation for
Industrial Agglomerated Areas in the Asean Region”

Thursday, 6 March 2013
Grand Citra Hotel, Karawang

Time : 09.00 - 16.30
Moderator : Khrisna S. Pribadi

A. OPENING

Speech from Mr. Khrisna Pribadi
Institut Teknologi Bandung

I express my deepest my gratitude to all the participants who had come to this meeting. Thank you very much to 18 agencies that have come from governments (cities and counties) as well as industrial sectors. Today’s event will end at 3 pm and then carry on with visiting the KIIC area.

Speech from Ms. Linda
Bappeda Jawa Barat

A disaster is one of the most important issues to be considered in the province of West Java. Improper disaster management implementation reduces economic stability. Both systematic as well as integrated disaster management planning from emergency responses, postdisasters, and predisasters are necessary. Coordination among the governments, industries, lifelines actors are needed to address the dilemmas of a certain disaster. A sustainability plan for an industry needs to be implemented in order to overcome disaster problems so that the economic situations would not get paralyzed. An industrial sector is the most important aspect for economic situations in West Java, where many industries are located between Karawang and Bekasi. The

research on disaster issues have conducted frequently and hopefully it will develop some guidelines on the subject of how the business sector could minimize the risks. Since we all know that people only think about their own protection and personal properties than the survival of a business or the economics; whereas if a business falls down, a huge number of citizens lose their lives.

Speech from Mr. Hitoshi Baba

JICA

A special thank you goes to all participants for their participation in today's meeting. The recent activity, which is a new concept created designed for an industry can run in case of a disaster was carried out by the Japan International Cooperation Agency (JICA). The results will be presented in next year's meeting that will be held in Sendai, Japan and other ASEAN countries. JICA has a very deep concern to the sustainability of this project, so there will be a lot of support that JICA gave and will be given for this exercise. There are only chosen three countries among the ten ASEAN member countries for this study: Indonesia, Philippines, and Vietnam. In Indonesia, this activity focused on the industrial areas in Bekasi and Karawang, which is a substantial region for an industrial sector in West Java. Therefore, this workshop is a very important process to organize in order to accomplish the realization of an industrial area that is more resistant to natural disasters.

B. PRESENTATION

Presentation 1. Review of the area BCP / BCM and Orientation Workshop

Presenter: Dr. Masakazu Takahashi

Study Team Leader

Thank you to all participants who have attended today's meeting. Some were present at the previous meeting while the others came today.

The Video Playback tells us about various catastrophic events in Indonesia and how their impacts affect the business world. The description about BCM (Business Continuity Management) defines as a concept for an industry to overcome disasters and pay attention to business continuity as well as supply changes itself. It is expected that each company has their own scenarios to prepare and continue running together with ABCM even if a disaster occurs. Every industry needs to think about the power and water supplies, traffic, and many other things. All stakeholders need to gather in order to put this concept into action; this is the first step to get industry resistance.

It approximately takes a year for the study team to establish ABCM system in Indonesia that begins from Understanding are – Determining the ABCM strategy – Developing ABCP (plan) – Exercising and Reviewing – Maintaining and Improving. All of these processes are basically follows ISO 22301 standard for public safety – Business Continuity Management Systems – Requirements. The Scope of Cooperation between JICA and the AHA Centre is to develop the ABCP Plan. Today's workshop focuses on discussing the BCM strategy about the impact of a disaster to bottlenecks, local communities and industries, and an indicator for the continuation of the business areas. The next workshop will be held in May for determining the next steps that needs to be accomplished. In the previous workshop, some priority of hazards, such as floods (most important) and earthquakes (which is damaging dams, pipes, etc) has been found.

The discussion topic for this workshop is about the Impact on Local Community and Industry taught by Mr. Kinehara, and Critical Problems or Bottlenecks taught by Mr. Segawa. Then the last one is about the Parameters or Indicators Regarding the Continuation of the Business Area by Mr. Kinehara. This meeting will also explore objectives of disaster scenarios, the impacts for infrastructures, and barriers and models of the impact on the economy and local industries.

Presentation 2. Overview of Disaster Scenarios and Examples of Impact on Infrastructure

Presenter: Mr. Shukyo Segawa
Leader of Natural Disaster Risk Assessment

The study team has analyzed various infrastructures that are essential for industrial areas in Karawang and Bekasi. One of them is a port and there is only one found in Jakarta. Essential hazards include earthquakes, floods, and tsunami (less likely) in both Karawang and Bekasi. For some reasons, volcanic eruptions are not included. Flood is still the main hazard for the given areas.

The probability of flooding is 1 per 200 years with the maximum for immersion is over four meters. The duration for inundation usually takes more than two weeks. In the first workshop, the study team presented various flood scenarios on the maps. There were times when Jababeka only suffered a little during a flood, but basically industrial lives have been disrupted by its inundation. Consequently, first we need to reflect on how to deal with flooding or when the flood occurs in urban areas or not and about electricity in case if there is none available.

The next scenario is about traffic infrastructure. If Jakarta-Cikampek toll road is closed for more than 2 weeks, the workers were not capable to work or either end up arriving late due to flood impact. The additional scenario (when the flood occurs outside the area) is when Muara Karang power plant was completely damaged and the power supply became limited. What if the access road to Tanjung Priok port gets vulnerable due to flood? In the year 2005, the access road to Tanjung Priok got flooded and the road to Soekarno Hatta Airport ended the same after two years. What we need to reflect on is how to cope with these issues.

There will be a review about floods hazard in Jakarta and Bekasi in January 2014 in the following pages. The precipitation was the highest from the 19th to the 21st in January 2014, where the rainfall prior was already high from January 8 to 17. The average depth of inundation was about 10-700 cm in Jakarta, but there were some areas flooded of more than 150 cm. The flood impact for the community itself was so big. Many people needed to evacuate to a safer place.

Based on the map of the flooding incident occurred on 21 January 2013, the areas that have darker colors indicate that they have suffered from stronger floods than those areas with

brighter colors. The circled regions on the map are the KBN Cakung industrial areas. We can see that the surrounding areas were flooded even even though there were undersized inundations. Turning the power off to prevent a short circuit is one of the the condition of life support facilities whereas the telecommunication companies cannot run its operations due to floods. In terms of road infrastructures, loading and unloading cargo activities can be vulnerable due to the flooded travel routes. The roads remain impassable due to damaged condition even if the flood has subsided. From the aspect of the workers, they often become stunted to come to work. There were inundations up to 80 cm in KBN Cakung region in January 2014. All flood events data in January 2014 will underlie the working group for today's workshop.

Presentation 3. Barriers and Impacts on Local Economy and Industry

Presenter: Mr. Yoshiki Kinehara

This presentation will explain some examples of the impact on an economy that must be related to the government's role, starting from the conditions of Karawang and Bekasi who donated Regional GDP about 70 billion per year for West Java Province. There are also foreign investments about 4 billion per year for this industrial area. About 40% of the populations in Kawarang zone are working for the industrial sector and the local economy is very dependent in both Bekasi and Karawang Industrial regions.

In Indonesia, there are about 55% of the containers handled at Tanjung Priok. Transportation of goods is really dependent on roads and ports. Investors might resign, local economies will eventually decline sharply, people will get affected, and plants or industries may cease, if there were floods in Karawang and Bekasi.

In case of the flood in October 2011 in Thailand, that incident can be useful for studying. Flood event has eliminated \$9000 million and there was estimation that 35% of companies got full recovery, while only 54% of Japanese companies retain its entire workers.

The price impact of handling a riverstream is around \$9 billion.

We need to identify what is the impact of floods that may arise in Indonesia from that case. How many employees cannot work if a city gets submerged for two weeks or more? When can the electricity, roads, and ports be normal? When will companies get recovered? How many companies will be closed? How many people will lose their jobs?

The ITB team has conducted a survey and analyzed the flood events in Jakarta in January and February 2014. It has been revealed that many regions in Jakarta were submerged by floods, around 140,000 of people got affected, 70% of workers could not work for about 1-2 days, industrial areas were not affected, electrical and communication connections only slightly impaired, factory machines were not affected by inundation, dreadful traffic jam situation and disrupt logistic distribution processes, and the production processes stopped for about one week.

The following conditions of resources or support facilities of industrial areas:

- The buildings in an industrial area were not disrupted, and the electricity and ports were not impaired
- There were traffic jams in the toll road
- Employees got distracted since the access got blocked or because their homes got flooded
- Many factories were closed for 2 weeks, and the recovery time required more than 2 weeks

Companies should stay alive, floods and inundation should be mitigated, having a good security, number of resources for industries need to be available, resume with manufacturing many products, and workers remain active and healthy, until economic conditions remain awake.

Various actions that need to be accomplished to cope with disaster:

1. Strengthening the organizations
2. Prepare alternative/ resources backup
3. Shorten time of emergency response activities to be back normal

Basically there are enough examples of mitigation to overcome flood problems in Japan. One example is the anti-flood pool (for temporary water storage). The next example is making a second dike as a space to prevent water which forms flood expansion. There are also the manufacture of building regulations, drainage pumps, financial aid for victims (only for tax payer), preparation of primary supplies for disaster event (electricity and water supplies), provision of public shelters, and public financial assistance to business sectors (to protect the company and its labors). The recovery performances in Japan are so cooperative. For instance, the pipes for industries were easily repaired in just 5 days by the cooperation between local government and private company after the massive earthquake. When the ports got damaged, the government established alternative ports as a practice.

Description of working in group discussions

Participants were divided into several groups. The purpose of discussion is to determine the effect might be experienced by industries and what can be done in BCM. There will be a leader, presenter, and a time keeper for each group. Each member will be asked to write down his or her ideas on cue cards and then put those cards in a larger sheet. After that, all of members should discuss about them until the leader summarizes the conclusion. There will be three issues delivered and each one has same steps that need to be done.

Various issues will be discussed are:

- The impact of the disasters on the community and local industry (eg, half of the number of employees who might be laid off, the population can be reduced by about 10% due to an accident, evacuation, etc.)
- The obstacles that will be faced by the industry for survival (major obstacles experienced by the local community and the industry as a result from the disaster need to be discussed)
- Actions for industry survival (action to be taken for business continuity). Also consider the intervention of the government, such as the governor or another example.

Working Groups (*There are 6 groups*)

Traces Discussion:

- Introduction of each participant (and from which agency they were)
- A description of the things that must be completed by the group
- Election of the leader, presenter, and time keeper
- Participants answer three questions

Question 1

		Predicted Impact
Local Society	Population (Casualty or Outflow)	Crime, damaged public facilities, death, emergence of refugees, food shortage, illness, property loss
	Peace and Order (Security)	The security system does not function, crime and robbing
	Community	Social care community rises
	Other	Emergency transportations
Local Industry (Economy)	Amount of Production (Ex Annual GDP)	Production processes stop or decline, power supply failures
	Number of Companies (Ex: Bankruptcy)	Agribusiness and industry bankruptcies, many factories got ceased
	Amount of Investment	Investment got reduced or stopped (to 0)
	Employment	Finished or not present
	Other	The company issued corporate social responsibility (CSR) funds

Question 2

	Critical Problems (Bottleneck)
Natural Environment (Terrain, River, Lake, Coast)	Rivers overflowed and breached the levees

Lifeline Infrastructure	Broken electricity substation, damaged communication network, flooded roads interrupted, and water channel and electricity supply
Transportation Infrastructure	Airports and ports were closed, public transportations got smashed and/or were not operable, and roads got smashed and submerged
Human (Employee)	Absent from illness or work
Property (Facilities, Equipment)	Public facilities were demolished, the construction got blocked or stopped
Local Community	Society closed the roads, sleeping in public places
Other	The toll road was closed

Question 3

	Software	Hardware
Natural Environment (Terrain, River, Lake, Coast)	Periodic maintenance program for rivers and waterways	Pump installations, river dredging, tree planting, watershed conservation
Lifeline Infrastructure	System improvement of telecommunication networks, waterpump operating hours arrangements to regulate water flows	Water pumps, water supply
Transportation Infrastructure	Traffic management	Emergency vehicles
Human (Employee)	Altering working hours, dismissing employees	Emergency settlement

Property (Facilities, Equipment)	Allowed to use public facilities factory	Building evacuations and supply lines, the establishment of health posts
Local Community	Establishment of cooperation mechanisms or flood shelters	Health and security posts
Other		

Question 1

		Predicted Impact
Local Society	Population (Casualty or Outflow)	Food shortages, health and diseases, lack of property, loss of many lives
	Peace and Order (Security)	Asking for help (beggars), crime (lack of security, looting, riots)
	Community	Chaotic, lack of adequate infrastructures and facilities (electricity, toilets, tents), separated from family members
	Other	Reduced local revenues
Local Industry (Economy)	Amount of Production (Ex Annual GDP)	Total number of productions and reductions (profits got decreased)
	Number of Companies (Ex: Bankruptcy)	Small companies cannot survive
	Amount of Investment	Investments got declined and re-examined, investors left
	Employment	Unemployment, the employees cannot work
	Other	Missing or ruined documents, unsettled transportations

Question 2

	Critical Problems (Bottleneck)
Natural Environment (Terrain, River, Lake, Coast)	Dams and levees got breached, landslides, rivers and lakes overflowed, siltation of rivers and lakes
Lifeline Infrastructure	Not easy to provide electricity, food, fuel, medications, telecommunications, and water
Transportation Infrastructure	Broken, detached, and jammed roads and bridges
Human (Employee)	Some employees cannot work, lots of unemployed individuals
Property (Facilities, Equipment)	Damaged infrastructure industries (machinery and electrical), destroyed or inoperative properties
Local Community	Refugees around industry access
Other	Loss of fuel or supplies

Question 3

	Software	Hardware
Natural Environment (Terrain, River, Lake, Coast)	Inventory of the river, the spatial planning, the study or research of flooding area(s)	Dam reservoir, dredging rivers, and strengthening the levees
Lifeline Infrastructure	Creating an alternative infrastructure plan, preparation of a backup system for utilities	Infrastructure improvements, logistics supplies, preparing equipments (generators, tents, kitchens)
Transportation Infrastructure	Ruined inventory access, traffic management	Strengthen roads and bridges, substitute transport pathways

Human (Employee)	Donations	Labor-intensive activities, repair facilities
Property (Facilities, Equipment)	Inventory properties affected by flooding, location of the building	Elevating the factory floor
Local Community	Mutual cooperation, psychological and religious coaching, training and disaster simulations	
Other	Increasing the role of all stakeholders, preparation of flood disaster management plans	

Question 1

		Predicted Impact
Local Society	Population (Casualty or Outflow)	Diseases, loss of lives, temporary shelters are needed
	Peace and Order (Security)	Incidence of insecurity, psychological traumas especially in children
	Community	Solidarity got emerged, but needs coordination
	Other	Poverties arose
Local Industry (Economy)	Amount of Production (Ex Annual GDP)	Production fell to stop, profit reductions
	Number of Companies (Ex: Bankruptcy)	More than 50% of companies got closed
	Amount of Investment	Investment plans may got delayed or weaken, need additional funds for recoveries
	Employment	Employees were unable to work, employment was reduced
	Other	Logistics got disturbed

Question 2

	Critical Problems (Bottleneck)
Natural Environment (Terrain, River, Lake, Coast)	Need rivers siltation and dredging. Takes a long time to repair since not all rivers have levees
Lifeline Infrastructure	Energy supply (electricity and water) was disturbed, the raw water that needs to be processed into clean water got reduced to 20%, the communication was interrupted
Transportation Infrastructure	A wide range of industries got disrupted due to road breakdowns
Human (Employee)	Number of productivity were declined because it could not function properly
Property (Facilities, Equipment)	Made damages to buildings and public facilities
Local Community	Isolations
Other	Traumas

Question 3

	Software	Hardware
Natural Environment (Terrain, River, Lake, Coast)	Updating hazard maps on watersheds	Making polders in the industrial area
Lifeline Infrastructure	Early warning systems	Flood water pumps, local electricity management

Transportation Infrastructure	Interconnection, synchronization modes of transportations	Making alternative transport pathways
Human (Employee)	Disaster preparation training for employees and communities	Post-disaster assistances
Property (Facilities, Equipment)	Enforcement of rules and regulations on industrial area, guidelines for areas of industrial management	Construction of facilities for employees, residence in industrial areas
Local Community	Establishing trauma centers	Evacuations
Other	Enforcement of the existing rules	

Question 1

		Predicted Impact
Local Society	Population (Casualty or Outflow)	The number of refugees grew around 50000 to 100000, causing a variety of problems (diseases, fatalities, shortage of doctors)
	Peace and Order (Security)	Number of demands for logistics and food supplies got increased
	Community	Emotional distress and stress of the community
	Other	Damage to infrastructure (roads and transportations)
Local Industry (Economy)	Amount of Production (Ex Annual GDP)	Decreased significantly (50% -75%)
	Number of Companies (Ex: Bankruptcy)	The entire companies may bankrupt
	Amount of Investment	Got declined as many investors leave the industrial area
	Employment	Fallen performances
	Other	

Question 2

	Critical Problems (Bottleneck)
Natural Environment (Terrain, River, Lake, Coast)	Damages to the levees for as the amount of water discharge rises
Lifeline Infrastructure	Communication got interrupted, goods and logistics were displaced, and communication and electricity for industry suppliers got wrecked
Transportation Infrastructure	Vehicles could not enter or depart of the areas since the access has isolated
Human (Employee)	Employees could not show up to work since they have to take care of their house
Property (Facilities, Equipment)	CPU is destroyed / faulty computers / immersed logistics warehouse and goods were not able to be distributed
Local Community	Population movement / refuges in other cities
Other	

Question 3

	Software	Hardware
Natural Environment (Terrain, River, Lake, Coast)	Early warnings to business community stakeholders, recoveries of industrial locations (regulation)	Elevating the roads

Lifeline Infrastructure	Purchasing radio communications for every single areas, making communication nets	Electrical substations were raised
Transportation Infrastructure	Consultant, Standard Operating Procedure (SOP) -> Internal or external	Creating water absorption systems, manufacturing transportation pathways
Human (Employee)	Employment outreach, relocation services or employee relocation	Housing employees
Property (Facilities, Equipment)	Preparing evacuation equipment, preparing company site that is not close to the river.	Building elevations
Local Community	Socialization in communities	Constructing permanent shelters
Other		

Question 1

		Predicted Impact
Local Society	Population (Casualty or Outflow)	Material losses, poverty increase
	Peace and Order (Security)	Crime rates increased
	Community	Disruption in educations, interrupted social activities
	Other	Health (disease outbreaks), stress
Local Industry (Economy)	Amount of Production (Ex Annual GDP)	Industrial production got weakened, supplies got disrupted
	Number of Companies (Ex: Bankruptcy)	Insolvent
	Amount of Investment	Investors ran out of money, stocks fell
	Employment	Layoffs, the employees were not present, the production process got suspended
	Other	Import and export logistics disrupted

Question 2

	Critical Problems (Bottleneck)
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Natural Environment (Terrain, River, Lake, Coast)	Damage to watersheds, landslides, loss of catchment areas, and waste (shallowing and narrowing),
Lifeline Infrastructure	The drains got smashed up, water got polluted
Transportation Infrastructure	Bridges were cut off (distribution disrupted), holes, rails got vanished, roads got smashed
Human (Employee)	Not present, jobless, sick and stressed
Property (Facilities, Equipment)	Archives and documents were lost, machineries and offices were submerged, problems with logistics
Local Community	Supply problems, polluted environments, banned trading activities
Other	

Question 3

	Software	Hardware
Natural Environment (Terrain, River, Lake, Coast)	Regulations of the river upstreams to downstreams, updates with integrated watershed regulations	River normalization
Lifeline Infrastructure	Disaster mitigation system of PLN (electricity) and PDAM (water)	Road improvement alternatives, levee constructions, water pump and rubber boat supplies
Transportation Infrastructure	Establishments of rapid response team of a disaster, motor vehicle safety regulations	Developing an alternative road access, launching car pumps

Human (Employee)	HR training for emergency response teams, socialization of flood	Constructing shelters in a region near the industrial area
Property (Facilities, Equipment)	Integrated logistics system	Constructing of recharge wells and warehouse logistics
Local Community	Reinforcing a system area for a certain disaster	Shelters and emergency lanes
Other		

Additional Note:

In addition to the impact of disasters, it also needs to consider the preventive action for the business continuity in the industrial area of Karawang and Bekasi. One of the major problems of the water resources management is from being integrated downstream to upstream. The Citarum-Cibeet River Flow Scheme has three dams: Cirata, Jatiluhur, and Saguling. In the other side, the water from Bekasi and Cianjur Regency is completely uncontrolled for the reason that they only have one dam (Cibeet Dam).

Question 1

		Predicted Impact
Local Society	Population (Casualty or Outflow)	Disease, death, health declining, reduced incomes
	Peace and Order (Security)	A lot of number of crimes and beggars
	Community	Disruption of traffic safety, inhibition of mobilization, restlessness (uneven relief)
	Other	
Local Industry (Economy)	Amount of Production (Ex Annual GDP)	Decline in productivity shrank to 10% (for 2 weeks)
	Number of Companies (Ex: Bankruptcy)	Around 50% of companies stopped working temporarily
	Amount of Investment	The decrease in investment, dropped to 25%
	Employment	Workforce laid off (creating productions were banned)
	Other	

Question 2

	Critical Problems (Bottleneck)
Natural Environment (Terrain, River, Lake, Coast)	Levee breached, the river overflowed
Lifeline Infrastructure	Power outages lasted for 3 weeks, interrupted supply of clean water for 30 days, the communication broke up for a week
Transportation Infrastructure	Bridges and roads got shattered and/or flooded, railways got flooded
Human (Employee)	Employees were absent from their occupations for a month, having health risks, refusing to work
Property (Facilities, Equipment)	Disruption in production process, logistics were disrupted (submerged), poor industrial equipments
Local Community	Unable to attend school, disruption of orders
Other	

Question 3

	Software	Hardware
Natural Environment (Terrain, River, Lake, Coast)	A memorandum of understanding (MOU) or regulations related to integrated disaster management, emergency response policies modifies into something much more easier or shorter, uncomplicated regulations for private power supply	Channel normalization and improvements, constructing levees making artificial lakes or ponds
Lifeline Infrastructure		Increasing life support and infrastructure systems
Transportation Infrastructure		Repairing rigid roads
Human (Employee)		Making dormitories or shelters

Property (Facilities, Equipment)	(electric synergy) between private and the government	Opening logistics centers in an industrial area with a minimum of 2 weeks for the stock anticipation, the provision of inflatable boats
Local Community		Making support or evacuation shelters even more significant
Other		

C. CLOSING

Summary

The number participants in today's workshop have a total of 57 people: 42 people are participants, 15 were from JICA study team, and also a facilitator. The 42 participants came from the government, private sector, infrastructure, and other life support facilities.

Schedule for Workshop 3:

- Delivery of homework to participants : April 14, 2014
- Homework is sent back to the study team : April 30, 2014
- Workshop 3 (Proposed) : May 26, 2014

Additional presentations from KIIC

The KIIC industrial area has reached to 1200 ha. It already has ISO 900, ISO 14000, and OHSAS. In year 2013, KIIC awarded as the best industrial region and also possesses many independent infrastructures (electricity, gas, WTP / STP, drainage, water tower & telecommunication, direct highway access, security and fire brigade). KIIC has water ponds in the mainland as a place to hold the water even longer.

LIST OF ATTENDANCES:

1. PT. SHARP
2. PT. Jasa Marga
3. PT. KAI
4. PT. Telkom - Karawang
5. PT. TMMIN
6. KODAM III/SOPS
7. PT. Telkom - Bekasi
8. PJT (Jatiluhur)
9. UKM Kemenkop & UKM
10. PT. Jasa Marga
11. Lookman Djaya
12. MM2100
13. Industry and Trade Agency – West Java Province
14. Highway and Irrigation Agency – karawang Regency
15. PT. HM Sampoerna
16. Regional Development and Planning Agency – West Java
17. PT. SEID
18. Communication and Information Agency – Bekasi Regency
19. Public Protection Agency
20. Fire Agency
21. PDAM Tirta Tarum Karawang
22. Social Agency – Karawang Regency
23. PT. KBN
24. JICA
25. Highway and Irrigation Agency
26. Regional Development and Planning Agency – Karawang Regency
27. Environmental Agency – Bekasi Regency
28. PT. HM Sampoerna
29. Environmental Agency – Karawang Regency
30. Transportation and Communication Agency – Karawang Regency
31. BNPB

32. Disbimarta – Bekasi City
33. Disaster Mitigation Agency - Bekasi
34. Kabar Gapura
35. Transportation Agency – Bekasi City
36. PT. HM Sampoerna
37. Industrial Ministry
38. Public Protection Agency - Karawang
39. KIIC
40. PDAM – Bekasi Regency
41. Regional Development and Planning Agency - Bekasi



Workshop 2 for Area BCP Formulation, the Philippines for

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

February 20, 2014, CRIMSON Hotel, Alabang, Muntinlupa City, Manila

A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Participants

Country	Name	Organization	Position
Advisory Sub Group 1			
Philippines	BrigGen Romeo Fajardo	Office of Civil Defense (OCD)	Acting Deputy Civil Defense Administrator
Philippines	Susan M. Cruz	OCD-NCR	Regional Director
Philippines	Amy Daura M. Gumboc	OCD-NCR	Training Officer
Philippines	Corazon T. Jimenez	Metropolitan Manila Development Authority (MMDA)	USEC/GM
Philippines	Richard P. Engasa	National Economic and Development Authority (NEDA) Regional Office-Calabarzon (IV-A)	Economic Development Specialist (EDS) 1
Philippines	Jesus I. Barrera	Cavite Provincial Government	
Philippines	Aldwin M. Cejo	Provincial Disaster Risk Reduction Management Office (PDRRMO)	CAO-I
Philippines	Atty. Norma B. Cajulis	Cavite Economic Zone (CEZ), Philippine Economic Zone Authority (PEZA)	Zone Administrator
Philippines	Madico Ada (Medico)	PEZA - CEZ	Representative
Philippines	Ramon S. Lacap, Jr.	PEZA - CEZ	Engineer III
Philippines	Renato U. Solidum	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	Director
Philippines	Yolanda M. Aguilar	Mines and Geoscience Bureau (MGB)	Supervising Sci. Res Specialist
Advisory Sub Group 2			
Philippines	Paul Chinayog	OCD	Staff
Philippines	Mateo S. Barro	OCD	
Philippines	Elvis S. Cruz (representative)	OCD Region IV-A	Assist. Regional Director
Philippines	Vicente Guidote	Laguna Provincial Government	DRRM Officer
Philippines	Darianne M. Natividad	Provincial Government Cavite Office of Public Safety (PG-COPS)	PSO III
Philippines	Claudette Trixia M. Flores	PG-COPS	PR Officer III
Philippines	Adelina C. Santos-Borja	Laguna Lake Development Authority (LLDA)	Chief, Intrn'l Linkages & Research Dev Unit
Philippines	Oscar Cruz	Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)	Senior Weather Specialist
Philippines	FSI Farida Ymballa	Bureau of Fire Protection (BFP)	Fire Marshall
Private Sector Sub Group 1&2			
Philippines	Grace Morella	Philippine Chamber of Commerce and Industry (PCCI)	Manager
Philippines	Teresita Leabres	Philippine Chamber of Commerce and Industry (PCCI)	Regional Gov.
Philippines	Virgilio Lorenzo	Laguna Chamber of Commerce and Industry	President

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Participants

Country	Name	Organization	Position
Philippines	Edwin Tirona	Laguna Techno Park	Vice President for External Affairs
Philippines	Rona S. Sañez	Laguna Techno Park	Marketing Manager
Philippines	Eric De Pedro	ROHM Electronics Phils Inc.	Section Manager
Philippines	Emerline Malicden	ROHM Electronics Phils Inc.	
Philippines	Gerardo Castillo	Yakazi-Torres	ADR/ Safety Officer
Philippines	Fidel Eblasin	Yazaki-Torres	
Lifeline Group			
Philippines	Arnel C. Antonio	Department of Energy (DOE)	Senior SRS
Philippines	Marie Angela D. Delos Santos	Department of Transportation and Communication (DOTC)	Exe. Assistant 1
Philippines	Conrad P. Soriano	Maynilad Water Services, Inc.	Head, Safety Health Dept.
Philippines	Jason Brasileno	Manila Water Company, Inc.	Business Continuity Head
Philippines	Marco R. Carlos	Manila Electric Company (Meralco)	
Infrastructure Group			
Philippines	Christopher Ornum	Philippine Ports Authority (PPA)	Engineer
Philippines	Michael Angeles	Department of Public Works and Highways (Region IV-A)	Engineer II
Philippines	Conrad Joseph Perez	Department of Public Works and Highways (Region IV-A)	Engineer II
Philippines	Eduardo N. Villarín	Skyway (representative of Col Maralit)	Deputy Head-TMSD
Philippines	Dave Warren I. Evangelista	Cavite Expressway (CAVITEX)	
Observer			
Philippines	Amy Daura M. Gumboc	OCD -NCR	Training Officer
Philippines	Myra Nazarre	Metropolitan Manila Development Authority (MMDA)	Chief of Staff of GM
Philippines	Pablo R. Bautista Jr.	MMDA-FCIC	Assist. Head
Philippines	Renato Brion	Department of the Interior and Local Government (DILG) - NCR	Regional Director
Philippines	Teresita Fortuna	Department of Science and Technology (DOST)	Regional Director
Philippines	Benjie Barbosa	Department of Social Welfare and Development (DSWD)	Program Officer
Philippines	Maricel B. Regachuezo	City Disaster and Risk Reduction Management Office (CDRRMO)	Administration
Philippines	Antonino Z. Lu	City Disaster and Risk Reduction Management Office (CDRRMO)	CDRRMO Officer OF Sta. Rosa

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A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

JICA and JICA Study Team

Country	Name	Organization	Position
Japan	Hideaki Matsumoto	JICA Headquarter Office	Disaster Management Division1
Japan	Hayato Nakamura	JICA Philippine Office	Project Formulation Advisor (Disaster Management)
Japan	Takaaki Kusakabe	JICA - Office of Civil Defense	JICA Expert
Japan	Masakazu Takahashi	JICA - AHA Centre Study Team	Team Leader
Japan	Yoshiyuki Tsuji	JICA - AHA Centre Study Team	Deputy Team Leader / Area BCP
Japan	Shukyo Segawa	JICA - AHA Centre Study Team	Expert on Risk Assessment
Japan	Shiro Matsunami	JICA - AHA Centre Study Team	Coordinator
Philippines	Ramon J. Santiago	JICA - AHA Centre Study Team	National Coordinator
Philippines	Josephine R. Sy	JICA - AHA Centre Study Team	Project Staff
Philippines	Rizza Mae C. Yson	JICA - AHA Centre Study Team	Project Staff
Philippines	Lynn P. Melosantos	Philippine Institute of Volcanology and Seismology	Facilitator
Philippines	Alex Nicolas P. Tamayo	University of the Philippines	Facilitator
Philippines	Claire S. Pantoja	University of the Philippines	Facilitator
Philippines	Mari Aven T. Perez	University of the Philippines	Facilitator
Philippines	Mariam Jayne M. Agonos	University of the Philippines	Facilitator
Philippines	Sheila Ruth T. Magdaraog	University of the Philippines	Facilitator

**Workshop 2 for Area BCP Formulation, the Philippines
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

February 20, 2014, Crimson Hotel, Alabang, Muntinlupa City, Manila, Philippines

Agenda

February 20, 2014, Tuesday

Agenda	
8:30-9:00	Registration
9:00-9:20	<p>Welcome Address</p> <p>Bgen.(Ret) Romeo F. Fajardo Deputy Administrator Office of Civil Defense</p> <p>Group Photo Session</p>
9:20-10:10	<p>Inputs from the Study Team and Q&A</p> <p>Review of Area BCP /BCM and Orientation of Workshop Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Review of Disaster Scenario and Examples of Impact on Infrastructure Mr. Shukyo Segawa Team Member, Leader of Disaster Risk Assessment</p> <p>Bottlenecks, and Examples of Impacts on Local Economy and Industries (including Summary of Homework 2) Mr. Yoshiyuki Tsuji Deputy Leader of the Study Team</p> <p>Grouping and Instruction for Group Work</p>
10:10 -10:30	Coffee Break
10:30-11:50	Group Work

	Guided by Mr. Yoshiyuki Tsuji
11:50-12:35	Presentation by the Groups and Q&A Guided by Mr. Yoshiyuki Tsuji
12:35-12:50	Wrap up Dr. Masakazu Takahashi Leader of the Study Team
12:50-13:00	Closing of the Workshop Mr. Hayato Nakamura Project Formulation Advisor (Disaster Management) JICA Philippines
13:00	Adjournment
13:00-14:00	Lunch

MC: Ramon Santiago

Summary of Group Work at 2nd WS, Manila, the Philippines (1/5)

Name		Advisory Sector Group 1	Advisory Sector Group 2	Private Sector 1	Private Sector Group 2	Infrastructure	Lifeline	
		Ms. Sheila Ruth T. Magdaraog	Ms. Mari Aven T. Perez	Mr. Alex Nicolas P. Tamayc	Ms. Mariam Jayne M. Agonos	Ms. Lynn P. Melosantos	Ms. Claire S. Pantoja	
Q1 (1/2)	Local Community	Population (Casualty or Outflow)	<ul style="list-style-type: none"> *10% fire casualties *10% heavy damage to houses *20% moderate damage overall *Deaths of about 10% of the population 	<ul style="list-style-type: none"> *there are more predicted casualties if the disaster hit the area during nighttime 	<ul style="list-style-type: none"> • Death, injuries, illness will spread, missing, depression, displacement • Casualty-many living in low cost rented houses. Injury may be great, death increase in low standard house • Where to put the death will be a problem, lack of mortuary or crematorium 	<ul style="list-style-type: none"> • Upward downward movement will cause 20% casualty • Based from 1990 earthquake, they will go to resettlement areas • 10-20% total damage 	<ul style="list-style-type: none"> manpower shortage. forced evacuation due to damaged houses 	<ul style="list-style-type: none"> poor handling of corpses (retrieval, mortuary, identification) may lead to sickness among the survivors or even more deaths
		Peace and Order (Security)	<ul style="list-style-type: none"> *Looting in densely populated areas/urban centers *Fire during and after earthquake 	<ul style="list-style-type: none"> *Looting *Psychological Distress 	<ul style="list-style-type: none"> • Increase in crimes, eg, looting • Theft, robbery • Absence of peace officers • Nobody to respond to crimes • Control over looting nad panic may be low since police and barangay officials will be among those affected • Breakdown of peace and order 	<ul style="list-style-type: none"> • Blue alert: order still retains • Looting will be possible • Minor security risks because foods will be available • Level of security will depend on local police 	<ul style="list-style-type: none"> Chaos looting 	<ul style="list-style-type: none"> * breakdown of peace and order may result from the scarcity of resources (lifeline, transportation), damaged facilities/properties * incidence of crime may result from the breakdown of peace and order * “Breakages of main and water delivery lines from ground shaking rendering services to be unavailable for some days or partial unavailability for hours.” Jason, Manila Water * “Hoarding of primary needs (food and water) by affected individuals or groups can cause massive panic and chaos when resources are scarce.” Jason, Manila Water
		Community	<ul style="list-style-type: none"> *Migration of residents from densely populated areas to the less densely populated areas 	<ul style="list-style-type: none"> *Psychological Effects 	<ul style="list-style-type: none"> • Chaos, hunger, emotional devastation, search for family members • Accessibility to major and minor facilities (hospital, airport, seaports) • Disruption in the educational sector • Cessation of jobs, no income, usual and routinary activities paralyzed • Hoarding , overpricing of commodities • Availability of various resources such as food, medicines, communication, power, money, etc. • Psyche of common workers will be towards self preservation • Small public hospitals in the area, more private but doctors are not immediately available 	<ul style="list-style-type: none"> • Social disorder • No concrete program/ livelihood • Example is in Calcuan, Laguna, prostitution became evident in exchange for food 	<ul style="list-style-type: none"> • Low morale •hunger •Food shortage •Poor communication services •Poor transportation connection and high cost to hinterlands •Stranded passengers •Disruption of vehicular flow •Some areas made inaccessible due to damaged roads 	<ul style="list-style-type: none"> *sickness among the survivors or even more deaths may result from the - constant threats of liquefaction - contamination, mismanagement, or prolonged unavailability of resources (lifeline, transportation) - breakdown of peace and order - incidence of crime - poor handling of corpses properties may be lost if not damaged
		Others	<ul style="list-style-type: none"> *20% of population injured *10% heavily damaged public buildings 	<ul style="list-style-type: none"> *positive effects- opportunities stemming from the needs of those affected by the earthquake 	<ul style="list-style-type: none"> • Damage on road network and infrastructure 	<ul style="list-style-type: none"> • Post-traumatic disorder • Family member casualty • Needs de-briefing/ counseling 	<ul style="list-style-type: none"> Increased price of commodities 	

Summary of Group Work at 2nd WS, Manila, the Philippines (2/5)

Name		Advisory Sector Group 1	Advisory Sector Group 2	Private Sector 1	Private Sector Group 2	Infrastructure	Lifeline	
Q1 (2/2)	Local Industry (Economy)	Productivity	*5% decrease in annual income (services)	*Decrease in Productivity	<ul style="list-style-type: none"> Reduces production output or zero output when no immediate recovery plan is available Damaged equipment No raw materials, no workers Production will totally stop for safety reasons 	<ul style="list-style-type: none"> No production for 1 week, depending on actual damage 	Shortage of supply of basic necessities Cargo throughput reduced by 50% at port	<ul style="list-style-type: none"> production will be put to a halt due to: constant threats of liquefaction lost if not damaged facilities/properties prolonged unavailability of resources (lifeline, transportation) breakdown of peace and order; incidence of crime;
		Number of Companies (Ex. Bankruptcy)	*Closing down of 5% of all companies	*Temporary to Permanent closure of business	<ul style="list-style-type: none"> Closure of work stoppage of ecozone companies Reduced investment till recovery Inability of companies to pay taxes and submit reports Suppliers will also stop delivery for safety and security reasons 	<ul style="list-style-type: none"> The most affected companies will be the small scale companies and they will be bankrupt 30 % of the big companies will slow down 		some companies may never recover as a result of: <ul style="list-style-type: none"> contamination, mismanagement, or prolonged unavailability of resources lost if not inoperative facilities/properties decrease in production absenteeism - "Those whose source of livelihood are based on the natural environment will be severely affected e.g. farmers, fishermen. There will be loss of livelihood and income." Conrad, Maynilad
		Investment	*Around P 2 Billion in losses	Decrease in investment	<ul style="list-style-type: none"> Industries have to increase capital investment to provide for individual basic recovery plan 	<ul style="list-style-type: none"> 5% from small companies will be bankrupt 	Additional amount of investment for repair of damaged equipment and infra	<ul style="list-style-type: none"> investment value will drop
		Employment	*50,000 employees will be laid off	Decrease in employment	<ul style="list-style-type: none"> Loss of income and job for 10 mos to 1 year Reduces production or zero production causes supply chain effect and will reduce economic growth No work, no pay People/employee will first stare and care for their family and homes (absentees) Company will be foresee to shell out loans 	<ul style="list-style-type: none"> 30% loss of employment Decrease in manufacturing 	<ul style="list-style-type: none"> Loss livelihood opportunities Employees unable to report for work Mass lay-off due to bankruptcy or reduced production 	<ul style="list-style-type: none"> absenteeism as a result of physical or mental incapacity and deaths
		Others	*	Opportunities for employment for those who are less affected by the earthquake	<ul style="list-style-type: none"> Increase insurance risk No investors because of damaged basic requirements of power and communication infrastructure 			<ul style="list-style-type: none"> breakdown of information/knowledge management (records, contacts)

Summary of Group Work at 2nd WS, Manila, the Philippines (3/5)

Name		Advisory Sector Group 1	Advisory Sector Group 2	Private Sector 1	Private Sector Group 2	Infrastructure	Lifeline
Q2	Natural Environment (Terrain, River, Lake, Coast)	*Strong ground shaking; liquefaction i.e. subsidence, fissuring of roads in coastal areas = damage to port, water pipes, and electrical posts = unpassable roads	*Ground rupture *Mangrove Destruction *Liquefaction *Lower Water Quality *Landslide *Change in River Course	• Flooding to low lying areas • Liquefaction of coastal areas or areas close to lakes • Enlargement of lake and river areas • Damaged to livestock, agricultural, fish and fowl-displaced habitat	• Liquefaction • Subsidence • People occupying the 12.5 meter radius easement of Laguna Lake • Cavite area has possibilities of 1.5 meter-high tsunamis	• River beds dry up • Agricultural lands flooded • Landslide obstruct roads	• unavailability of resources • damaged resources • contamination of resources • mismanagement of resources • “Waste water may not be treated properly if water treatment facilities became unavailable. This may accidentally be released untreated to waterways. Ground water may also be contaminated.” Jason, Manila Water
	Lifeline Infrastructure	*Water: community-disruption of water supply longer than industry zone *Disruption of power and communication lines = decreased access to basic services = insufficient water supply for firefighting = decreased production and efficiency = delayed rescue efforts	*Water Supply *Communications	• Destruction of medical facilities, water facilities, telecom facilities, food supply	• Communications, Electricity, and Water will be down by 50%	• Telecommunications are down • Water lines and pipes are broken • Powerlines are down	• liquefaction • damages to pipelines from ground shaking • partial/total collapse of facilities • power outages • loss of communication • “Power outages. Recovery will depend on damage to backbone power infrastructures i.e., substations, substation poles.” Marco, Meralco • “Liquefaction has more damaging effect to substations than ground shaking.” Marco, Meralco
	Transportation Infrastructure	*Road systems unpassable due to liquefaction, debris *Damaged seaports = limited rescue operations = decreased inflow and outflow of roads	*Damaged Infrastructure *Problematic Traffic Flow	• No transportation • Technopark and ecozones in Sta. Rosa have roads but they can be easily blocked for emergency vehicles to use • How to bring the injured to the hospitals and availability of doctors • Roads are made crossing rice fields. They may collapse easily causing travel in them difficult • Ports, roads, bridges restoration	• Fault line effect on roads along San Pedro to Calamba (Laguna) • Liquefaction on Cavite Roads	• Roads, bridges collapse Cavite, potentially 7 bridges and 1 viaduct can collapse • SLEX, 1 km of skyway at Cupang, Muntinlupa may collapse, viaduct at Alabang and Calamba At Manila seaport, damage to berthing lengths or piers (assumed 50%)	• damaged roads and bridges • inaccessible roads
	Human (Employee)	*Decrease in labor force; = decreased production = slower productivity = psychological stress	*Stranded Employees *Psychological Stress	• Damage to the shelters of employees thus failure to go to work • Will ask for gov’t assistance and financial loans from the company • Emotional stress to employees especially whose family are affected by casualties • Financial impact to employees	• Cannot report due to damaged houses’ roads • Casualty of family members • Death	• Casualties – injuries and death • Psychological effect, such as depression	• (physical or mental) incapacity • absenteeism
	Property (Facilities, equipment)	*Facilities and equipment breakdown = decreased production, operations, labor	*Damaged Properties	• Total damage of power substation • Damaged water supply line • Facility and machinery need longer testing time before declared safe to operate • 50% damaged telecoms system	• 30% total damage • 40% partial damage	• Damage to power supply and gen-set • Damage to machinery, equipment • Damage to handling equipment, such as gantry crane, quay crane	• losses: damages, hoarding, looting
	Local community	*Government buildings damaged; *Loss of leaders; = government services delayed and disrupted; = loss of data	*Damaged Shelter *Lack of Supplies	• Rendered homeless, no basic needs, food, clothing, shelter • Local community may seek shelter inside the company grounds if houses are unsafe or burned	• Social unrest • No peace of mind • Unproductive • Cannot/ does not try on own	Damage to homes, educational facilities and hospitals	• (physical or mental) incapacity • obstinacy • “Lack of manpower to attend to the affected community medical personnel, counseling” Conrad, Maynilad
	Others		*Sanitation and Health *Epidemic Diseases	• No insurance coverage for force majeure or acts of God.			• breakdown of information/knowledge management (records, contacts)

Summary of Group Work at 2nd WS, Manila, the Philippines (4/5)

Name		Advisory Sector Group 1	Advisory Sector Group 2	Private Sector 1	Private Sector Group 2	Infrastructure	Lifeline	
Q3 (1/2)	Soft Measures	Natural Environment (Terrain, River, Lake, Coast)	*Assessment of hazards and risks in the community (existing)	*Public Awareness Campaigns	<ul style="list-style-type: none"> Enactment of local policies/ordinances on environmental related, infrastructure mitigating facilities Hazard maps should be made available 	<ul style="list-style-type: none"> Identify alternate route Correction capability improvement Know the problem and prepare a solution Updates on fault site and effects 	<ul style="list-style-type: none"> Massive tree planting – mangrove forest for tsunami protection Assessment of landslide-prone areas 	<ul style="list-style-type: none"> formulation and implementation of ABCP establishment of memorandum of agreements(MOAs) among experts establishment of alternate command posts, sources Organizations to run off-grid power supply system.” Marco, Meralco network augmentation and training dissemination of Geohazard maps, other signage, and information materials reinforcement of ABCP, MOAs, trainings Deployment of water tanking” Jason, Manila Water Mobile treatment plants for quick supplies” Jason, Manila Water production of earthquake damage report
		Lifeline Infrastructure	*Designation of priority and alternate routes	*Planning	<ul style="list-style-type: none"> Electricity and water suppliers should communicate with zones on status of recovery and schedule 	<ul style="list-style-type: none"> Educate stakeholders on the possible effects Creation of restoration plans 	<ul style="list-style-type: none"> Compliance to international standards and design 	
		Transportation Infrastructure	*Regular inspections of roads, bridges, etc. (i.e. load, limit)	*Alternative routes	<ul style="list-style-type: none"> Resumption of transport system ASAP (bus, jeepney, ports, ships, airports, ships) 	<ul style="list-style-type: none"> Identify alternate routes Consider use of waterways Readiness of restoration plan 	<ul style="list-style-type: none"> Assessment of the structural condition of all infrastructure (roads, bridges, ports, railroads) For PPA to designate Batangas port as alternative port in place of Manila in case of emergency Risk-sensitive design of infrastructure Traffic rerouting plan 	
		Human (Employee)	<ul style="list-style-type: none"> Establishment of cooperative structures Securing employment and livelihood 	<ul style="list-style-type: none"> Psychological Debriefing Livelihood Calamity Loan 	<ul style="list-style-type: none"> Earthquake drills done as well as Conduct regular fire and earthquake drills Mandatory disaster preparedness program 	<ul style="list-style-type: none"> Awareness program/ what to do Earthquake/ BCP drill 	<ul style="list-style-type: none"> Conduct moral recovery program Access to emergency funds for employees 	
		Property (Facilities, equipment)	*Regular inspection of the structural integrity of facilities	*Risk Financing	<ul style="list-style-type: none"> Facility and equipment checking for safety of employees after the calamity Implementation of building code to withstand high intensity earthquake 	<ul style="list-style-type: none"> Insurance Structure inspection Location check 	<ul style="list-style-type: none"> Risk transfer by insuring properties 	
		Local community	<ul style="list-style-type: none"> Designation of shelters Formation and availability of emergency urban search and rescue teams Formation and availability of emergency medical response teams 	<ul style="list-style-type: none"> Psychological Debriefing Strengthen coordination with all stakeholders (Local Gov't Units, Industries, communities etc) 	<ul style="list-style-type: none"> Establishment of coordination system Avoid politicking during disasters and focus on rescue/rehabilitation by gov't 	<ul style="list-style-type: none"> awareness program/ education evacuation plan identify evacuation area 	<ul style="list-style-type: none"> Promote a culture of self-reliance Formulate community evacuation plan Disaster training and education Community-led forum for sharing of ideas on how to mitigate the impacts of hazards 	
		Others	<ul style="list-style-type: none"> Formulation of BCP Priority recovery Cooperation between public and private agencies/institutions disaster risk reduction plan disaster risk management plan disaster risk reduction contingency plan brainwashing and reorientation of ABCM and DRM 	<ul style="list-style-type: none"> Creation of Incident Command System Risk and Hazard assessment Formulate BCM encouragement of the local industries to create an emergency response fund 	<ul style="list-style-type: none"> Ecozone policy for emergency cases. What to don and how to do for companies covered LGU should assign personnel in-charge of disaster risk management division who is not a political appointee to ensure program continuity Private sector to lead BCP funds Coordination with stakeholders Value formation during disaster, no blaming on deficiencies of government or other entities Insurance coverage should include force majeure damages Review/revise building codes adapted to high intensity earthquakes The president should call for international help immediately 	<ul style="list-style-type: none"> relief and rehabilitation program livelihood programs 	<ul style="list-style-type: none"> Access to funds for livelihood recovery 	

Summary of Group Work at 2nd WS, Manila, the Philippines (5/5)

Name		Advisory Sector Group 1	Advisory Sector Group 2	Private Sector 1	Private Sector Group 2	Infrastructure	Lifeline	
Q3 (2/2)	Hard Measures	Natural Environment (Terrain, River, Lake, Coast)	*Increase number of inland, offshore rescue vehicles and equipment for risk assessment	*Mangrove Tree Replanting *Engineering Interventions *Proper Waste Management	• Construction of regulating ponds by various real state developers • Clean-up drive after calamity	• Controlled extraction of underwater • Reinforcement of structures	• Armor rock – breakwater coastal protection in Cavite • Construction or emplacement of slope protection in Cavite and Laguna landslide-prone areas	
		Lifeline Infrastructure	*Installation of emergency communication systems *Provision of alternate power supply	Restoration of Facilities	• Portable water purification system distribution • Portable power generators distribution • A technology for quick dry emergency road construction • Stocking of food supply and availability of facility/standby gensets	• Availability of gen-set materials • Hydraulic equipments, satellites • Heavy equipment	Strengthening or retrofitting of lifeline structures	
		Transportation Infrastructure	*Construction of alternate roads *Strengthening of ports *Construction of alternative airport	*Engineering Interventions	• Access road outside the ecozone should be wider and secure bridge or be reinforced • Rescue vehicle should be multiplied and maintained for immediate response (gov't disaster coordinating committee • Immediate clearing of operations of affected areas • Road infra standards should be enhanced (earthquake resistance)	• Construction of alternate route • Emergency rescue vehicle • Construct additional ports	Temporary bridges ready to be employed retrofitting of infrastructure to be more resistant prior to disaster Provision of or improvement of alternative routes Alternative Ports	• establishment of alternate command posts, sources →"Organizations to run off-grid power supply system." Marco, Meralco • network augmentation and training • retrofit capabilities, facilities • reinforcement of ABCP, MOAs, trainings →"Deployment of water tanking" Jason, Manila Water →"Mobile treatment plants for quick supplies" Jason, Manila Water
		Human (Employee)	*Construction of stress debriefing and counseling centers	*Camp Coordination and Management *organized group of rescuers	• Military response to keep peace and order should be immediate • Discipline professionalism concerted for speedy recovery	• Provision of emergency kit and equipment • Insurance • Financial support		• Repair and rehabilitate of backbone facilities." Marco, Meralco
		Property (Facilities, equipment)	*Establishment of emergency and early warning systems and devices *Strengthening of critical facilities	*Provision of Safety Measures	• LGU should invest on tools and equipment to be used during disaster/calamity	• Insurance • Emergency equipment • relocation	Provide additional back-up generator sets	
		Local community	*Construction of disaster resilient evacuation centers *Putting up of a mirror site containing government data *Provision of more emergency response team equipment	*Management of the dead and missing *Breakwater construction *Procurement of rescue and emergency equipment *Organized group of volunteers	• Insure food security, agriculture products, livestock, fish • Funds • Designation of evacuation centers	• ready relocation site with toilets • available relief goods • availability of rescue equipments	Strengthen school buildings that will be used as evacuation centers	
		Others	*reinforcement of buildings, communication, facilities, and lifeline infrastructure	*Centralized Stockpiling	• Use batangas port as alternate for manila port	• medicine		

Workshop 2 for Area BCP Formulation, Vietnam
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

February 27, 2014, Nam Cuong Hotel, Hai Phong City, Vietnam

A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)
Participants

Country	Name	Organization	Position
Advisory Group 1			
Vietnam	Nguyen Ba Tien	Dyke and Flood & Storm Control Department, Agricultural and	Director
Vietnam	Pham Quoc Ka	Natural Resources and Environment Dept.	Deputy Director
Vietnam	Tran Minh Tuan	Natural Resources and Environment Dept.	Expert
Vietnam	Vu Ba Dung	Planning and Investment Department	Expert
Vietnam	Pham Sy Son	Fire Station	Expert
Private Sector Group 1			
Vietnam	Nguyen Thi Thu Hien	Nam Cau Kien Industrial Zone	Expert
Vietnam	Tran Thi Hong Cam	Dinh Vu Industrial Zone	Expert
Vietnam	Bui Thi Minh Trang	Dinh Vu Industrial Zone	Expert
Vietnam	Vu Tru Tia	Do Son Industrial Zone	Deputy Director
Vietnam	Le Minh Son	Industrial and Trade	Deputy Director
Private Sector Group 2			
Vietnam	Tran Vinh Hoan	Hai Phong Economic Zone Management Board	Vice Director
Vietnam	Tran Thanh Son	Management Board of the Project for Infrastructure Construction of Industrial Zone of Hai Phong	Expert
Vietnam	Phan Cong Minh	VCCI Hai Phong	Expert
Vietnam	Vu Xuan Binh	VCCI Hai Phong	Head Department
Vietnam	Do Thi Kim Thanh	Dinh Vu Industrial Zone	The First Deputy Director General
Infrastructure Sub and Lifeline Group			
Vietnam	Vu Huu Thanh	Dept of Construction	Vice director of Department
Vietnam	Bui Ngoc Nam	Hai Phong Port Authority	Expert
Vietnam	Nguyen Duc Tho	Management Board of the Project for Infrastructure Construction of Industrial Zone of Hai Phong	Director
Vietnam	Le Anh Tuan	Hai Phong Electric One Member Limited Company	Head Department
Vietnam	Bui Tuan Son	Hai Phong Electric One Member Limited Company	Vice Head of Department
Vietnam	Nguyen Quynh Hoa	Hai Phong Water Supply Company	Expert
Vietnam	Nguyen Do Minh Trang	Hai Phong Water Supply Company	Expert
Vietnam	Ha Thi Thuan	Dept of Transportation	Expert
Vietnam	Nghiem Quoc Vinh	Hai Phong Port Authority	Deputy Director

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Participants

Country	Name	Organization	Position
Media Group			
Vietnam	Tran Phuong	Hai Phong Security Newspaper	Reporter
Vietnam	Hoang Thanh Giang	Hai Phong Radio and Television	Reporter
Vietnam	Bui Thi Van Nga	Hai Phong Newspaper	Reporter
Vietnam	Pham Thi Mai Huong	Hai Phong Radio and Television	Reporter
Vietnam	Ho Thi Huong	Hai Phong Electronic Newspaper	Reporter
Observers/Jica-AHA Project Team group			
Japan	Masakazu TAKAHASHI	AHA Center -Jica Project Team	Team Leader
Japan	Yoshiyuki TSUJI	AHA Center -Jica Project Team	Deputy Team Leader
Japan	Shukyo SEGAWA	AHA Center -Jica Project Team	Leader of Natural Disaster Risk
Japan	Akira WATANABE	AHA Center -Jica Project Team	Coordinator
Vietnam	Dinh Van Hung	Geoenvironmental and Territorial Institute	Director
Vietnam	Hoang Minh Nguyet	MC- AHA Centre - Jica Projcet Team	MC
Vietnam	Vu Dinh Toi	VCCI Hai Phong	Expert
Vietnam	Bui Van Ly	Dept of Industry and Trade	Vice Head of Department
Vietnam	Pham Viet Hoa	Space Techonoly Institute	Head of Department
Vietnam	Nguyen Thi Quynh Trang	Space Techonoly Institute	Expert
Vietnam	Nguyen Hung Tien	Space Techonoly Institute	Expert
Australia	Emma Dade	Space Techonoly Institute	Expert
Vietnam	Ngo Gia Trung	Facilitator	
Vietnam	Nguyen Thanh Ha	Facilitator	
Vietnam	Thai Minh Huong	Facilitator	
Vietnam	Nghiem Ba Hung	Facilitator	
Vietnam	Nguyen Tien Dung	Facilitator	
Vietnam	Nguyen Phuong Nhung	Facilitator	
Vietnam	Ngo Thi Minh	National Coordinator	
Vietnam	Bui Bich Ngoc	Intepreter	
Vietnam	Tran Thi Duyen	Rapporteur	

**Workshop 2 for Area BCP Formulation, Hai Phong
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

February 27, 2014, Nam Cuong Hotel, Hai Phong, Viet Nam

Agenda

February 27, 2014, Thursday

Agenda	
13:00-13:30	Registration
13:30-13:50	<p>Welcome Address Mr. Do Trung Thoai Vice Chairman, Hai Phong People's Committee</p> <p>Group Photo Session</p>
13:50-14:55	<p>Inputs from the Study Team and Q&A</p> <p>Review of Area BCP /BCM and Orientation of Workshop (20) Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Review of Disaster Scenario and Examples of Impact on Infrastructure (15) Mr. Shukyo Segawa Team Member, Leader of Disaster Risk Assessment</p> <p>Bottlenecks, and Examples of Impacts on Local Economy and Industries (including Summary of Homework 2) (30) Mr. Yoshiyuki Tsuji Deputy Leader of the Study Team</p> <p>Grouping and Instruction for Group Work</p>
14:55 -15:10	Coffee Break



15:10-16:30	Group Work Guided by Mr. Yoshiyuki Tsuji
16:30-17:15	Presentation by the Groups and Q&A Guided by Mr. Yoshiyuki Tsuji
17:15-17:30	Wrap up Dr. Masakazu Takahashi Leader of the Study Team
17:30	Adjournment

MC: Hoang Minh Nguyet

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formulation for Industrial Agglomerated Areas in the ASEAN Region”

2nd Workshop

Workshop Minutes

13:45 pm: MC Hoang Minh Nguyet started the Workshop. Firstly, she warmly welcomed all participants to the Seminar, and highly appreciated their presence. She also introduced the special participants, Mr. Nguyen Ba Tien, Director of Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department of Hai Phong City, representatives of Hai Phong authorities, representatives from industrial parks, from private companies, from other NGOs, from mass media and other research institute. Last but not least, she introduced Dr. Masakazu Takahashi, Team Leader of the Study Team.

The workshop was the joint cooperation among JICA, AHA Center and Hai Phong authorities and it was among 3 workshops to formulate the Areas Business Continuity Plan for Hai Phong Pilot Area. She overviewed the contents of the workshop today: review of Area BCP/BCM, review of disaster scenario, bottleneck and the group work to identify the impacts of disaster on the local society and industry.

Then Ms. Nguyen introduced Mr. Nguyen Ba Tien to give welcome address.

13:50 pm: Welcome Speech- Mr. Nguyen Ba Tien, Director of Dyke and Flood & Storm Control Department of Hai Phong City.

On behalf of Hai Phong People’s Committee, on behalf of Mr. Do Trung Thoai, Mr. Tien gave the welcome address in the workshops. Firstly he warmly welcomed all the participants to the workshop in Hai Phong today. In his speech, he summarized the important roles of Hai Phong such as biggest port city in the North, one among the most important economic zones in Vietnam, overviewed the industrial parks in Hai Phong in all aspects. He reminded the features of Hai Phong’s terrains, so Hai Phong usually coped with a lot natural disasters and then they acknowledged the important roles of natural disaster management. At the moment Hai Phong city has built a lot of structural and non-structural measures to response to the natural disasters to develop a safe city in disaster. He also overviewed the great disasters occurred in some recent years such as tsunami Indian Earthquake in Indonesia, Thailand, Sri Lanka...., earthquake in 2011 in Japan, earthquake in Thailand 2011, 2012...

In order to ensure the business continuity, JICA and AHA center implemented the project “Natural Disaster Risk Management and Area Business Continuity Plan Formulation for

Industrial Agglomerated Areas in ASEAN Region” and Hai Phong was one among 3 pilot projects. So, Hai Phong authorities commit to implement risk assessment and business continuity to attract more investors in Hai Phong.

Mr. Tien expressed his grateful attitude to JICA when selecting Hai Phong for their research. He also summarized the results of 1st workshop in Hai Phong. He also hoped that in this 2nd workshop, all participants could formulate the Area BCP with high feasibility. He asked the cooperation from all stakeholders to implement this project and the commitment of Hai Phong City. Lastly, he wished the health to the participants and success to the workshop.

- Details of his speech: Welcome Address

14:05 pm: Photo section

14:15 pm: Review of Area BCP/BCM and Orientation of Workshop- Dr Masakazu Takahashi, Team Leader of the Study Team

Firstly Dr. Takahashi showed a promotion video on BCP/BCM. The video took an overview on the whole parts of the project: concepts, objectives, contents, necessity, Area BCM, BCP and so on.

Due to a limited time, so Mr. Takahashi just only talked about some key matters: BCM for a company, area BCM system, workshops for forming Area BCP, outputs of 1st workshop and question in the 2nd workshop.

- Details of his speech: Review of Area BCP/BCM and Orientation of Workshop, WS2_VN_06

14: 35 pm: Review of Disaster Scenario and Examples of Impact on Infrastructure- Mr. Shukyo Segawa, Team Member, Leader of Disaster Risk Assessment

Mr. Segawa reminded that disaster scenario was used in the 1st workshop, and it could be used in this 2nd workshop accordingly.

- Details of his speech: Review of Disaster Scenario and Examples of Impact on Infrastructure, WS2_VN_07

14:50 pm: Bottlenecks, and Examples of Impacts on Local Economy and Industries (including Summary of Home work 2)- Mr. Yoshiyuki Tsuji, Deputy leader of the study Team

- Details of his speech: : Bottlenecks, and Examples of Impacts on Local Economy and Industries (including Summary of Home work 2) – WS2_VN_08.

15:10 pm: Coffee Break

15:25 pm- 16: 50 pm: Group Work, guided by Mr. Yoshiyuki Tsuji

There were 4 sub-groups including Advisory, Private sector I, Private Sector II, and Infrastructure and Lifeline Utility to discuss 03 questions:

Question 1: Impacts on the local society and industry by Disaster

Question 2: Critical Problems (Bottlenecks) for Area Business Continuity

Question 3: Measures for Area Business Continuity

All sub-groups worked very actively and interestingly.

16:50 pm: Group presentation

1. Infrastructure and Lifeline Utility Sub-group gave the first presentation.

Question 1: Impacts on the local society and industry by Disaster

Local Society

- **Population**
 - o Have impact but not significant: dead and injured people at low level
- **Peace & Oder**
 - o Disorder and robbery
- **Community**
 - o Increase prices of commodities due to the lack of supply
 - o Increase sickness and diseases
- **Others:** reduces agricultural production

Local Industry

- **Amount of Production**
 - o Decrease productivity of some main industries such as import-export at ports...
 - o Reduced the production volume of some main manufacture industries such as cement, shipbuilding...
- **Number of Companies**
 - o For big companies: suffered loss and damages but not bankruptcy
 - o For SMEs: suffered huge loss and damages, even bankruptcy

- **Amount of Investment**
 - o There will be decrease of investment
 - o There will be reduction in attraction of investment
- **Employment**
 - o Lack of skillful employees due to the impacts on the transportation
- **Other:** impacts on import/ export activities, tourism, entertainment, normal life of the people.

Question 2: Critical Problems (Bottlenecks) for Area Business Continuity

- **Natural Environment**
 - o Erosion and sedimentation occurred, so impact on the seaway transport, impact on eco-system
 - o Salt water intrusion, rubbish and trash on the flow
 - o Impact on dyke system (broken dyke), change river flow
- **Lifeline Infrastructure**
 - o Telecommunication was frozen
 - o Fresh water scarcity (broken pipeline)
 - o Impact on water supply and drainage
 - o Electricity run out
- **Transport Infrastructure**
 - o Because Hai Phong has a long coast, so there was huge damages to the transportation system in all types
 - o Some islands could be isolated
 - o Disruption of inland and sea ports
 - o Traffic control system damaged
- **Human (Employee)**
 - o Reduction of employees
 - o Lack of high-quality human resources
- **Property (Facilities, Equipment)**
 - o Broken down facilities
 - o Damaged seriously (power supply, machinery, equipment)
 - o Damaged warehouse
- **Local Community**
 - o Damaged the community supply such as food, fresh water...
 - o Utility services reduced
 - o Shortage of labor protection utilities, increase the gaps between demand and supply
- **Other:** impacts on energy security (fuel, gas, electricity), tourism, and entertainment activities

Question 3: Measures for Area Business Continuity

CATEGORY	SOFT MEASURES	HARD MEASURES
- Natural Environment	<ul style="list-style-type: none"> ○ Protect forest ○ Natural reserve 	<ul style="list-style-type: none"> ○ Regular maintenance of disaster control works (dykes, revetment) ○ Dredge rivers, build dams...
- Lifeline Infrastructure	<ul style="list-style-type: none"> ○ Assessment on disaster impacts on specific sector (power, water supply, telecommunication) ○ Provide to the people the list of emergency communication, back up equipment ○ Education on how to make clean water 	<ul style="list-style-type: none"> Enforce lifeline infrastructure Strengthen warehouse
- Transport Infrastructure	<ul style="list-style-type: none"> ○ Comprehensive master plan ○ Study/research on transportation system to reduce negative impacts of disasters 	<ul style="list-style-type: none"> ○ Investment on road ○ Reinforce and conduct regular maintenance ○ Upgrade the drainage system
- Human (Employee)	<ul style="list-style-type: none"> ○ Raising awareness and capacity for employees on disaster management ○ Job creation mechanism after disaster 	<ul style="list-style-type: none"> ○ Increase budget for capacity building activities ○ Equip labor safety facilities ○ Support hospital
- Property (Facilities, Equipment)	<ul style="list-style-type: none"> ○ Study on protection measures for facilities (machinery, equipment) 	<ul style="list-style-type: none"> ○ Equip search and rescue facilities ○ Apply protection measures for facilities
- Local Community	<ul style="list-style-type: none"> ○ Community awareness raising on disaster risk reduction ○ Disaster preparedness plan (evacuation plan) ○ Ensure food security/mental health support 	<ul style="list-style-type: none"> ○ To build strong house, center for evacuation ○ Strengthen school buildings, office building

2. Next, the private sector sub-group 2 also showed their presentation on for 3 questions.

Question 1: Impacts on the local society and industry by Disaster

Local Society

- **Population**
 - o No big human losses but may be many casualties
 - o Certain proportion of population may evacuate from disaster areas.
- **Peace & Order**
 - o No loitering
 - o Serious panics occur among the population
- **Community**
 - o Serious electricity and water shortage
 - o Disruption of communication
 - o Disruption of transport
 - o Shortage of food supply
 - o Serious diseases and casualties may lead to over workload of hospitals

Local Industry

- **Amount of Production**
 - o Serious reduction, disruption of production, especially of industries using much electricity
- **Number of Companies**
 - o Many businesses, especially those with high-tech, haul or stop operation
 - o Harbor and storehouse industries seriously affected
- **Amount of Investment**
 - o There will be decrease of investment
 - o There will be reduction in attraction of investment
- **Employment**
 - o Employees of many businesses, especially those using large. A large section of employees, especially on industries many employees, will not go to work for several days.

Question 2: Critical Problems (Bottlenecks) for Area Business Continuity

- **Natural Environment**
 - o Majority of area, including lakes and ponds, will be submerged
 - o Water and soil are silted by intrusion of sea water
 - o Water and environment will be polluted
- **Lifeline Infrastructure**
 - o Long day power cut-off, taking time to reach full recovery and stability
 - o Long-day suspension of communication
- **Transport Infrastructure**
 - o Various industries and services (harbor, rail, road, airport) are submerged or stop operation

- Supply of materials, especially of enterprises producing consumer goods, are affected
- **Human (Employee)**
 - Dismay and depression will occur among the employees
 - Certain cases death and casualty will occur in enterprises with poor prevention measure
 - Certain proportion of employees may have disease or illness if long-day inundation takes place
 - Business operation of some enterprises with populated employees will be seriously affected
- **Property (Facilities, Equipment)**
 - Equipment machinery, storehouse are damaged or unable to function
- **Local Community**
 - Overloaded patients in hospitals due to sudden high rate of casualties and illness
 - Possible bad coordination between local government, community and businesses to handle/settle problems (communication, handling of human death and casualty, pollution, epidemic ...)

Question 3: Measures for Area Business Continuity

CATEGORY	SOFT MEASURES	HARD MEASURES
- Natural Environment	○ Water purifiers of enterprises	○ Maintenance and widening of lakes/ponds ○ Fortification and expansion of dyke system
- Lifeline Infrastructure	○ Unit generator of enterprises ○ Establishment of hot line	
- Transport Infrastructure	○ Establishment of transport guidance information system, especially for road system	○ Improvement of drainage/slucice system
- Human (Employee)	○ Organization of first aid services ○ Establishment of mobile hospitals	
- Property (Facilities, Equipment)	○ Readymade plates for entrances & doors ○ Building of surrounding wall	○ Heighten machine foundation, workshop floor

<ul style="list-style-type: none"> - Local Community 	<ul style="list-style-type: none"> o Improvement of warning, prevention information system with updated information o Prepared prevention, evaluation scenarios o Organizing disaster response training and rehearsals 	
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3. The 3rd presentation from Advisory Sub-group

Question 1: Impacts on the local society and industry by Disaster

Local Society

- **Population**
 - o No big human losses but may be many casualties
- **Peace & Order**
 - o Transportation orders,
 - o Robbery at small level
- **Community**
 - o Environment security disturbance
- **Others:** production, commerce, services

Local Industry

- **Amount of Production**
 - o Suspension time was about 1 month, so the production reduction was about 10%
- **Number of Companies**
 - o Enterprise would be impacted, but it was difficult to identify the exactly number of bankruptcy companies.
- **Amount of Investment**
 - o There will be decrease of investment
 - o There will be reduction in attraction of investment
- **Employment**
 - o The number of employees reduced due to the negative impacts
 - o Laid-off

Question 2: Critical Problems (Bottlenecks) for Area Business Continuity

- **Natural Environment**
 - o Broken dykes

- Change eco-systems
- Sedimentation, landslide, erosion
- **Lifeline Infrastructure**
 - Affected to electricity, water, communication networks
 - Communication tower collapsed
 - Polluted water supply
- **Transport Infrastructure**
 - All types of transportation shall be damaged, but the damage scale shall be medium.
 - Airport, ports shall be disrupted
- **Human (Employee)**
 - Shortage of human resource due to negative impacts on families and employees
 - Dismay and depression will occur among the employees
 - Health of employees shall be impacted
- **Property (Facilities, Equipment)**
 - Equipment machinery, storehouse are damaged or unable to function
 - Buildings, factory collapsed,
- **Local Community**
 - Need the support from the enterprise to the community and vice versa
 - To share the resources with the community
- **Other:** orders and security, epidemic....

Question 3: Measures for Area Business Continuity

CATEGORY	SOFT MEASURES	HARD MEASURES
- Natural Environment	<ul style="list-style-type: none"> ○ To protect and develop forest ○ Reduce emissions ○ Protect eco-systems 	<ul style="list-style-type: none"> ○ Upgrade dyke systems ○ Protect the coast
- Lifeline Infrastructure	<ul style="list-style-type: none"> ○ To change technology, wireless system 	<ul style="list-style-type: none"> ○ To upgrade facilities ○ To build reserve facilities
- Transport Infrastructure	<ul style="list-style-type: none"> ○ To make transportation plan to response to all requirements of business continuity 	<ul style="list-style-type: none"> ○ To upgrade the damaged routes ○ To construct more alternative routes
- Human (Employee)	<ul style="list-style-type: none"> ○ Raising public awareness on disaster ○ To improve the adaptability, response 	<ul style="list-style-type: none"> ○ To invest the transportation means in disasters

	capacity	
- Property (Facilities, Equipment)	<ul style="list-style-type: none"> ○ Apply design standards ○ Change the plan such as leveling 	<ul style="list-style-type: none"> ○ To construct building in accordance with the standard
- Local Community	<ul style="list-style-type: none"> ○ To raise the awareness of enterprise and community ○ Implement the education in all levels 	

4. The last group made presentation was Private sector sub-group 2

Question 1: Impacts on the local society and industry by Disaster

Local Society

- **Population**
 - Insignificant damages because there is dissemination activities of the local authorities, through the mass media, the people has awareness and preparedness, and there is disaster control department to response to the natural disasters.
- **Peace & Oder**
 - In short time, robbery may occur
 - No strike, no disorder
- **Community**
 - No problem occurs, but in the long time, discrepancy among groups may arise.
- **Others : diseases**

Local Industry

- **Amount of Production**
 - Suspension in a short time, production volume reduce,
- **Number of Companies**
 - Huge loss and damages
 - SMEs without the response plan may suffer huge loss and damage, even bankruptcy
- **Amount of Investment**
 - There will be reduction in attraction of investment
- **Employment**
 - Employees may lay off due to the problems of family or transportation

Question 2: Critical Problems (Bottlenecks) for Area Business Continuity

- **Natural Environment**
 - o Water surge shall affect to the agriculture
 - o Pollution

- **Lifeline Infrastructure**
 - o Under suspension in a short time, run out of electricity, water supply, telecommunication may be frozen in short time

- **Transport Infrastructure**
 - o Suspension in a short time
 - o All types of transportation will be affected

- **Human (Employee)**
 - o Laid-off
 - o Injured

- **Property (Facilities, Equipment)**
 - o Equipments, machinery, warehouse are damaged
 - o Lack of investment for maintenance, improvement

- **Local Community**
 - o Dispute among social groups to protect their own benefit

Question 3: Measures for Area Business Continuity

CATEGORY	SOFT MEASURES	HARD MEASURES
- Natural Environment	<ul style="list-style-type: none"> o Storm and flood control committee checks and instructs before the disasters o In the building plan, pay more attention to leveling, land attitude in case of water surge 	<ul style="list-style-type: none"> o To maintain and upgrade the buildings and facilities to response to the disasters
- Lifeline Infrastructure	<ul style="list-style-type: none"> o Backup plan 	Backup facilities such as generator...
- Transport Infrastructure	<ul style="list-style-type: none"> o To build the streamline to ensure the transportation 	<ul style="list-style-type: none"> o To follow the Master plan (mention to the design in disaster)
- Human (Employee)	<ul style="list-style-type: none"> o Raising public awareness on natural disaster management 	<ul style="list-style-type: none"> o There is incentive policies to encourage employees o Equip labor safety facilities

	<ul style="list-style-type: none"> ○ Promote the job-creation mechanism to support employees after the disaster 	for employees
- Property (Facilities, Equipment)	<ul style="list-style-type: none"> ○ Be carefully prevented for machinery and properties when getting information on disaster. 	<ul style="list-style-type: none"> ○ When constructing the buildings, to pay attention to the design of main properties to prevent floods, inundation... ○ to reserve main materials
- Local Community	<ul style="list-style-type: none"> ○ Improve the mutual support in the disasters 	
- Other	<ul style="list-style-type: none"> Disaster insurance Develop coordination and collaboration mechanism Integrate disaster into city master planning 	

17:35 pm: Closing

Dr. Takahashi highly appreciated the contribution of all participants in the workshops. He summarized some outputs of the workshop. With 51 participants, in which 37 are working members into 4 sub-groups to formulation the Area BCP. He recalled 03 questions in this workshop. Based on the presentations, Mr. Takahashi summarized the results of 03 questions (based on answers of Advisory sub-group). And he also overviewed the process of the project, the need of upgrade the BCM in the future. He talked about the project schedule and plan for next seminars and workshops. Once more time, Dr. Takahashi thanked all the participants for their cooperation.

17:46 pm: Workshop end

Workshop 3 for Area BCP Formulation, Indonesia
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

May 22, 2014, Grand Zuri Hotel, Jababeka-Cikarang, Indonesia

A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Attendants

Country	Name	Organization	Position
Group 1			
Indonesia	Asep Suntoro	District Water Company /PDAM Tirta Tarum Kab. Karawang	KA. Litbang
Indonesia	Dewi Nawang Wulan	Kementerian Koperasi dan UKM	Kabid Penyelenggara
Indonesia	Dendy Harry	BBWS Citarum	Seksi Sungai
Indonesia	Asep Anwar	BBWS Citarum	Seksi Sungai
Indonesia	M. Hidayat	Stasiun Geofisika Klas I Bandung – BMKG	Kepala Stasiun Gest. Bandung
Group 2			
Indonesia	Dadang M	Bappeda Kota Bekasi	Kabid Fisik
Indonesia	Rudi Ruhdiat	BPBD Kabupaten Bekasi	Kabid
Indonesia	Rita Amaliah	BPBD Kabupaten Bekasi	
Indonesia	Muhammad Afdal	PT. Sharp Electronic Ind.	Business & Strategy Plan - AGM
Indonesia	Donny Sumardi	PDAM Kota Karawang	Litbang
Group 3			
Indonesia	Evi Mutia	Bappeda Kabupaten Bekasi	
Indonesia	Bariman	Bappeda Kabupaten Bekasi	
Indonesia	D.K. Adi Yuda	Public Work of West Java Province (Dinas Bina Marga)	Staff
Indonesia	Nanang Prakosa (Time Keeper)	PT. Sharp	New Factory Project Manager
Indonesia	Bima Kawindra	PJT II Jatiluhur	Kabag. Teknik DPA II

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Attendants

Country	Name	Organization	Position
Group 4			
Indonesia	Henny E.	Ministry of Home Affairs	Kasi Mitigasi
Indonesia	Rahmat T.	BMKG / Indonesian Agency for Meteorological, Climatological and Geophysics	Kabid
Indonesia	Fakhrul Alam	BMKG / Indonesian Agency for Meteorological, Climatological and Geophysics	Staff Peringatan Cuaca Dini Cuaca Ekstrem
Indonesia	Rita Rakhmayati	BPLH Kabupaten Bekasi	Kasubid Pemulihan LH
Indonesia	Irwansyah	Management of KIIC	Deputi GM KIIC
Indonesia	Wahyu M.	PT. Sharp Electronic Ind	Ass. Man. ICM
Other Group			
Indonesia	E.Y. Taupik	BAPPEDA Kab. Bekasi	Kabid Fisik
Indonesia	Muttaqin	Diskominfo Kab. Bekasi	Sie Penyajian Data
Indonesia	Titot S.	Disperindag Kab. Bekasi	
Indonesia	Anny Isgiyati	BNPB	Dir. PM
Indonesia	Edi Santoso	PT. MMID-MM2100	TERAGA
Indonesia	P. Deni R.	PT. TMMIN	Ext. Affairs

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A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

JICA and JICA Study Team

Country	Name	Organization	Position
Japan	Hideaki Matsumoto	JICA Headquarter Office	Deputy Director, Disaster Management Division
Japan	Nami Kasahara	JICA Indonesia Office	Project Formulation Advisor (ASEAN Partnership)
Indonesia	Janggam Adhityawarma	AHA Centre	Senior Disaster Monitoring and Analysis Officer
Japan	Masakazu Takahashi	JICA - AHA Centre Study Team	Team Leader
Japan	Shukyo Segawa	JICA - AHA Centre Study Team	Expert on Risk Assessment
Japan	Yoshiki Kinehara	JICA - AHA Centre Study Team	Area BCP
Japan	Kotaro Fukuhara	JICA - AHA Centre Study Team	Coordinator
Indonesia	Krishna S. Pribadi	JICA - AHA Centre Study Team	National Coordinator
Indonesia	Aria Mariany	JICA - AHA Centre Study Team	Facilitator
Indonesia	Mona Foralisa	JICA - AHA Centre Study Team	Facilitator
Indonesia	Anin Utami	JICA - AHA Centre Study Team	Facilitator
Indonesia	Rienna Oktarina	JICA - AHA Centre Study Team	Facilitator
Indonesia	Nimas Maninggar	JICA - AHA Centre Study Team	Facilitator
Indonesia	Gerry Andrika	JICA - AHA Centre Study Team	Facilitator
Indonesia	Bayu Novianto	JICA - AHA Centre Study Team	Project Staff
Indonesia	Lusiana Rumintang	JICA - AHA Centre Study Team	Interpreter
Indonesia	Pribasari Damayanti	JICA - AHA Centre Study Team	Note Taker

**Workshop 3 for Area BCP Formulation, Indonesia
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

May 22, 2014, Grand Zuri Hotel, Jababeka-Cikarang, Indonesia

Agenda

May 22, 2014 (Thursday)

Agenda	
09:00-09:30	Registration
09:30-09:50	<p>Welcome Address</p> <p style="padding-left: 40px;">Mr. Hideaki Matsumoto JICA</p> <p style="padding-left: 40px;">Mr. Sigit Padmono BNPB</p> <p>Group Photo Session</p>
09:50-11:10	<p>Inputs from the Study Team</p> <p style="padding-left: 40px;">Review of the First and Second Workshops Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p style="padding-left: 40px;">Draft Area Business Continuity Plan Mr. Yoshiki Kinehara Team Member, Area BCP</p> <p style="padding-left: 40px;">Next Steps Dr. Masakazu Takahashi</p> <p>Grouping and Instruction for Group Work</p>
11:10-11:20	Coffee Break



11:20-12:40	Group Work Guided by Mr. Yoshiki Kinehara
12:40-13:40	Lunch
13:40-14:25	Presentation by the Groups and Q&A Guided by Mr. Yoshiki Kinehara
14:25-14:40	Wrap up Dr. Masakazu Takahashi Q&A
14:40	Adjournment

MC: Dr. Krishna S. Pribadi

Workshop 3 ABCP Formulation in Indonesia
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formulation for
Industrial Agglomerated Areas in the Asean Region”

Thursday, 22 May 2014

Grand Zuri Hotel, Jababeka – Cikarang, Indonesia.

Time : 09.00 - 14.40

Moderator : Khrisna S. Pribadi

A. PEMBUKAAN

Speech from Mr. Hideaki Matsumoto

JICA

Good morning to Mrs. Ani, the Director of Capacity Building BNPB, and all the participants who attended this workshop. My name is Hideaki Matsumoto, representative of JICA in Indonesia. This concept was carried out by two major major disasters that occurred in Japan (earthquake) and Thailand (flood). Disasters have global impacts and one of them is impacting the industry or business conditions in certain areas. Recovery is a matter that should be considered from each company to restore and make their business resilience.

Based on the past events we have learned, we cannot rely on the facilities provided by the government only to restore business in a short time. Cooperation is needed to achieve business continuity and it needs special management for facilities in order to get appropriate support. The goals are not to disrupt all the economic activities and make them run as usual.

In order to find out what is necessary for having a good system, we need to conduct a risk assessment so that the recovery plans would become strategic. We perform a risk assessment to create a diversity of possible disaster scenarios, analyze the business impact, and identify steps that need to be done for disaster recovery in a short time in this study. We have

discussions about how the shape and structure of an organization need to be implemented in ABCP. I hope today's discussion will run smoothly and give inputs that are essential for ABCP's future sustainabilities.

Speech from Mrs. Anny Isgiati
Director of Community Empowerment BNPB

This placement is an excellent initiative in building resilience to overcome a disaster in the business sector. This is the third workshop which there are definitely good outputs. We hope AHA Centre and JICA can share information about the results that has been obtained. As the second largest country in the world deals with disaster (based on UNISDR), one of the most business sector's impact is on small and medium-sized corporations. In addition, companies that own business continuity planning (BCP) have faster recovery time than those without BCP based on the confirmation of Japan certainly needs to be considered deeper and we support the realization of BCP and ABCP.

Indonesia has some industrial areas in Jakarta, Karawang, Bekasi, Makassar, Bandung, and Surabaya with a wide range of industrial sectors. Badan Nasional Penanggulangan Bencana (BNPB) hopes that ABCP can assist us to support these companies to develop and provide improved disaster resistance.

At the moment, BNPB and AIFDR have collaborated to have public-private partnership (PPP) in Central or East Java in order to establish a pilot project to those companies who are present and try to know how to increase resilience of livelihoods to disasters. We expect that we are able to share information to develop the concept of public-private partnership based on this output concepts.

B. PRESENTATION

Presentation 1. Review Workshop 1 dan 2

Presenter: Dr. Masakazu Takahashi

Study Team Leader

This workshop is the last series of the earlier ones. The formulation of BCP began last year in February 2013 where a lot of meetings and workshops were conducted by the research team.

During the first workshop, we have discussions about the basic policies, critical problems as well as serious issues to consider. In the second workshop, we have talked about the impact on the community and local industries, barriers to business sustainability areas, and actions to be taken for making business continuities.

Throughout the third, we discussed some of the future plans, management systems and repairs, and the next steps that need to be done. As for today, these are the three chosen discussion topics:

- Is this plan useful for industry continuities and which parts need to be repaired?
- Are the Institutions or organizations suitable for management of BCP?
- Next steps

Participants will be divided into several groups based on the number of their attendance and each group will be given inputs to be used to discuss all matters.

Presentation 2. Draft Area Business Continuity Plan –Bekasi & Karawang-

Presenter:Mr. Yoshiki Kinehara

Team Member, Area BCP

ABCP is a plan that ensures all stakeholders in the region or industrial areas get the same benefits for disaster resilience. This plan was initially published by West Java Bappeda through the formulation of various stakeholders and with the support of the JICA team. The first plan was devoted to Bekasi and Karawang, but it also expected to eventually evolve in other areas and so, there are 7 steps all together:

1. Objectives
2. Scope of Plan
3. Understanding of the Areas
4. Analysis of Area Impacts (industry barriers to sustainability)
5. Strategies for Industrial Sustainability
6. Activities to Improve the Sustainability of Industry (efforts to increase)
7. Implementation Plan (will be discussed in groups today)

Meanwhile if you want to help industrial areas to restore their business in the event of a disaster, this concept is capable of resolving problems from occurring in the region around industrial areas. This strategy would like to assist the stakeholders through cooperation and it is expected for their active participation since they are important in the sustainability of ABCP. There will be three groups of stakeholders: the owner, members, and the supporters in this workshop.

In terms of highway infrastructure, there are many industrial areas that passed toll road Jakarta-Cikampek. The size of the industries that were operating in this area is very large and a lot of local economies depend on those industries. In fact, industries rely heavily on the port of Tanjung Priok.

Disaster Risks in Bekasi and Karawang are enormous, especially for those regions that occur in every 200 years. Flood impacts on community and local industry is substantial seeing how there will be layoffs, bankruptcies, numbers of areas will be inundated for two weeks, tons of facilities, refuges, and victims will be damaged, productions will be postponed, and then the regional economy will eventually decline.

A variety of obstacles that may possibly occur has been discussed at March (second workshop), where the barriers were categorized into three different types. The first obstacles and the most important ones are about Jakarta-Cikampek Toll Road function. Then it was carried on with the worsening of living conditions of those people who cannot work and the functions of communication as one of the significant barriers. Other risks are connected with declining the function of transport of the port of Tanjung Priok.

The concept of sustainable industries offered:

- Production activities in the industrial area that are still running when disasters occur
- Improve or restore infrastructure and life support facilities in order to support the first conditions
- Must have accurate estimations since there are many necessary things for practical activities

There are a number of roles for stakeholders that need to be in charge and promoted by the future supporters. Every single improved activity in each stage of the disaster cycle (prevention, mitigation, preparedness, emergency response, and recovery) will be enhanced by ABCP. Each proposed action will be measured and updated in the future and the central government is expected to perform a variety of preventive strategies while the local government should conduct prevention activities, emergency response, and recovery. For mitigation, stakeholders can build new ports and airports in different locations. The road management plans are involves performing highway expansion, by-pass road constructions or other alternatives in case of floods. Communication operators are required to make efforts to anticipate flood with socialization while the electric operators are expected to secure the access to electricity in the event of blackout and other stakeholders are supposed to build dormitories for employees in order for them to work.

These improvements are still in process. The proposed ideas can be achieved and implemented through BCM activities.

Presentation 3. Next Steps

Presenter:Dr. Masakazu Takahashi

The understanding of the areas of Karawang and Bekasi, as well as the determination of BCM strategies has been discussed in the previous workshops. This time, ABCM will be reviewed again even deeper and in what way to perform the maintenance and improvement of BCM.

There are many things that need to be prioritized:

- Participation of stakeholders
- Practice and the continuous efforts of stakeholders
- Identify those stakeholders and the establishment of a system (institutional arrangements)
- Coordination of public and private parties

This meeting is a good opportunity for us to share information and cooperate, so that each stakeholder can find a lot of things to do in the future.

The manager or owner along with the members shall disseminate and carry BCM out and it must be supported by its supporters. Supporters are expected to provide useful information so that BCM could be applied in the national level.

The manager or owner proposed to Bappeda of West Java Province with one the roles to socialize and manage the BCM, and maintain the BCP until now. However, the determination of the manager or owner of the BCP needs to be discussed even further. Members are based on industrial estates, local governments, operators, private companies, and supporting infrastructure.

Members should have an obligation to participate, formulate, provide data and documents, attend workshops, and formulate BCM official papers in their respective institutions. Supporters consist of the central government, research institutes, and universities, which is required to provide information, knowledge, and technical support(s). It is mandatory that BCM is able to explain the concrete steps that need to be implemented while the supporting team is supposed to socialize the BCM region to the national level.

The purpose of these meetings is to make a written and implemented BCM correctly. To create a sustainable ABCM, the assessment, maintenance, repair steps as well as revision are necessary. We need to make huge efforts so that the cycle is useful for all of us and have nothing postponed.

In the periods of assessment and review (exercise), it was emphasized how to save the existing businesses (not only save people). The method will be used through the discussions within the members of the organizations and training on a round table using BCP scenarios. An example of assessment and review of a natural disaster that has been made are so clear from the report of Jakarta floods in January and February 2014. Maintenance and improvement are getting ready to update the information of BCM.

A number of results of this workshop will be the current revision of the BCP report, so the next steps in the year 2014 will be determined based on today's discussion. Once we know what to do later on, participants are expected to discuss with the respective offices about various inputs that might be provided in order to update the report. In year 2015, BCP is expected to be applied in other various areas.

Therefore, the various inputs from the participants during the discussions are important, especially the ideas of ABCP, ABCM system, institutional arrangement, the next steps, workshops, and how to keep all of these things sustainable.

DISCUSSION

1. Bappeda - Bekasi Regency

To respond to the results that have been presented, there are some things that we think that are necessary, but got somehow neglected. Disasters that need to consider for this concept are only earthquake and floods, as drought needs to be anticipated as well. What will happen if the industry conditions lack of water supplies? They will definitely get disrupted.

Answer:

(Mr. Krishna) It would be an input for the discussion. Therefore, we need more ideas and contributions for today's workshop.

2. Mrs. Dewi N (Ministry of Cooperatives and SMEs)

The ministry is very concerned about the Business Continuity Plan. I would like to ask about the differences between Business Continuity Plan (BCP) and Business Continuity Management (BCM)?

Answer:

(Mr. Takahashi) BCP is a document, while the BCM is a management system.

3 . Nanang (Private Sector KIIC)

What has been described so far is quite good, but now I want to know about what has been done by the stakeholders in Karawang? What are the differences with this concept and what can be maintained or needs to be completed?

Answer:

(Mr. Takahashi) Bekasi and Karawang's basic conditions have been analyzed during the first workshop while a strategy in the region of BCP was already formulated followed by developing the BCP region later on in the second. It is very important for every single company in the industry to conduct assessment and review for the area this time.

Explanation of Group Discussion

Working Group (There are 4 groups)

Flow of Discussion:

- Introduction of each participant (and also the origin of the name of agency)
- Read and understand the concept plan
 - Each member write down their ideas on some cards
 - Attaching each card on a flipchart
 - Discussion refers to the content flipcharts
 - Chairman summarizes the discussion
 - Each group has 3 topics.

[TOPIC 1]

Question 1

Do you think that this plan is useful for the industry continuity of Bekasi and Karawang area?

Useful for a variety of reasons, namely

- Because the sustainability of the industry related to the lives of many people
- To sustain employment, increase revenue of Jawa Barat Province, and improving technical guidelines.
- For technical guidance
- To improve the socio-economic life.

However, until now the draft is still an academic study and not yet describes a mechanism of management systems.

Question 2

Do you think which contents of this plan will be improved?

- The short-term plan
- BCP should be informative, implementable, and focus on the planning / plan that must be followed by industrial area
- Budgetary
- Preparation of manuals and repair of natural disaster risk assessment for more technical and about SOP when disaster strikes

[TOPIC 2]

Question 1

Which organization is suitable for the owner/maintener to promote Area BCP in Bekasi and Karawang?

- BNPB
- BNPB assisted by head area
- Bappeda

Question 2

Which resources and system are needed to continue Area BCM?

- Human Resources (Professional and integrity)
- Coordinator

- Commitment of the stakeholders
- Integrated planning to support from human resources, budget, and logistics aspects
- Institution BNPB, BPBD, Program and Budget

[TOPIC 3]

Question 1

What activities do you expect in the next step of Area BCM?

- A system / sustainability activities, Trainer Of Trainer, dissemination, training, workshop
- Involve / accommodate input from various agencies

[TOPIC 1]

Question 1

Do you think that this plan is useful for the industry continuity of Bekasi and Karawang area?

Useful for a variety of reasons, namely

- Increase awareness of the relevant parties of the importance of a deliberate planning in anticipation of the impact of the disaster for industry continuity.
- The integration of industrial development with supporting infrastructure
- Industrial development in line with the regional development programs
- Minimize the impact of disasters.

Question 2

Do you think which contents of this plan will be improved?

- There is no clear schedule for implementation and how the coordination between stakeholders
- Fix map (hazard map with gradations of color and type of hazard, vulnerability, capacity maps, risk maps)
- Risk assessment based on the type of hazard is necessary
- Organization and budgeting
- Disaster Management Plan

[TOPIC 2]

Question 1

Which organization is suitable for the owner/maintener to promote Area BCP in Bekasi and Karawang?

- The agency which has authority across the district and has a real role in the disaster risk reduction with the function of coordination, command, and executing, i.e BPBD of West Java Province.

Question 2

Which resources and system are needed to continue Area BCM?

- Human Resources and budgetary

- Cross-agency communication forums
- Regulation
- Socialization
- Post Rehearsal / Rehearsal Field / Simulation

[TOPIC 3]

Question 1

What activities do you expect in the next step of Area BCM?

- Review of BCP
- Training of BCM
- Secretariat
- Simulation / Rehearsal
- Early Warning System

[TOPIC 1]

Question 1

Do you think that this plan is useful for the industry continuity of Bekasi and Karawang area?

Useful for a variety of reasons, namely

- Companies gain security in business and can prepare necessary steps
- Know the risks for every decision-making
- A comprehensive plan involving all parties
- Integrated document between private and government plans
- Necessary maintenance in the industrial area

Question 2

Do you think which contents of this plan will be improved?

- The possibility of another disaster, such as lack of clean water supplies
- Clear institutional arrangement and legal framework
- Synergies with planning documents that have been made by the government

[TOPIC 2]

Question 1

Which organization is suitable for the owner/maintener to promote Area BCP in Bekasi and Karawang?

- Bappeda supported by National Government

Question 2

Which resources and system are needed to continue Area BCM?

- Law
- Budget
- MOU between government and private
- Steering Committee

[TOPIC 3]

Question 1

What activities do you expect in the next step of Area BCM?

- Plan - Do - Check - Action
- Socialization / Workshop on BCM, BCP
- Integration of BCP, BCM plan that has been owned by the local government
- Regulation / Operating Procedures / SOP
- Drill / Simulation
- Signboard in flood areas

[TOPIC 1]

Question 1

Do you think that this plan is useful for the industry continuity of Bekasi and Karawang area?

Useful for a variety of reasons, namely

- Knowing the risks and potential disasters that arise and to know required preparation steps (anticipation)
- Helpful as it contains information + strategy + implementation plan
- Helpful for consideration of spatial planning

Question 2

Do you think which contents of this plan will be improved?

- Risk assessment for another disaster although the impact is not really big
- Risk assessment which tested by a competent institution

[TOPIC 2]

Question 1

Which organization is suitable for the owner/maintener to promote Area BCP in Bekasi and Karawang?

- BPBD and BAPPEDA

Question 2

Which resources and system are needed to continue Area BCM?

- Disaster management information system
- Early warning system

[TOPIC 3]

Question 1

What activities do you expect in the next step of Area BCM?

- Socialization BCM
- Simulation BCM
- Evaluation of BCM (BCM Periodic Review)

C. CLOSING

Total participant is 43 people, consist of Advisory (15 people), Private (6 people), Lifeline (5 persons), and the Observer (17 people).

Here are some keywords for each question topic

A. Topic 1

1. Usefulness of the plan

- a. Awareness for the need to plan
- b. Integrated industry and infrastructure development
- c. Guideline to reduce risk and coordination
- d. Security feeling for business
- e. Industry, Employment, and economic sustainability
- f. Providing strategic information and plan for emergency

2. Improvement of the plan

- a. Implementation schedule
- b. Coordination means
- c. Improved maps: hazard, vulnerability, risk
- d. Coordination with other regions
- e. Synchronization with other local government planning document
- f. Legal framework
- g. Verification of risk assessment by authority

B. TOPIC 2

1. Who should be the owner

- a. BPBD
- b. BNPB supported by local government
- c. Chief of local governmentmen delegated to BNPB
- d. Bappeda
- e. Support from national government

2. Resources and system for sustainability

- a. Competent human resources
- b. Competent organizations
- c. Coordination
- d. Annual program and budgetary funding

- e. Commitment
- f. Regulation/Legal framework
- g. Mou Public Private
- h. Communication forum

C. Topic 3

1. Next Step

- a. PDCA
- b. Review and Update
- c. System and regulations
- d. Permanet secretariat
- e. Training and workshop on BCP/BCM
- f. Exercise and drills
- g. Promoting communication
- h. Accomodating input from other stakeholder
- i. Early Warning system
- j. Integration of BCP/BCM with other government plans

All of the inputs will be considered into the BCP document. The next step after this is a review and update by stakeholders where the results will be used to update the document. After each participant returned to each respective companies, participants are expected to share information to all of peoples in each office.

To achieve sustainability within the ABCM, it is required :

1. Stakeholders Identification (organizational form)
2. Active participation by all of stakeholders
3. Continual approaching and also efforts from all of stakeholders

Upcoming events of this series of activities are Practitioners Seminar in June 2014, Final Seminar in Bandung (August), then Aha Centre Workshop in Jakarta (September) .

Workshop 3 for Area BCP Formulation, the Philippines
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

May 27, 2014, Crimson Hotel, Filinvest City Alabang, Muntinlupa City, Philippines

A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Attendants

Country	Name	Organization	Position
Advisory Group 1			
Philippines	BrigGen Romeo Fajardo	Office of Civil Defense (OCD)	Acting Deputy Civil Defense Administrator
Philippines	Amy Daura Gumboc	OCD-NCR	Training Officer
Philippines	GM Corazon T. Jimenez	Metropolitan Manila Development Authority (MMDA)	USEC/GM
Philippines	Jhovy Medico	Cavite Economic Zone (CEZ), Philippine Economic Zone Authority (PEZA)	Senior Specialist
Philippines	Engr. Ramon Lacap, Jr.	PEZA - CEZ	Engineer III
Advisory Group 2			
Philippines	Paul Chinanog	OCD	Staff
Philippines	Rosauro Arnel Q. Gonzales, Jr.	OCD Region IV-A	Operations Head
Philippines	Pat Husena	OCD Region IV-A	Operations Assist.
Philippines	Darianne M Natividad	Cavite Provincial Government	Public Services Officer
Philippines	Marisel Cayetano	Cavite Provincial Government	OIC-Special Operation Officer
Philippines	Aldwin M. Cejo	Laguna Provincial Government	CAO-I
Philippines	Adelina C. Santos-Borja	Laguna Lake Development Authority (LLDA)	Chief, Intrn'l Linkages & Research Dev Unit
Philippines	Dr. Esperanza Cayanan	Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)	Head, NCR
Private Sector Group 1			
Philippines	Grace Morella	Philippine Chamber of Commerce and Industry (PCCI)	Manager
Philippines	Virgilio Lorenzo	Laguna CCI	President
Philippines	Edwin Tirona	Laguna Techno Park	VP-External Affairs
Philippines	Fe Bandy	Yazaki-Torres Manufacturing, Inc.	Company Doctor
Philippines	Godofredo Magsino	Yazaki-Torres Manufacturing, Inc.	

Workshop 3 for Area BCP Formulation, the Philippines
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

May 27, 2014, Crimson Hotel, Filinvest City Alabang, Muntinlupa City, Philippines

A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Attendants

Country	Name	Organization	Position
Private Sector Group 2			
Philippines	Teresita Leabres	PCCI	Regional Governor
Philippines	Rona S. Sañez	Laguna Techno Park	Marketing Manager
Philippines	Gerardo Castillo	Yazaki-Torres Manufacturing, Inc.	ADR/ Safety Officer
Philippines	Nhel S. Maronilla	NEP Logistics, Inc.	Assistant manager
Philippines	Ryan Liwanag	NEP Logistics, Inc.	Assistant manager
Philippines	Von Juvie C. Petecio	Nippon Micrometal Corporation (NMC)	Officer Engineer
Lifeline Group			
Philippines	Arnel C. Antonio	Department of Energy (DOE)	Senior SRS
Philippines	Conrad P. Soriano	Maynilad Water Services, Inc.	Head, Safety Health Dept.
Philippines	Jommel Omar Gomez	Manila Water Company, Inc.	Business Continuity Head
Philippines	Lino D. Fabia	National Grid Corporation of the Philippines (NGCP)	Head of Staff
Philippines	Joseph G. Blas	NGCP	Specialist of Staff
Philippines	Medel P. Lim Subu	NGCP	
Philippines	Leisl Lim	SMART	
Infrastructure Group			
Philippines	Krishna D. Chavez	Department of Transportation and Communication (DOTC)	Staff-OMS
Philippines	Marie Angela Delos Santos	DOTC	OMS Technical Assist.
Philippines	Engr. Christopher Ornum	Philippine Ports Authority (PPA)	Engineer
Philippines	Engr. Conrad Joseph Perez	Department of Public Works and Highways (Region IV-A)	Engineer II
Philippines	Joseph Frankie S. Argana	Cavite Expressway (CAVITEX)	ESM
Philippines	Rebecca Oliva S. Dimasacay	CAVITEX	
Philippines	Angel Echano	The National Transmission Corporation (TransCo)	Head, Safety Committee
Philippines	Ronald Cueto	TransCo	DCBO Member

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A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

JICA and JICA Study Team

Country	Name	Organization	Position
Japan	Takahiro Morita	JICA Philippine Office	Senior Representative
Japan	Hayato Nakamura	JICA Philippine Office	Project Formulation Advisor (Disaster Management)
Japan	Takaaki Kusakabe	JICA - Office of Civil Defense	JICA Expert
Japan	Masakazu Takahashi	JICA - AHA Centre Study Team	Team Leader
Japan	Yoshiyuki Tsuji	JICA - AHA Centre Study Team	Deputy Team Leader / Area BCP
Japan	Shukyo Segawa	JICA - AHA Centre Study Team	Expert on Risk Assessment
Japan	Shiro Matsunami	JICA - AHA Centre Study Team	Coordinator
Philippines	Ramon J. Santiago	JICA - AHA Centre Study Team	National Coordinator
Philippines	Josephine R. Sy	JICA - AHA Centre Study Team	Project Staff
Philippines	Rizza Mae C. Yson	JICA - AHA Centre Study Team	Project Staff
Philippines	Dante A. Susano	JICA - AHA Centre Study Team	Project Staff
Philippines	Lynn P. Melosantos	Philippine Institute of Volcanology and Seismology	Facilitator
Philippines	Alex Nicolas P. Tamayo	University of the Philippines	Facilitator
Philippines	Claire S. Pantoja	University of the Philippines	Facilitator
Philippines	Mariam Jayne M. Agonos	University of the Philippines	Facilitator
Philippines	Sheila Ruth T. Magdaraog	University of the Philippines	Facilitator
Philippines	Sinta Posadas	University of the Philippines	Facilitator

Workshop 3 for Area BCP Formulation, Manila
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”

May 27, 2014, Crimson Hotel, Filinvest City Alabang, Muntinlupa City, Philippines

Agenda

Agenda	
8:30-9:00	Registration
9:00-9:20	<p>Welcome Address</p> <p style="text-align: center;">Bgen.(Ret) Romeo F Fajardo Deputy Administrator Office of Civil Defense</p> <p>Group Photo Session</p>
9:20-10:10	<p>Inputs from the Study Team and Q&A</p> <p style="text-align: center;">Review of the first and second workshops Dr. Masakazu Takahashi Leader of the Study Team</p> <p style="text-align: center;">Draft Area BCP (Plan) Mr. Yoshiyuki Tsuji Deputy Leader of the Study Team</p> <p style="text-align: center;">Next Steps Dr. Masakazu Takahashi</p> <p>Grouping and Instruction for Group Work</p>
10:10 -10:30	Coffee Break
10:30-11:50	<p>Group Work</p> <p style="text-align: center;">Guided by Mr. Yoshiyuki Tsuji</p>

11:50-12:35	<p>Presentation by the Groups and Q&A</p> <p>Guided by Mr. Yoshiyuki Tsuji</p>
12:35-12:50	<p>Wrap up</p> <p>Dr. Masakazu Takahashi</p> <p>Q&A</p>
12:50-13:00	<p>Closing of the Workshop</p> <p>Mr. Hayato Nakamura Project Formulation Advisor (Disaster Management) JICA Philippines</p>
13:00	<p>Adjournment</p>
13:00-14:00	<p>Lunch</p>

MC: Ramon Santiago

Summary of Group Work at 3rd WS, Manila, the Philippines (1/3)

Group	Advisory Group 1	Advisory Group 2	Private Sector 1	Private Sector 2	Lifeline Group	Infrastructure (Transportation)
Facilitator	Sheila Ruth T. Magdaraog	Claire PANTOJA	Mariam Agonos	Alex NP Tamayo	Sinta Posadas	Maria Lynn Melosantos
[Topic1] 1) Do you think that this plan is useful for the industry continuity?	<ul style="list-style-type: none"> Yes, this is a good plan to be incorporated in the agenda of LGUs (CTJ) Yes, this can be our guide during the occurrence of the unknown real thing (RLJ) Yes, because of the high probability of damages to facilities and infrastructure. A BCP in the Cavite, Laguna, MM Areas may shorten the recovery period and deliver soonest may help in formulating a contingency plan in areas identified(ADG) <p>WHY? (agreed answers of the group)</p> <ul style="list-style-type: none"> The ABCP draft plan provides information on the various impacts of disasters, how to address them, and the role of each stakeholder in addressing the problems It serves as a handbook for all agencies It is a replicable plan 	<p>The Advisory Group 2 all agreed that the BCP is of value, especially because the economy, ecological integrity, infrastructures, and other critical systems are interconnected. Besides awareness and knowledge of probable impacts, it opens up the possibility of understanding and working with other stakeholders for disaster preparedness. In this light, gaps and needs may be identified and dealt with accordingly.</p>	<p>Yes.</p> <ul style="list-style-type: none"> The plan will be a strategy to counter disaster Due to increasing number of industrial parks that are grouped into associations where communication and association is feasible Understand the importance of cooperation among stakeholders To be in touch with the right agencies to leave information to be relayed to members The proposed measure of lifeline because it is a basic necessity To understand concepts of BCP and BCM 	<ul style="list-style-type: none"> Yes, pilot areas area highly industrialized and the BCP should be focused on them. Yes, areas are identified as hazard zones Yes, stakeholders can prepare ahead and have a preventive plan to respond to emergency situation Yes to understand the concept of BCM Yes, to know the formulation of BCM for immediate measures in terms of disasters Yes, we have (to) plan our local government to improve (their) disaster management Yes, to learn more about BCM and make plan 	<ul style="list-style-type: none"> Yes, because it helps to have a rapid recovery of industries and companies during emergencies It also defines some stakeholder functions 	<ul style="list-style-type: none"> Yes, having a BCP enhances resilience and ensures early recovery. The BCP provides guidelines, protocols and standard operating procedures that prompt proper organizational actions to an incident or event.
[Topic1] 2) Do you think which contents of this plan will be improved?	<ul style="list-style-type: none"> Table 3-3 and 4-1, there must be a similarity in the data for the disaster scenarios and impact analysis (JM) Include a guide on selection/ identification of leader or, for the purposes of the plan, owner and maintainer (ADG) Rephrase/change term for owner/maintainer to ABCP Chair (CTJ)/(AGREED) Table 6.3, stakeholder must identify the specific process for the proposed measure, i.e. budget, approval, implementation (RLJ) Copy editing of ABCP draft plan (AGREED) Next target hazard should be flooding (JM) Businesses should adopt the incident command system 	<p>Participants were generally content with the draft, except for a few clerical errors such as the Karawang table and the use of Manila-Cavite Expressway and Cavite Expressway—they cannot be interchanged.</p>	<ul style="list-style-type: none"> 6.2 List of measures to be implemented for each stakeholder and new measures to be implemented 6.2 Building up plans to augment support from government agencies and other NGOs 6.2 Provide medium of awareness for the plans through all the media Emphasize awareness of all company members to the importance of the objectives of BCP 6.2 Each lifeline must have a contingency plan if ever the disaster come A general information campaign for the areas concerned to spread preparedness and condition companies and its members To include stakeholders' business service organizations 	<ul style="list-style-type: none"> 1.2 – How would LGUs and stakeholders coordinate during disaster within area BCM 1.2 – would there be cost involved in implementing the project area BCM e.g., training seminar and awareness campaign 3.4 – How LGU would continuously give seminar / awareness on area BCM 7.3 – How often should the plan be updated Who would give BCM the legal personality for its implementation 	<ul style="list-style-type: none"> While there are advantages to the plan, the stakeholders of this group feel that there is a lack of clear and written structures and protocols. These must be included in the plan. The group wanted clearer definitions of their functions as stakeholders. They emphasized that, as it was now, they would usually operate as independent silos. They wanted to be more coordinated for future operations and they wanted to have clear and elaborated processes included in the plan regarding coordination. They also wanted the plan to set its priorities clear, regarding which sectors hold a higher rank in times of a disaster. 	<ul style="list-style-type: none"> The following items can be changed: <ul style="list-style-type: none"> Section 7.4, specify a timeframe for updating BCP (see also comment below, on Table 6.2 about “Review” stage) Section 5.2, specify and add “OWNER” as one of the stakeholders. The Owner of the BCP has a regulatory function and thus, approve, monitor, and act as oversight body over the implementation of the contents of the BCP. The Owner is a body composed on a chairman and members, all coming from the stakeholder of that area’s BCP. Table 6.2, Concept stage: suggest to change “agreed” to “approved”, and change “administrator” to “Owner” Table 6.2, add a “Review” stage for a total of five stages. The Review stage cycles the stage back to Idea stage and ensures that the BCP is made relevant to current time and situation. The suggested review cycle is two years.

Summary of Group Work at 3rd WS, Manila, the Philippines (2/3)

Group	Advisory Group 1	Advisory Group 2	Private Sector 1	Private Sector 2	Lifeline Group	Infrastructure (Transportation)
[Topic2] 1) Which organization is suitable for the owner/maintainer to promote Area BCP?	<p>AGREED ANSWERS</p> <ul style="list-style-type: none"> - Assign BCP head per region - Office of Civil Defense as overseer/owner - ABCP should be a partnership/joint ownership among stakeholders, however a government agency must take the lead, though business sector supports financially - Chambers play a crucial role - There is no one leader to rule them all, this is a partnership 	<p>It has been established that the owner must be from the government sector, that is Philippine Economic Zone Authority, National Economic and Development Authority, or an Area Business Continuity coordinating council.</p> <p>They also mentioned that they look forward to the expansion of the plan and the inclusion of other stakeholders as in the Philippine National Railways and other local government units and agencies.</p>	<ul style="list-style-type: none"> - LGUs – Private Sectors, ECOP, Rotary Club, DOLE etc - Co-chair NDRRMC and PCCI 	<ul style="list-style-type: none"> - For industrial park it should be the PEZA as they govern all industrial companies within ecozone areas - Industrial park administrator and PEZA - LGU, they have an organized risk reduction management council as mandated by law - LGU, we have plan and we have organization to take BCM - LGU should be the big umbrella where all other organizations like PEZA, industrial parks should be under (supervision) 	<ul style="list-style-type: none"> - They suggested that the PDRRMC/MDRRMC take the lead in spearheading (or being the owner/maintainer) of Area BCP. - Their reasons are as follows: 1) because the PDRRMC/MDRRMC (including all the branches under it, including regional and national branches) is the one mandated by law to handle and/or head emergency preparedness; and 2) the PDRRMC/MDRRMC have a greater knowledge regarding such topics and operations. Therefore, they would be better suited for the job. 	<ul style="list-style-type: none"> - The “Owner” suggested above in Section 5.2, made up of elected members. It is a new body made up of stakeholders from public and private organizations.
[Topic2] 2) Which resources and system are needed to continue Area BCM?	<ul style="list-style-type: none"> - Regular consultation meetings between members (CTJ) - Inventory of resources (ADG) - Human resources and information sharing (JM) - Regularly updated area assessment (CTJ) 	<p>Participants asserted that, for sustenance, it is important to encourage engagement from groups outside the government sector as well as bring in monetary resources. Above all, they claimed that mandate is necessary in directing people and handling the Disaster Risk Reduction and Management fund and business taxes as financial sources.</p>	<ul style="list-style-type: none"> - Budget to implement area BCP (Allocation, grants) - Specialist, expertise for Area BCM risk assessment - Commitment of Top Managements and other member organizations - Issuance of Executive Order to implement BCP/ BCM - Creation of Secretariat that would coordinate communications and plans 	<ul style="list-style-type: none"> - Budget for the Area BCM implementation, who will be funding the project? Is it the national government of LGU? - Commitment of the implementing body (owner) - LGU must initiate introduction and sustainability of BCM - Leadership of LGU to take charge of Area BCM - Regular meetings of stakeholders to ensure cooperation - A focal person from all orgs to head their own BCM - LGU and stakeholders must form an organization that will be actively work on funds in cooperation of the industries /units being represented. 	<ul style="list-style-type: none"> - This group had very practical answers to question number two under topic 2. They talked about specific steps, such as building infrastructures or fortifying existing structures to make them disaster ready. - Their other answers are as follows: <ul style="list-style-type: none"> - budget - trained personnel - equipment for disaster preparedness (like kits, emergency life vests, flashlights, life boats, etc) - good communication scheme and networking in place. Also, communication devices, such as satellite phones, in case networks are down would be very helpful. - Back up Water & Food Systems good for at least 60 days - Clear security procedures, so that peace & order can be maintained, even during disasters 	<ul style="list-style-type: none"> - Command Center of the Area, but located outside of the Area (so it can function even after the Area is affected by earthquake). The Command Center must be properly equipped, especially with emergency telecommunication facility. - The area south of Metro Manila has plenty of water bodies, which can also be used as, or be part of the emergency transport network. Right now, the water bodies are not very much utilized for emergency transport, but if there are more sea/water crafts, then it enlarges the option for emergency routes.

Summary of Group Work at 3rd WS, Manila, the Philippines (3/3)

Group	Advisory Group 1	Advisory Group 2	Private Sector 1	Private Sector 2	Lifeline Group	Infrastructure (Transportation)
<p>[Topic3]</p> <p>What activities do you expect in the next step of Area BCM?</p>	<p>AGREED ANSWERS</p> <ul style="list-style-type: none"> · Conduct area drills including all hazards · Conduct drills on the ff: <ul style="list-style-type: none"> > Preparedness > Prevention > Mitigation > Response > Recovery > Reconstruction · Thematic repairs · Increase knowledge of available technologies 	<p>Proposed next steps in chapter 7.7 of the draft were deemed adequate. Most crucial of these steps are</p> <ul style="list-style-type: none"> · further studies; · review of existing risk or vulnerability assessments; · development into a multi-hazard approach covering a larger region; · stakeholder trainings or capability demonstration exercise; · tabletop exercises or simulations; and · monitoring and evaluation. 	<ul style="list-style-type: none"> · Workshops to schedule presentations of BCP/ BCM outputs · Review of results of BCM Workshop through another gathering of stakeholders · Establishment of periodical reviews of BCM stakeholders for continual improvement · Continuous workshop that will enhance and update · Disperse information among member groups and organizations · Education of members through drafting of brief manual · Capacity building on BCP/ BCM for private enterprises 	<ul style="list-style-type: none"> · Finalize the draft and have a manual to be given to all concerned · To finalize the draft ABCM and present to pilot areas – industries and communities · Organize a BCM group in each area like industrial park together with LOGUs · Promote and implement area BCM · Trainings¥ · A study tour to affected areas for first hand observation · Evaluation and monitoring seminar. 	<ul style="list-style-type: none"> · Much like their responses for Topic 2- Question 2, the lifeline group gave very specific process-oriented answers. Their answers are as follows: · Simulation Exercises and Drills · Succession plan (to explain, this is a plan designed to provide a back-up in case the personnel tasked to move in case of a disaster are incapacitated and/or incapable of operation) · Widespread dissemination of information, all the way down to the lowest sector of society—to prevent panic and unnecessary casualties · Medical Training for the personnel · Tabletop exercises for specific disasters · Actual inventory of available resources, to be conducted quarterly or on a regular rotational basis · Benchmarking and study tour to other ASEAN countries to better expose ones' self to their systems already in place · Assign a command center or headquarters for the head of Area BCP/ Area BCM for a clear center for coordination and consolidation of reports 	<ul style="list-style-type: none"> · The Area BCP can be expanded to cover other hazards, such as typhoon and flood hazards, which are more frequently faced by communities. · What would motivate, encourage or compel businesses in an area to group together for the purpose of developing an A_BCP? Are there applicable laws, guidelines or similar “legal” instruments that would make these organizations participate in the crafting and owning of an A_BCP? If there are laws, where are the areas of congruence and conflict? If none, should there be an advocacy to enact a legal basis for crafting an A_BCP? If needed, who should advocate and review a proposed legal basis for A-BCP?
Other comments (if you have)					<ul style="list-style-type: none"> · Mr. Arnel Antonio from the DOE made a very good comment saying: “The plan... must go beyond saving lives & properties. It must be able to also look forward far enough to save the industries, wherein they are able to immediately take off after a disaster.” He went on to stress that if we only strive to save lives, but not the industries, it will not make much of a difference to uplift the people’s morale. 	<ul style="list-style-type: none"> · Area BCP can be made more generic and applicable to areas beyond the Industrial Zones in Cavite, Laguna, and Southern Metro Manila

Workshop 3 for Area BCP Formulation, Vietnam
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

June 03, 2014, Nam Cuong Hotel, Hai Phong City, Vietnam

A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Attendants

Country	Name	Organization	Position
Advisory Group 1			
Vietnam	Nguyen Ba Tien	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department	Director
Vietnam	Nguyen Thi Thu Ha	DMC- Ministry of Agriculture and Rural Department	Expert
Vietnam	Dang Quan Minh	DMC- Ministry of Agriculture and Rural Department	Expert
Vietnam	Le Nguyen Viet	Hai Phong Fire Station	Officer
Vietnam	Do Thanh Trung	Hai Phong Police	Officer
Vietnam	Dinh Van Hung	Geoenvironmental and Territorial Institute, (Ha Noi)	Director
Vietnam	Truong Kien Trung	Asia Foundation	Staff
Advisory Group 2			
Vietnam	Tran Vinh Hoan	Hai Phong Economic Zone Management Board	Vice Director
Vietnam	Nguyen Huu Phuc	DMC- Ministry of Agriculture and Rural Department (Ha Noi)	Director
Vietnam	Phan Cong Minh	VCCI Hai Phong	Expert
Vietnam	Vu Thi Thanh Huong	Trang Due IZ	Expert
Japan	Kimitoshi Sato	Toyotda Gosei Hai Phong	Director
Private Sector Group			
Vietnam	Bui Ngoc Nam	Hai Phong Port Holding Limited Liabilities Company	Expert
Vietnam	Nguyen Thien Quan	Ministry of Industry and Trade	Expert
Vietnam	Nguyen Thi Thu Hien	Nam Cau Kien Industrial Zone	Expert
Vietnam	Takashi Masuno	Nomura Hai Phong Industrial Zone	Director
Japan	Takashi Kawai	Tenant of Industrial Park: Yazaki HP VN Co., Ltd	Director General
Japan	Kunio Mitobe	Tenant of Industrial Park: Yazaki HP VN Co., Ltd	Director General
Vietnam	Truong Van Thai	Hai Phong Port	Deputy Director

Workshop 3 for Area BCP Formulation, Vietnam
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June 03, 2014, Nam Cuong Hotel, Hai Phong City, Vietnam

A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Attendants

Country	Name	Organization	Position
Infrastructure and Lifeline Group			
Vietnam	Nguyen Duc Tho	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department	Head of Administration Officer
Vietnam	Cao Van Quy	Hai phong Water One Member Limited Company	Deputy Director
Vietnam	Nguyen Ngoc Duy	Dept. of Construction	Expert
Vietnam	Vu Thai Binh	Dept of Transportation	Expert
Observers			
Vietnam	Pham Viet Hoa	Space Technology Institute	Vice Head of Department
Vietnam	Le Anh Tuan	Hai Phong Electric One Member Limited Company	Deputy Director
Vietnam	Bui Tuan Son	Hai Phong Electric One Member Limited Company	Deputy Director of Deoartment
Vietnam	Vu Dinh Toi	VCCI Hai Phong	Expert
Vietnam	Nguyen Huu Hoa	Dept of Industry and Trade	Expert
NGO	Jonhsanders	Peace Winds America	Expert
NGO	Mast Aflick	Peace Winds America	Expert
Vietnam	Dinh Thi Hong	Space Technology Institute	Expert
Vietnam	Doan Minh Chung	Space Technology Institute	Expert
Vietnam	Nguyen Vu Giang	Space Technology Institute	Expert
Vietnam	Nguyen Thu Trang	Natural Resources and Environment Dept.	Expert
Vietnam	Minh Phuong	Hai Phong Radio and Television	Reporter
Vietnam	Vu Trung	Hai Phong Radio and Television	Reporter
Vietnam	Nguyen Minh	Hai Phong Radio and Television	Reporter
Vietnam	Tran Phuong	Hai Phong Security Newspaper	Reporter

Workshop 3 for Area BCP Formulation, Vietnam
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

June 03, 2014, Nam Cuong Hotel, Hai Phong City, Vietnam

A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

JICA and JICA Study Team

Country	Name	Organization	Position
Japan	Taisuke Watanabe	JICA Headquater	Senior Advisor to the Director General, Global Environment
Japan	Masakazu Takahashi	AHA Center -Jica Study Team	Team Leader
Japan	Yoshiyuki Tsuji	AHA Center -Jica Study Team	Deputy Team Leader
Japan	Shukyo Segawa	AHA Center -Jica Study Team	Leader of Natural Disaster Risk
Japan	Akira Watanabe	AHA Center -Jica Study Team	Coordinator
Vietnam	Hoang Minh Nguyet	AHA Center -Jica Study Team, National Staff	MA/Facilitator
Vietnam	Nguyen Thanh Ha	AHA Center -Jica Study Team, National Staff	Facilitator, National Coordinator
Vietnam	Thai Minh Huong	AHA Center -Jica Study Team, National Staff	Facilitator
Vietnam	Nghiem Ba Hung	AHA Center -Jica Study Team, National Staff	Facilitator
Vietnam	Nguyen Tien Dung	AHA Center -Jica Study Team, National Staff	Facilitator
Vietnam	Ngo Gia Trung	AHA Center -Jica Study Team, National Staff	Facilitator
Vietnam	Nguyen Phuong Nhung	AHA Center -Jica Study Team, National Staff	Facilitator
Vietnam	Ngo Thi Minh	AHA Center -Jica Study Team, National Staff	Assistant of National Coordinator
Vietnam	Bui Bich Ngoc	AHA Center -Jica Study Team, National Staff	Intepreter
Vietnam	Tran Thi Duyen	AHA Center -Jica Study Team, National Staff	Facilitator

**Workshop 3 for Area BCP Formulation, Hai Phong
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

June 3, 2014, Nam Cuong Hotel, Hai Phong, Viet Nam

Agenda

June 3, 2014, Tuesday

Agenda	
07:30-08:00	Registration
08:00-08:20	<p>Welcome Address</p> <p>Mr. Do Trung Thoai Vice Chairman, Hai Phong People's Committee</p> <p>Opening Remarks</p> <p>Mr. Taisuke Watanabe Senior Advisor, JICA HQ</p> <p>Group Photo Session</p>
08:20-09:40	<p>Inputs from the Study Team and Q&A</p> <p>Review of the First and Second Workshops Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Draft Area Business Continuity Plan Mr. Yoshiyuki Tsuji Deputy Team Leader of the Study Team</p> <p>Next Steps Dr. Masakazu Takahashi</p> <p>Grouping and Instruction for Group Work</p>
09:40 -10:00	Coffee Break



10:00-11:20	Group Work Guided by Mr. Yoshiyuki Tsuji
11:20-12:05	Presentation by the Groups and Q&A Guided by Mr. Yoshiyuki Tsuji
12:05-12:20	Wrap Up Dr. Masakazu Takahashi Leader of the Study Team Q&A
12:20	Closing Remarks Mr. Nguyen Huu Phuc Director, DMC – Ministry of Agriculture and Rural Development Adjournment

MC: Hoang Minh Nguyet

Workshop 3 for Area BCP Formulation, Haiphong

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formulation for Industrial Agglomerated Areas in the ASEAN Region”

June 3, 2014, Nam Cuong Hotel, Hai Phong, Vietnam

Minutes of Workshop

8:00 am:: MC Hoang Minh Nguyet started the Workshop. Firstly, she warmly welcomed all participants to the workshop and highly appreciated their presence. She also introduced the special participants, from Vietnam side- Mr. Nguyen Ba Tien, Director of Dyke Management and Flood & Storm Control Department, Department of Agriculture and Rural Development, Hai Phong City and Mr. Nguyen Huu Phuc – Director of Disaster Management Center from Ministry of Agriculture and Rural Development of Vietnam. From JICA Headquater, Mr. Taisuke Watanabe, Senior Adviser to Director General of Global Environmental Department took part in the workshop; MC also introduced Dr. Masakazu Takahashi, Team Leader of the Study Team and other study team memebers. Last but not least, MC welcomed representatives from central government agencies, Ministry of Industry and Trade, Hai Phong authorities, industrial parks, private companies, NGOs, mass media and other research institutes.

The workshop was the joint cooperation among JICA, AHA Center and HPC and it is the last workshops in the seriey of three workshops to formulate Areas Business Continuity Plan for Hai Phong Pilot Area. MC overviewed the contents of the workshop today: review of the First and Second Workshops, Draft of Area Business Continuity Pland and Next steps for the Area BCP/BCM.

Then MC Hoang Minh Nguyet introduced Mr. Taisuke Watanabe to deliver Openning Remark.

8:10 am: Openning Remark- Mr. Taisuke Watanabe, from JICA Tokyo Headquater

On behalf of JICA, Mr. Taisuke Wanatabe delivered his welcome to all participants in the workshop. Firstly he emphasized the reasons to formulate this research in Asean countries- the consequences of great disasters such as earthquake and tsunami occurred in Japan or great floods in Thailand in 2011. They acknowledged that the negative impact of natural disasters was not only in a local level, but also to global supply chain. So to implement Area BCP/BCM is really necessary.

Mr. Watanabe also highlighted the roles of Haiphong city with a lot of industrial parks, private companies and organizations, infrastructure operators, lifeline utilities... Haiphong played an important role as a major port in Vietnam. He pointed out the importance of cooperation among all stakeholders to formulate and implement Area BCP/BCM. So, all participants in the workshop would review the draft of BCP as well as show all works needed to be done in the next steps. Lastly he wished all participants would actively join the workshop through group discussion.

8:20 am: Group photo section

8:25 am: Review of the First and Second workshops - Dr Masakazu Takahashi, Team Leader of the Study Team

Firstly Dr. Takahashi warmly welcomed all participants to take part in the 3rd workshop in Hai Phong. He summarized all activities done in the first and second workshops held in Haiphong previously. He talked about the number of participants in each workshop in Vietnam, Indonesia and also the Philippines. Dr. Takahashi emphasized topics discussed in each workshop as well as discussion results in two workshops. Then he showed topics in 3rd workshop, grouping activities.

- Details of his speech: Review of the First and Second Workshops, WS3_VN_04

8:35 am: Draft Area Business Continuity Plan, presented by Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team

Mr. Tsuji gave an overview of the Draft of Area Business Continuity Plan for Haiphong area (Draft Version 1): backgrounds, contents, purposes of the plan. He pointed out the stakeholders of the area in category, infrastructure in the area, structure of local industry. Mr. Tsuji also summarized understandings about the natural disaster risks, impacts to local society and industry, bottlenecks for industry continuity then policy of industry continuity. And furthermore, he indicated the roles of stakeholders, improvement activities and proposed measures. All the plan would be implemented by Area BCM System.

- Details of his speech: Area Business Continuity Plan- 1st edition (Draft), WS3_VN_05

8:55 am: Next Steps, Dr Masakazu Takahashi, Team Leader of the Study Team

Dr. Takahashi overviewed the cycle of Area Business Continuity Management, emphasized the factors for effective implementation of Area BCM, roles of

owner/maintainer, member and supporters in Area BCM as well as proposed the next steps in 2014 and 2015.

- Details of his speech: : Next Steps, WS3_VN_06

After finishing the inputs from the Study Team, no question was raised, so the workshop had the coffee break.

09:50 am -11:10 am: Group Work, guided by Mr. Yoshiyuki Tsuji

There were 4 sub-groups including Advisory, Private sector, Observer, and Infrastructure and Lifeline Utility groups to discuss 03 topics:

Topic 1: Usefulness of Area BCP for the industry continuity in Hai Phong and the improvements for the contents of the plan.

Topic 2: Organization as the owner/maintainer to promote Area BCP in Hai Phong and the necessary resource/system to continue Area BCP.

Topic 3: Expected activities in next steps of Area BCM

All sub-groups worked very actively and interestingly.

11:10 am: Group presentation

1. Infrastructure and Lifeline Utility Sub-group gave the first presentation.

Topic 1: Usefulness of Area BCP for the industry continuity in Hai Phong and the improvements for the contents of the plan.

Group confirmed the usefulness of the Area BCP for the industry continuity in Hai Phong because Haiphong was an important areas with critical infrastructures such as port, airport, roads... and Haiphong was a prone areas, under directly negative impacts of natural disasters. Acknowledging benefits of Area BCP, it was very important to formulate an appropriate plan to raise public awareness about Area BCP.

Regarding to improvements for the contents of the plan, this group gave some comments as follows:

- Identify clearly the socio-economic and infrastructure conditions in order to develop an appropriate plan
- Add-on DRR measures
- Section 3 should have a part on planning on transportation, water resources, industrial parks

- Section 7 should have a part on the advantages, disadvantages and challenges in implementing Area BCP
- The proposed measures should be updated regularly based on the surveys/assessments conducted by relevant agencies (table 6.3)
- Develop the disaster scenarios for early warning purposes

Topic 2: Organization as the owner/maintainer to promote Area BCP in Hai Phong and the necessary resource/system to continue Area BCP.

This group indicated that Haiphong People's Committee would be the Owner to promote Area BCP in Hai Phong area, the Standing Office would be Division of Dyke Management and Flood Storm Control, DARD and it was necessary to assign dedicated and full-time staff working for the Standing Office.

Regarding to the necessary system/resource to continue Area BCP, this group showed some comments:

- It would be required to integrate the BCP mission into the responsibility and mandate of the Hai Phong Committee for Flood Storm Control.
- The budget for the implementation of BCP is Fund for Natural Disaster Prevention and Control
- Enhance the roles of Industrial Park Management Board of Hai Phong
- Active participation of Hai Phong Economic Management Board and Industrial Park Management Board in Hai Phong Steering Committee for Natural Disaster Prevention and Control
- Enhance the role of Department of Industry and Trade
- Implement the M&E system as the input for reviewing stages in BCM process

Topic 3: Expected activities in next steps of Area BCM

This group pointed out some expected activities in the next steps as follows:

- Maintain the regular discussion among stakeholders (difficulties and challenges in implementing BCM)
- Identify/ Assess the feasibility of the BCM/BCP
- Encourage businesses to establish/maintain their own fund for natural disaster management
- Get the involvement of mass media (Hai Phong Television, Voice of Hai Phong, etc)
- Conduct training, simulation, workshop to disseminate the BCM approach
- Conduct capacity building for in-charge staff developing the BCP

2. Next, the Advisory sub-group also showed their presentation on for 3 topics.

Group confirmed the usefulness of the Area BCP for the industry continuity in Hai Phong because a lot of reasons such as:

- Protect interests and assets for existing and future enterprises
- Ensure effective continuity of business
- Provide psychological guarantee to business
- Proactive coordination of different stakeholders

Regarding to improvements for the contents of the plan, this group gave some comments as follows:

- Legal and institutional background of the plan
- Clarification of stakeholders (specific name), role of stakeholders, implementation method, coordination, measures mechanism, monitoring and assessment
- Communication plan and information plan
- Clarification of definitions and terms
- Specific measures to ensure the feasibility of the plan
- Coordination mechanism among stakeholders
- Regular review and update of Area BCM/BCP

This group also indicated that Haiphong People's Committee would be the Owner to promote Area BCP in Hai Phong area, Coordination and monitoring office would be Steering Committee for Flood and Storm Prevention and Search and Rescue of Hai Phong.

For the necessary resources, this group emphasized the resources in term of human, materials and finance from all sources (promoting socialization). For necessary system, this group indicated the need of legal framework, institutional system, clear coordination mechanism,...

This group pointed out some expected activities in the next steps as follows:

- Effective implementation of the plan
- Regular update and review Area BCP
- Commitment of business and service providers
- To build binding mechanism to stakeholders
- Add more scenarios
- Dissemination and awareness raising
- Preparation of BCP, disaster management plan, and measures of individual stakeholders

3. The 3rd presentation from Private Sector Sub-group

Group also confirmed the usefulness of the Area BCP for the industry continuity in Hai Phong because this plan would mobilize the participation of all stakeholders, so it could give the obligations and measures for each stakeholder effectively. It may analyse a lot types of natural disasters systematically and comprehensively. This plan could prepare response measures for natural disasters in the future...

For the improvements, this group asked the Study Team to add more details on disaster scenarios.

This group also agreed that Haiphong People's Committee would be the Owner to promote Area BCP in Hai Phong area, Coordination and the Standing Office would be Division of Dyke Management and Flood Storm Control, DARD.

About the necessary systems, the group mentioned the improvement of legal system, training courses for PIC (person in charge) to implement Area BCP, preparation of equipments and materials to response to natural disasters, establishment of reserve fund.

This group accepted proposed steps in previous sub groups and added the regular exercises and drills, reminded the integration of disaster management plan.

4. The last group made presentation isvObserver sub-group

Actually most of suggestions from Observer group were similar with other groups. They agreed with usefulness of Area BCP and emphasized the roles of Area BCP to change the behavior and attitude of the stakeholder toward natural disasters. This group also indicated the importance of communication plan and information plan needed to be implemented before implementation of this Area Business Continuity Plan.

The Observer group also confirmed the roles of Hai Phong People's Committee as the owner of the plan. Steering Committee for Flood and Storm Prevention and Search and Rescue of Hai Phong would be the standing office with the support from DARD, Department of Trade and Industry in term of electricity management, Department of Information and Communication for the communication plan, the group suggest that members of this Steering Committee are leaders from local government key agencies. This plan required the cooperation from all local government at all levels (district and commune also).

Regarding to the necessary resources and systems for sustainability, this group mentioned the requirement for pilot mechanism from Prime Minister, written guidance from Hai Phong People's Committee. Especially, this group talked about the separate budget for Area BCM.

For the suggestion about the next steps of Area BCM, the group agreed with all opinions from other groups. Group said that it would be helpful to have support projects to raise public awareness and communication in term of ABCP/BCM. They mainly focused on importance of communication plan.

12:20 pm: Adjournment

Dr. Takahashi highly appreciated the contribution of all participants in the workshops. He summarized some outputs of the workshop. With 48 participants, in which 33 attendance are working group members and they were divided into 4 sub-groups to review the Draft of the Area BCP. He recalled 03 topics in this workshop. Based on the presentations, Mr. Takahashi summarized the results of 03 topics as follows:

Topic 1: Usefulness of Area BCP for the industry continuity in Hai Phong and the improvements for the contents of the plan.

Confirm the usefulness of the Area BCP because of some reasons:

- Ensure effective continuity of business
- Deeper understanding BCP and disasters
- Changing attitude/behavior of stakeholders toward natural disaster
- Making clear mandate of central/local agencies
- Provide psychological guarantee to business
- Protect business interest, existing and future enterprises
- Proactive coordination of different stakeholders
- Identification of measures/solutions
- Input to undergoing process of preparing strategy of related agencies (ABCP is a good reference)

For the improvement, all sub-groups mentioned about:

- Legal and institutional background of the plan
- Clarification of stakeholders (specific name), role of stakeholders, implementation method, coordination, measures mechanism, monitoring and assessment
- Communication plan and information plan
- Clarification of definitions and terms

Topic 2: Organization as the owner/maintainer to promote Area BCP in Hai Phong and the necessary resource/system to continue Area BCP.

All groups agreed that Hai Phong People's Committee would be the Owner to promote Area BCP with the coordination from Steering Committee for Flood and Storm Prevention and Search and Rescue of Hai Phong and DARD, Economic Development Board would be members.

Regarding to necessary of resources and systems for sustainability, Dr. Takahashi summarized as follows:

- Legal framework, institutional system, policy
- Mobilization public and private stakeholders
- Clear coordination mechanism
- Human resource, knowledge, experience, materials
- Annual program and budgetary funding, mobilizing businesses, ODA
- Technical support by NGOs, technical institutions
- Communication strategy
- Collecting/Sharing of information and experiences

Topic 3: Expected activities in next steps of Area BCM

All opinions and suggestions from 4 sub-groups were collected as follows:

- Effective implementation of the plan
- Dissemination and awareness raising
- Review and regular update
- Permanent staff to serve as secretariat
- Continuous training and workshops on BCP/BCM
- Regular exercises and drills
- Promoting-communicating (socialization)
- Preparation of BCP, disaster management plan, and measures of individual stakeholders
- Integration of BCP/BCM with existing systems
- Commitment of business and service providers
- Preparation of specific scenarios and scenarios for other hazards
- Formulate supporting project of Area BCP process focusing on communication

He talked about the project schedule and plan for next seminars and workshops. Once more time, Dr. Takahashi thanked all the participants for their cooperation.

Lastly, Mr. Nguyen Huu Phuc from MARD delivered his closing remarkd to end the meeting. He highly appreciated the study of JICA Study Team in Hai Phong area,

Vietnam, especially the study focused on industrial agglomerated areas. Because Vietnam was in the way to adopt new law on natural disaster prevention, so he hoped that Area BCP would become a good reference for policy makers in Vietnam, especially for MARD when they draft guidance Circular and other under-law legal documents.

12:35 pm: MC Hoang Minh Nguyet declared the close of the conference.



**Workshop 4 for Area BCP Formulation, the Philippines
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial
Agglomerated Areas in the ASEAN Region”**

November 20, 2014, Aston Primera Pasteur, Bandung, Indonesia

*A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

Attendants

No	Name	Organization	Position
Working Group Member 1			
2	Lina Yulianty	Local Planning and Development Agency (BAPPEDA) West Java Province	Staff
1	Agustien N.	Local Planning and Development Agency (BAPPEDA) Karawang Regency	Perencana Madya Bappeda Karawang
3	Syamhuri	Local Disaster Management Agency (BPBD) Bekasi Regency	Kepala Pelaksana
4	Nanang	PT. Sharp	GM
5	Agus Komarludin	PT. KAI Jakarta	
6	Imron Rosadi	PT. HM. Sampoerna	EHS
7	Zainal M.	PJT II	
Working Group Member 2			
1	E.Y. Taufik	Regional Planning & Development Agency /BAPPEDA	
2	Fuad H.	Regional Planning & Development Agency/BAPPEDA	
4	Khanifudin	Natural Environmental Management Agency/BPLH	
5	Mansur	Natural Environmental Management Agency/BPLH	
3	Tuftana	Transportation Agency of Bekasi Regency	Sekdin
6	Diperanata S.	PT. JOTUN Indonesia	HSE
Working Group Member 3			
1	Ani Widiani	BAPPEDA-west java Province	Kasubid TRLH
2	Iskandar	Road Agency-west jaba Province/Dinas Bina Marga	
3	Yuliansyah	Transportation Agency-Bekasi regency/Dishub	Keuangan
4	Asep Suntoro	PDAM-karawang regency	Ka. Litbang
5	Khalil M.	BBWS Citarum	
6	Rudi A.	Jasa Tirta II company/PJT II	
Other Group Member			
	Munadi	BPBD	Pelaksana
	Petra	BPBD	Pelaksana
	Muttaqin	Diskominfo	Sie Pengkajian Data
	Ilham P.	Diskominfo	Staff
	Mardjuki S.	Perum Jasa Tirta II	Dir. LIST
	Rizky A.	Dishub	Lapang Tengah Bekasi
	Yoyo Ismaya	Dishub	Lapang Tengah Bekasi
	Shobirin	Dinas Kebersihan	
	Rahmat H.	Damkar	
	Anisa Laura	Damkar	
	Apriyani	Damkar	

**Workshop 4 for Area BCP Formulation, Indonesia
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

November 20, 2014, Aston Primera Pasteur, Bandung, Indonesia

Agenda

November 20, 2014, Thursday

Agenda	
11:30	Registration
12:00-13:00	Lunch
13:00-13:20	<p>Welcome Address</p> <p style="text-align: center;">Regional Development Planning Board (BAPPEDA), Province of West Java Ms. Ani Widiani</p> <p>Group Photo Session</p>
13:20-14:30	<p>Inputs for Discussion</p> <p style="text-align: center;">Review of Area BCM process and options for the next cycle Dr. Masakazu Takahashi Leader of the Study Team</p> <p style="text-align: center;">Review of the Plan by the working group members Mr. Yoshiki Kinehara Team Member, Area BCP</p> <p style="text-align: center;">Approach for Area BCP by PT. Sharp Mr. Nanang Prakosa Budianto Senior Manager Business Strategy & Planning Development, PT. Sharp</p> <p style="text-align: center;">Sum up of the Project and way forward in Indonesia Ms. Ani Widiani BAPPEDA</p>



	Q&A Grouping
14:30 -14:40	Coffee Break
14:40-16:00	Group Work Topics for Discussion 1. How the Plan (Area BCP) was improved by reviewing by your organizations? 2. What would be our responsibilities in Area BCM? 3. What would be the next cycle of Area BCM in Karawang and Bekasi? Guided by Mr. Yoshiki Kinehara
16:00-16:45	Presentation by the Groups and Q&A Guided by Mr. Yoshiki Kinehara
16:45-16:50	Wrap up Dr. Masakazu Takahashi Q&A
16:50-17:00	Closing of the Workshop Mr. Hiroaki Nakagawa Principal Representative for ASEAN Coordination Japan International Cooperation Agency (JICA)
17:00	Adjournment

MC: Dr. Krishna Suryanto Pribadi

4th Workshop
Area BCP Formulation, Indonesia, for
“NATURAL DISASTER RISK ASSESSMENT AND AREA BUSINESS CONTINUITY
PLAN FORMULATION FOR INDUSTRIAL AGGLOMERATED AREAS IN THE
ASEAN REGION

Thursday, 20 November 2014
Aston Hotel – Bandung, Indonesia.

Time : 13.00 - 17.00
Moderator : Khrisna S. Pribadi

A. OPENING

Opening from Ms. Ani
BAPPEDA, Jawa Barat Province

Natural disasters give negative impacts to many aspects without any exception to the industrial aspect. This 4th workshop, originated from “research,” was held in Indonesia for reducing the risks or losses for industrial area when a disaster strikes. West Java is a province that has many industries and industrial areas compared to other nationwide areas. We hoped that we could establish Area-BCM (Business Continuity Management) to minimize the risk of disasters through this workshop. We also would like to thank and give a huge appreciation for the participants. Hopefully we will be able to increase our commitments with this.

B. SESSION 1

Presentation 1. ABCM Process and Future Plans

Presenter: Dr. Masakazu Takahashi

Study Team Leader

Today we will assess the BCP document that has been made. As we know, ABCM is a concept that has the following stages: understanding the area, determining strategies, developing asset-backed commercial paper (ABCP), implementation and review, as well as maintenance and repair. Country reports, guidebooks, and risk profile reports are the instruments to use. Currently, we are drafting a risk profile for Bekasi and Karawang as we also prepare state reports for Indonesia.

There is a guidebook that consists of eight chapters with three attachments and extra documents, providing data about five elements in the Area-BCM for initiating and putting ABCP and ABCM into action. Inside the documents, there is an ABCP file for case studies and it will be reviewed together.

The risk profile report is expected to be a reference for all of us and could provide useful information for those people who want to invest an area for case studies. As for country reports, it contains some macro-level information that combines data on decision making and disaster risk together. Additional improvements will be required by taking inputs from experts.

This activity started in 2013 and is positioned at the end of project. Today we all will exercise and review in order to finalize the second version of ABCP. The next stage is implementation and testing process for providing improvements to the concept; the cycle is repeated in every new conditions. Furthermore, the possibilities of having the following things that may possibly change in the future need to be considered: unexperienced members, modifications of a specific area, a new disaster risk reduction strategies, and many more.

Presentation 2 Results of the Review Plan and Working Group Discussion

Presenter: Mr. Yoshiki Kinehara

Team Member

There have been three workshops held in December 2013, March 2014, and May 2014. The first version of ABCP has been reviewed from September to October 2014 and the second version will be released after today's workshop. There are 18 organizations, which are mostly come from government agencies (there about 10 local government agencies among them), provide feedbacks on the ABCP documents.

Other institutions derive from infrastructure sectors, lifelines, private sector, and others (employers and industry associations). There are several roles and responsibilities proposed by the working group members of ABCM: those are from BAPPEDA recommended themselves as sectors to design budgeting for ABCM and those who are from BPBD offered to apply for disaster management. There are also members who offered information and data related to ABCM, disaster data and risk assessment for BPBD, and corporate data from APINDO.

The following things were requested by the working group members: assumption impacts, central government's responsibility for the infrastructure continuity services, details of the role and responsibilities of all supporters, implementation plans, improved of ABCP manuscript, Standard Operating Procedures, suitability of other plans, countermeasures for flood disaster damage prevention, as well as traffic and telecommunications.

While the rest needs to complete the following things for the revision of ABCP: peer review of team members, details of his or her main responsibilities, additional information, and improvement of ABCP contents. A review of studies, say all meetings of members, the commitment from the management levels, and the general review is needed for the private sectors to complete ABCP. There are also requests for facts from each agency or institution, organizations' expectations, as well as the official government supports.

Content improvements of ABCP established from the formulation of emergency response plans, simulations, and so on. At the moment, we are editing the second edition in order to continue further ABCM's activities in Bekasi and Karawang until the third version of ABCP will be released.

Presentation 3. Approach of ABCP
Presenter: Mr. Nanang Prakosa Budianto
PT. SEID (Sharp Electronics Indonesia)

Jakarta did not only face natural disasters, but also 29 local offices of PT. SEID (Sharp Electronics Indonesia Denpasar Branch) in Indonesia. Plant sites in Cakung, Pulogadung is located near the river and Banji Kanal Timur (BKT). A flood occurred in early February 2007, which many employees faced obstacles to get to their place of work: some were late, while some could not reach to their workplace. It was flooded and many essential items such as raw materials, refrigerator, and television got submerged into the water.

The impact and losses will ultimately lead to financial aspects; there were costs of demolition and the removal and disposal of things that cannot be used for insurance even if we have to follow the insurance. There was disaster-related minimum information for vulnerabilities. What's more, the labour force lost employments for about two weeks. Given that no definite benchmark has been established yet for employment insurances for those people who have lost their jobs, all of these things cannot be claimed. When the other competitors were able to meet their demands whenever we could not work for two weeks, the market share went down in the end.

Afterwards, we decided to build infrastructure, such as an early warning system, flood pumps, and levees/floodwalls. Like so, now we have something called BCP (Business continuity planning) that we can use to create our own watergates, which it gives some signs at a particular level and the data or the sign will be transferred to the person who is in charge.

There are standard operating procedures (SOPs) for the distribution of the information as well.

The minute a flood occurs, there were no certainty about the flood condition by reason of the lack of disaster coordinates and a lot of obstacles during recovery, especially clean water and electricity. Speaking of information, sources of clean water only comes on the fifth day (in a very small amount), while the access to safe drinking water was still not available because they was blocked in the street and cannot come to the office.

We are trying to find information related to business activity in the early days; however, the information priorities for residents or community were declined.

With the development of the necessary information and future systems for early warnings, it must be essential to coordinate with the KIIC industrial area management. Another future plan is to make plans and organizations to face any disasters, conduct rapid recovery, and update ABCP. SEID and KIIC teams will coordinate specific outputs based on the past events in order to avoid losses in the future during the existence of ABCM.

Presentation 4 ABCP Programs in West Java Province

Presenter: Ms. Ani

BAPPEDA OF WEST JAVA

This activity starts from Japan International Cooperation Agency (JICA) and AHA Centres, and the selected regions in Indonesia are Kawasan Modern Internasional and MM 2100. Various activities have been carried out, working groups were formed, and workshops and seminars were organized. It has conducted a flood impact survey by the JICA Team, while the results were obtained from flood-disaster scenarios and the impacts of flooding on facilities and infrastructure.

ABCP has some contents starting from its purpose, scope, general description of the study areas, disaster impact analysis, industry survival strategies, and so forth. There are some modifications from the first version of ABCP documents dealing with editorial, institutional, infrastructure, authority issue of assets.

There were various inputs of substances, institutional, and infrastructure during the final seminar on August 26. Reviewing and updating were necessary and it has been performed by the stakeholders.

The construction of Cikarang Toll Road, one of the development plans related to ABCP, was authorized by the central government as well as building fly over Cibitung, developing marine transportation and Cilamaya Port in Karawang.

There is a concept of twin Metropolitan Bodebek Karpur – DKI Jakarta, which we are trying to add more benefits to the presence of industries in West Java seeing as all income tax transfers to Jakarta and we expect that both Bodebek Karpur and DKI Jakarta can positively cooperate in the future.

Next, we would like to strengthen communication and coordination related to implementation of ABCP as well as how to maintain the awareness of the stakeholders. We also want to initiate cooperation with the central government (BAPPENAS) who are involved with ABCP. In the meantime, BPBD and Bappeda have their own respective roles to work together and respond effectively to disaster management.

Working Groups

There are three group discussion topics, namely:

Topic 1: Plan Overview

Topic 2: Roles and Responsibilities

Topic 3: Cycle of ABCM

Each working group wrote down his or her ideas on notepads and debated until the Chairman summarized the conclusions.

Question #1

Opinions about the review plan:

- 1. Things that are approved or not*
- 2. Things that need to be improved*
- 3. Things that are beneficial to the organization or not*

Question #2

Any challenges faced by the organization in order to contribute to ABCM?

Question #3

Any required actions or information from stakeholders? (For example, content schedule, damage restoration predictions, or strong leadership...)

Question #4

Participants' opinions on the next cycle proposed by BAPPEDA? (Case approved or not)

Question #5

What are important tasks that must be performed in the next cycle? (Based on the studies of other types of disasters, the number of participants attended the workshops, official government support, training or simulation).

GROUP 1 (RIENNA & ARIA)

TOPIC #1	
Question #1	
<p>Basically agreed because the plan is in accordance with industry and disaster with some necessary improvement, namely:</p> <ol style="list-style-type: none"> 1. A shorter, simple, clear, and easy procedure to understand 2. Needs to be more applicable 3. Additional impacts to the community 4. Further elements of defense and security 5. Diversity and inclusion in organizations 6. More disaster mapping of emergency or post evacuation <p>Benefits for BAPPEDA:</p> <ol style="list-style-type: none"> 1. An input for the Regional Official Plan (ROP) documents can be integrated into more macro planning 2. References or manuals that needs put into action 3. Budgeting and business planning 4. Documents that are considered as useful 	
TOPIC #2	
Question #2	Question #3
<p><i>to Industry</i></p> <ol style="list-style-type: none"> 1. Dissemination for industry 2. Investment (Budget) <p><i>for the Government</i></p> <ol style="list-style-type: none"> 3. Consistency and commitment to those policy makers who may not be aware of ABCM 	<p>Industry requires more technical data, such as:</p> <ol style="list-style-type: none"> 1. Basic data of a disaster 2. Emergency response information 3. Water traffic in the harbor 4. Disaster predictions and certainties 5. Door-to-door information
TOPIC #3	
Question #4	Question #5
<p><i>Industry</i></p> <ol style="list-style-type: none"> 1. The real implementation of the plan was described by BAPPEDA <p><i>Government</i></p> <ol style="list-style-type: none"> 2. Agreed and desired Commitment and 	<ol style="list-style-type: none"> 1. Tested, analyzed, simulated, and further reviewed the deficiency and the advantages 2. Study the entire sector, including non-industries

Consistency	3. Useful tools that can be applied as well as easy enough to follow a disaster mitigation in general
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GROUP 2 (ANIN & MONA)

TOPIC 1	
Question 1	
<p>Agree or attempt regarding disaster risk reduction with a variety of inputs, among others:</p> <ol style="list-style-type: none"> 1. No industry will be built around the riverbanks again 2. Integration of an area 3. Making clear Standard Operational Procedures (SOPs) 4. A study of the upstream region 5. More specific stakeholder roles and responsibilities <p>The document is handy as a guide during a disaster and as reference for SOP in each SKPD</p>	
TOPIC #2	
Question #2	Question #3
<ol style="list-style-type: none"> 1. Need enforcement 2. Funding sources 3. Institutions and Regulations (For having strong rules and the possibilities of permitting other agencies into the structure.) 	<ol style="list-style-type: none"> 1. Disaster information center. The industry needs to obtain information from the government about the disasters that occur in particular seasons 2. Dissemination 3. Communication and Coordination
TOPIC #3	
Question #4	Question #5
<ol style="list-style-type: none"> 1. Agreed because it is the right solution when it comes to dealing with disaster problems. Some of the things that are mentioned on access, toll, and twin metropolitan are all interconnected 	<ol style="list-style-type: none"> 1. Simulation for testing is necessary 2. It needs government's support and training on how to deal with flood control and its problems

GROUP 3 (GERRY & NIMAS)

TOPIC #1	
Question #1	
<p>Agree because there are roles and responsibilities of various stakeholders, with a note:</p> <ol style="list-style-type: none"> 1. Keep synergy together with various stakeholders and plan documents 2. Need more detailed plannings poured in maps 3. Increase access to the industrial area 4. The involvement of the central government 5. Detailed planning 6. The role and authority of BBWS that are not yet listed in the document <p>This paper is beneficial for disaster for the reason that it aims to anticipate the risk of natural disasters</p>	
TOPIC #2	
Question #2	Question #3
<ol style="list-style-type: none"> 1. Planning synchronization in documents may have been legalized, but it currently has not been considered as official in future 2. Coordination and communication between agencies 3. Budget limitations 4. Unpredictable disasters 	<ol style="list-style-type: none"> 1. Relevant information from all stakeholders in the ABCP plan for identifying specific needs in their respective sectoral policies, so the plannings would not overlap 2. Duties and responsibilities of officials are not included 3. Information management plan of BPBD 4. There should be an early warning and information system from the agency that oversees the water discharge
TOPIC #3	
Question #4	Question #5
<p>Agreed and the next steps are:</p> <ol style="list-style-type: none"> 1. Dissemination 2. Formalized or legal protection 3. Budgeting 4. Implemented 5. Continuous 	<ol style="list-style-type: none"> 1. Actual implementation 2. Procurement of equipment 3. Training of personnel / HR 4. Simulation 5. Assessment for another disaster

WRAP UP

There are 30 participants came today and mostly it comes from the advisory sector (21 persons). There are also a few participants from the private sector, the lifeline, and as an observer. Summary of the 3 topics of discussion today are:

Topik 1

The participants generally agreed that the ABCP as disaster prevention and for future planning reference. However there are some inputs for improvement, among others:

- The need for improvement in the planning details and documents
- The need for involvement of the central government and other relevant agencies
- The need for improvement in the coordination, information, and communication
- It is very good for collaboration between government and the private sector
- It is very good as a manual for implementation

Topik 2

-Question 1

- Industry need dissemination and investment
- The government needs to be consistent and stick to commitment
- Need government enforcement because the document is not formal
- Less coordination and communication
- The source of funds is not clear\
- Conditions supervisor or senior employees who are less understand of the substance

-Question 2

- Information of water, electricity, traffic, and port
- Prediction of hazard, its periodic, and certainty
- ABCP included in the strategic plan
- ABCP included as roles and responsibilities of each agency
- Development of disaster information center in the industrial area to receive and transmit information
- Plan of disaster management by BPBD and early warning system by relevant agencies.

Topik 3

-Question 4

- There needs to be a concrete implementation of the planning
- Need consistency and commitment
- Dissemination and full support in a formal way
- Sustainable funding
- Agree with what was planned by BAPPEDA

-Question 5

- Need for testing and simulation
- Need involvement of other sectors
- Implementation of the plan
- Full support of government

Future Plans

In 2015 we will implement and increase awareness and commitment from stakeholders and members through meetings, workshops and seminars. Furthermore, it also will be a discussion with national stakeholders to obtain a wide range of support.

In 2016 will be held the 2nd initiation of ABCM cycle to acquire ABCP 3rd version with the latest conditions and the support of Bappenas and JICA. Meanwhile, we will enhance coordination and communication between the group members.

We hope that from this day participants can write the person in charge of each agency to ABCP. Then the participants are also expected to be able to correct the role of each organization that is in the attachment.

C. CLOSING

Closing from Mr. Kagawa

AHA Centre

Thank you so much for the presence and support of all the participants who came today. ABCP is important and it is necessary to have real support from all stakeholders involved. The ultimate goal of all this can be achieved by reviewing and monitoring this program so that any relevant plans and BCM can be carried out. There is also great hope that every plan can be disseminated and applied by every industry in the future.

Workshop 4 for Area BCP Formulation, the Philippines
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 Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

Attendants

Country	Name	Organization	Position
Advisory Group 1			
Philippines	Elvis Cruz	Office of Civil Defense Region IVA	Assistant Regional Director
Philippines	GM Corazon T. Jimenez	Metropolitan Manila Development Authority (MMDA)	Undersecretary /General Manager
Philippines	DDG Justo Porfirio Yusingco	Philippines Economic Zone Authority (PEZA)	Head, Administration and Finance
Philippines	Atty. Norma B. Cajulis	Cavite Economic Zone	Cavite Zone Administrator
Philippines	April Joy Medico	Cavite Economic Zone	Senior Specialist
Philippines	Ramon Lacap, Jr.	Cavite Economic Zone	Engineer III
Philippines	Donald James D. Gawe	National Economic and Development Authority (NEDA) Region IV-A	Chief, Policy Formulation and Planning Development
Advisory Group 2			
Philippines	Marie Angela Delos Santos	Department of Transportation and Communication	Technical Assistant
Philippines	Marisel Cayetano	Cavite Provincial Government	Special Operations Officer
Philippines	Ma. Cristina Monzon	Cavite Provincial Government	Administration Staff
Philippines	Mark Joseph G. Bawalan	Cavite Provincial Government	Administration Staff
Philippines	Jimson Evangelista	Laguna Provincial Government	Staff, PDRRM Office
Philippines	Pablo V. Del Mundo Jr.	Laguna Provincial Government	Officer in Charge, PPDC
Philippines	Gilberto R. Mondez	Laguna Provincial Government	Provincial Engineer
Philippines	Arnel Peñaranda	Laguna Provincial Government	Staff, Planning Office
Private Sector Group 1			
Philippines	Eduardo R. Nicolas III	Philippine Chamber of Commerce and Industry (PCCI-South Luzon)	Vice President
Philippines	Grace Carolyn G. Morella	Philippine Chamber of Commerce and Industry (PCCI)	Manager
Philippines	Virgilio Lorenzo	Laguna Chamber of Commerce and Industry	President
Philippines	Edwin Tirona	Laguna Techno Park	VP-External Affairs
Philippines	Rodolfo I. Catanghal	AFC/TSC	Safety Officer
Philippines	John Michael P. Torres	Yakazi-Torres Manufacturing, Inc.	TSC Security Officer
Philippines	Fidel Eblasin	Yakazi-Torres Manufacturing, Inc.	
Private Sector Group 2			

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Attendants

Country	Name	Organization	Position
Philippines	Teresita Leabres	Philippine Chamber of Commerce and Industry (PCCI)	Regional Governor
Philippines	Rona S. Sañez	Laguna Techno Park	Marketing Manager
Philippines	Nhel S. Maronilla	NEP Logistics, Inc.	Assistant manager
Philippines	Emerline Malicedem	ROHM Electronics Phils., Incorporated	Safety Officer
Philippines	Gerardo Castillo	Yakazi-Torres Manufacturing, Inc.	ADR/ Safety Officer
Lifeline Group			
Philippines	Arnel C. Antonio	Department of Energy (DOE)	
Philippines	Jorge T. Garcia	Department of Energy (DOE)	
Philippines	Jommel Omar Gomez	Manila Water Company, Inc.	Business Continuity Head
Philippines	Conrad P. Soriano	Maynilad Water Services, Inc.	Head, Safety Health Dept.
Philippines	Raoul Villasenor	PLDT	
Philippines	Lucky Arjay Macapilit	PLDT	
Philippines	Marco R. Carlos	Meralco	
Infrastructure Group			
Philippines	Michael Angeles	Department of Public Works and Highways (Region IV-A)	Engineer II
Philippines	Conrad Joseph Perez	Department of Public Works and Highways (Region IV-A)	Engineer II
Philippines	Deogracias P. Barrios	Department of Public Works and Highways - NCR	Engineer III
Philippines	Mariel Vergara	Department of Public Works and Highways - NCR	Engineering Asst.
Philippines	Jason Villegas	Department of Energy (DOE)	
Philippines	Rebecca Olivia S. Dimasacat	Cavitex	Head, Security Office
Philippines	Joseph Frankie S. Argana	Cavitex	Security Mngt Specialist
Philippines	Gen. Luisito Maralit	Skyway	Head, TMSD
Philippines	Eduardo Villarín	Skyway	Asst Head, TMSD
Philippines	Angel Echano	Transco	Head, Safety Committee

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JICA and JICA Study Team

Country	Name	Organization	Position
Japan	Noriaki Niwa	JICA Philippines Office	Chief, Representative
Philippines	Catherine Palanca	JICA Philippines Office	Program Officer (Disaster Management)
Japan	Takaaki Kusakabe	JICA - Office of Civil Defense	JICA Expert
Japan	Masakazu Takahashi	JICA - AHA Centre Study Team	Team Leader
Japan	Yoshiyuki Tsuji	JICA - AHA Centre Study Team	Deputy Team Leader / Area BCP
Japan	Shukyo Segawa	JICA - AHA Centre Study Team	Expert on Risk Assessment
Japan	Shiro Matsunami	JICA - AHA Centre Study Team	Coordinator
Philippines	Ramon J. Santiago	JICA - AHA Centre Study Team	National Coordinator
Philippines	Josephine R. Sy	JICA - AHA Centre Study Team	Project Staff
Philippines	Roxanne Joy R. Sy	JICA - AHA Centre Study Team	Project Staff
Philippines	Dante A. Susano	JICA - AHA Centre Study Team	Project Staff
Philippines	Lynn Melosantos	Philippine Institute of Volcanology and Seismology	Facilitator
Philippines	Alex Nicolas Tamayo	University of the Philippines	Facilitator
Philippines	Claire Pantoja	University of the Philippines	Facilitator
Philippines	Mariam Jayne Agonos	University of the Philippines	Facilitator
Philippines	Tiffany Nicole Corrales	University of the Philippines	Facilitator
Philippines	Anna Paulina Matillano	University of the Philippines	Facilitator

Workshop 4 for Area BCP Formulation, Manila
for
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PROGRAM

Time	Agenda	Focal Person
9:00-10:00	Registration	
10:00-10:20	Welcome Address	Brig Gen Romeo F Fajardo AFP (Ret) Deputy Administrator Office of Civil Defense
	Group Photo Session	
10:21-11:30	Inputs for Discussion	
	<ul style="list-style-type: none"> • Review of the Area BCM Process and Options for the Next Cycle 	Dr. Masakazu Takahashi, JICA ABCM Project Team Leader
	<ul style="list-style-type: none"> • Review of the Plan by Working Group Members 	Mr. Yoshiyuki Tsuji Deputy Team Leader
	<ul style="list-style-type: none"> • Promotion Approach of ABCP to Private Sector 	Mr. Fidel Eblasin, Yazaki-Torres Mr. Marco Carlos, MERALCO
	<ul style="list-style-type: none"> • Project Summary and Ways Forward 	DDG Justo Porfirio LI Yusingco PEZA
	<ul style="list-style-type: none"> • Q&A and Grouping 	
11:31-12:30	Lunch	
	Group Work (80 Mins)	Mr. Yoshiyuki Tsuji, Facilitators, Group Leaders and Members
	<i>Topics for Discussion:</i>	
	1. <i>How the Plan (Area BCP) was improved by reviewing by your organization?</i>	
	2. <i>What would be our responsibilities in Area BCM?</i>	
	3. <i>What would be the next cycle of Area BCM in Cavite, Laguna and Metro Manila?</i>	
13:51-14:10	Coffee Break	
14:11-14:55	Group Presentations (45Mins)	Group Leaders/Reporters [Facilitated by Mr. Tsuji]
14:56-15:00	Wrap Up and Q&A	Dr. Takahashi
15:01-15:10	Closing Remarks	Mr. Noriaki NIWA Chief Representative, JICA Philippines
15:11	Adjournment	

MC: Mr. Ramon J. Santiago

Summary of Group Work at 4th WS

Name of Group	<p>Advisory Group 1</p> <p>Members:</p> <ul style="list-style-type: none"> • Engr. April Joy Medico (CEZ) • Atty. Norma B. Cajulis (CEZ) • DDG Justo Porfirio Yusingco (PEZA) • Elvis Cruz (OCD-Region IV-A) • Ma. Cristina Monzon (Cavite Office of Public Safety)
Name of Facilitator	Tiffany Nicole Corrales
1) What do you think about the reviewed plan?	<ul style="list-style-type: none"> - We agree with the whole framework of the BCP but we do not agree on PEZA being the lead organization for areas outside the economic zone (of PEZA). Referring to Section 2.1.1 - What exactly do we mean by “lead organization”? Referring to Definition of Terms - We request further clarification for the roles of the Lead and Co-Lead of the BCP, as well as their definitions and the roles per agency. - We need participation from the local government of municipalities/cities in the area and other agencies as well, like the Bureau of Customs - Include historical data for similar calamities from other areas or countries - It is useful due to the potential effects of disasters on businesses inside the economic zone and also for other industries.
2) What are needed for your organization to contribute to Area BCM?	<ul style="list-style-type: none"> - Sharing of information from different agencies - Training for personnel within the organization - Funding - Identify the focal person within the organization for the organization to further contribute to the Area BCM.
3) What actions or information do you	<ul style="list-style-type: none"> - Access to different tools, such as the programs and simulations, equipment, sharing of resources during the actual emergencies or calamities

Summary of Group Work at 4th WS

request to other stakeholders?	<ul style="list-style-type: none"> - Relevant information - Individual BCP (access to these if other organizations have their own BCP so that we can incorporate it to the Area BCP) - Support & cooperation from the different agencies or participants and members of the BCP
4) What do you think about the next cycle proposed by PEZA?	<ul style="list-style-type: none"> - Formulate the timeline for the implementation of the next cycle - Technical working group in charge of the dissemination of information or training of different companies within the economic zone. The working group should be composed of the technical experts from different agencies. - Participation of JICA, PHIVOLCS, and other stakeholders with experience in Area BCP who have been implementing this for a long time.
5) What are the important tasks in the next cycle?	<ul style="list-style-type: none"> - Being in Cavite, [include] other disasters for the BCP like flooding, typhoon, storm surge, tsunami, because there are coastal areas - Recommend same participants because the group is very well represented from different industries - Appropriate funding. Local government is required to have the funding for the disaster risk reduction management so we would like to support the recommendation and that requirement. - Designate timeline on exercise of the Area BCM and information dissemination for other areas. If there are no actual calamities, we have to have some drills and do some evaluation
Other comments (if you have)	<ul style="list-style-type: none"> - The group did not have much comments because they were among the ones who were greatly involved in the formulation of the content of the draft of the Area BCP. - NOTE: text in blue were mentioned during the discussion/presentation but were not written down in the metacards.

Summary of Group Work at 4th WS

Name of Group	Advisory Group 2
Name of Facilitator	Anna Paulina Matillano
[Topic1] Question 1)	<ul style="list-style-type: none"> -formulation of bcps can be promoted as a strategy of the rdp and rdrmp -linkages of national, local, and business -lack of linking on 3rd and 4th district which is for agricultural area (limited) -focused in industrial business -monitoring, and evaluation problem -primary concern is earthquake, flooding is more prominent -further clarification: institutionalization for areas outside PEZA -more detailed action of implementing plans which can be used as guide by different stakeholders -useful: abcp -scope is very limited (focus industrial area) -lack of details (disaster scenarios table 3-3 specific and updated. Example if morning, night etc 'Philvolcs (earthquake damage assessment will be able to get more informatio. -too broad, lack of details
[Topic2] Question 2)	<ul style="list-style-type: none"> -let then knkw we are organized (fear of politics) -local government can contribute to economic, social and cultural information -financial support (availability of fund, not included in plan -politicking -possibility of bad relationships
[Topic2] Question 3)	<ul style="list-style-type: none"> -guidance of Peza to take lead -good information dissemination for the leaders: be the first to know -mutual support from other takeholders -resources documentation -memorandum of agreement among stakeholders (immediate and fast recovery) -public private relationships -realignment -late release of funds (flexibility) -assumption: should be good plannersp
[Topic3] Question 4)	<ul style="list-style-type: none"> -be able to share out of their areas -advocate out of peza -more flexible and relevant -roll out of bcp -scope of bcp -generally agree to proposition of peza

Summary of Group Work at 4th WS

	-target is to expand because it is limited (not only Calabarzon, or under their jurisdiction)
[Topic4] Question 5)	<ul style="list-style-type: none"> -study on how to persuade COA their approval on projects -NDRRM difficulty of money release -information dissemination in media 'Using visuals to simplest presentations -forums and symposiums -another disaster area and sector like agriculture -study another disaster or multi-hazard -flexibility on COA -Study for another disaster area -more participants=bigger funds (regional or province scope) -avoid misappropriation 'Output of release of fund (beneficiary, positive outputs, what it was able to prevent) -conducting trainor's training -Simulations -bring a representative to those who are not affected to make them realize what is needed
Members	<p>Chairman: Ariel Peneranda Presenter: Marisel Cayetano Timekeeper: Marie Angela Delos Santos Member: Jimson Evangelista</p> <ul style="list-style-type: none"> -Pablo del Mundo Jr. -Gilberto Mondez -Ma. Cristina Monzon -Mark Joseph Bawalan

Summary of Group Work at 4th WS

Name of Group	Private Sector 1
Members	<p>Facilitator: Alex NP Tamayo</p> <p>Chairman: Ed Nicolas</p> <p>Presenter: Miko Torres</p> <p>Timekeeper: Rudolf Catanghal</p> <p>Members:</p> <p>Edwin Tirona</p> <p>Teresita Leabre</p> <p>Grace Morella</p> <p>Virgilio Lorenzo</p>
<p>[Topic1]</p> <p>Q1 : What do you think about the reviewed plan?</p>	<ul style="list-style-type: none"> • Group implied that the plan is sufficiently agreeable, they instead focused on reviewing the ABCP plan • Useful for planning and decision making • Coordination with other regions who will help provide support • Section 2.3 – hazards – may wish to include awareness, training for secondary hazards (Tsunami, flood, & volcanic eruptions) • Table 3.1 – comprehensive, members: to include local SME Development council • Table 3.2 – to include water supply and sewerage treatment facilities • Table 3.3 – Consider gasoline and LPG, there might be insufficient supply • Table 4.1 – Consequential impact include medical facilities are toppled down/crowded facilities, lack of medical doctors, lack of cadaver bag • Section 4.2 – Concerns for the industry continuity – helping people to cope w/ the trauma, other groups such as the red cross and church org will play a vital role in helping people cope, accept responsibility, and move on. • Section 5.2 – company (in industrial park), contribute information for area BCM...involve industrial park

Summary of Group Work at 4th WS

	<p>HR/safety organization and clubs (they have better network organization chain)</p> <ul style="list-style-type: none"> • Table 5.2 – integrating of BCM/BCP in CDPs/CLUPs
<p>[Topic2] Q2 : What are needed for your organization to contribute to Area BCM?</p>	<ul style="list-style-type: none"> • Awareness programs coordination, networking, planning (Toyota suppliers’s club/HR Society) • As trainor, share best practices (PCCI) • Provide platform for info dissemination (we have the network) (PCCI) • Expand safety awareness/safety requirements to all Toyota Appliance (TSC) • Training material from private sector
<p>[Topic2] Q3 : What actions or information do you request to other stakeholders?</p>	<ul style="list-style-type: none"> • Funding for training from LGUs • Training materials from OCD • Organized network / command center (centralized command for relief, rescue, recovery. Assistance) • Tax free importation of equipment from PEZA • Involvement of LGUs in the formulation of ABC formulation planned by PEZA • Availability of heavy equipment in nearby locations of SLEX, CAVITEX etc (for immediate temporary repair of traffic to flow) • Include seismic requirement on PEZA audit checklist • DILG – strengthen local DRRM, LGU level
<p>[Topic3] Q4:What do you think about the next cycle proposed by PEZA?</p>	<ul style="list-style-type: none"> • Agree • Pilot proposal • Should include SMEs operating outside PEZA • Sustainability of PEZA cycle proposal • Include timetable in the PEZA proposal
<p>[Topic3] Q5:What are the important tasks in the next cycle?</p>	<ul style="list-style-type: none"> • Community/company wide drills on disaster preparedness • More participants from different industry sector and LGUs (industries outside PEZA) • Inclusion of companies with DRRM initiatives like SM, Aboitiz

Summary of Group Work at 4th WS

	<ul style="list-style-type: none">• Additional seminar workshop on storm surge, tsunami, outbreak and terrorism• ABCP info should be disseminated in all organization /companies covered by PEZA• Follow-through on actual implementation of the ABCP• Dissemination through city, municipality newspapers, magazines, all forms of media• Info dissemination (social media), monitoring and evaluation
Other comments (if you have)	- -

Summary of Group Work at 4th WS

Name of Group	Private Sector 2
Name of Facilitator	Mariam Jayne Agonos
[Topic1] Question 1)	<p>Points agreed on</p> <ul style="list-style-type: none"> - Establishing the appropriate organization to sustain ABCM - Essential to identify and build a consensus about the established organization - Institutionalization is the right direction for ABCM - So the overall benefits can be realized -5.1 Policy to ensure industry continuity -5.2 Role of stakeholders 5.3 Measures for industry continuity -7.3 Exercising and reviewing <p>Needs clarification</p> <ul style="list-style-type: none"> -2.1.3 support organizations -Support the main infrastructure operator -How will the agencies who will comprise the supporting organizations for the ABCM ensure consistent and continuous support to the activity <p>Needs improvement</p> <ul style="list-style-type: none"> -Role of stakeholders - How to effectively implement -Impact analysis of the area. Who will evaluate the output if the analysis is correct or not? -7.4 Maintaining and improving. Define specific time for reviewing (annual? Yearly?) <p>Usefulness to the organization</p> <ul style="list-style-type: none"> -Reviews plan has identified who will lead the BCM -Usefulness for the organization -Internal BCP already established and being practiced. Success of internal BCP is linked to other areas -Generally, having ABCP is useful to all types of industry, local, national, or government and SMEs -Will shorten recovery after an emergency or disaster -ABCP will be very useful on the economic zones continuous operation, competitiveness, and survival of industrial locators
[Topic2] Question 2)	<ul style="list-style-type: none"> - Support by top management, everything will follow with PEZA's instructions - Needed to contribute: organization, policy, plans and programs, activities, trainings - Right information should be given to the corporation's top management to earn support on ABCP
[Topic2] Question 3)	<ul style="list-style-type: none"> - To share if they have already their BCP so that it can be used as reference - For sharing of information and measures - Commitment to ABCP - Audit resources for continuous improvement

Summary of Group Work at 4th WS

[Topic3] Question 4)	<ul style="list-style-type: none"> - Proposal is magnificent to attain our objective - More structured approach - Looking for the next cycle
[Topic4] Question 5)	<ul style="list-style-type: none"> -Share the information to other areas -Ensure BCP awareness of our peoplr and stakeholders to be always ready -Enforcement under existing law -Institutionalization of ABCM activities to include all sectors -Study other disasters -Disseminate the study information to others as well -Include in the educational program -Continous awareness and tooling
Members	<p>Chairman: Gerando Castillo Presenter: Emerline Malicdem Timekeeper: Ramon Lacap Member: Nhel Maramilla</p>

Summary of Group Work at 4th WS: Infrastructure Group

Name of Group	Infrastructure Group
Name of Facilitator	Claire PANTOJA
Members	<ul style="list-style-type: none"> - Angel ECHANO, TRANSCO - Conrad PEREZ, DPWH 4A - Deogracias BARRIOS, DPWH - Eduardo VILLARIN, SKYWAY - Jason VILLEGAS, DoE - Joseph ARGANSA, CAVITEX - Michael ANGELES, DPWH 4A (Chair) - Rebecca DIMASACAT, CAVITEX (Reporter)
[Topic1] Question 1	<p><i>points to be further improved, Table 3-3 specifically</i></p> <ul style="list-style-type: none"> - “...restoration of road networks and bridges will not be easy and possible in two weeks as of the moment, benchmarking in Japan (10 days of restoration) (Dimasacat, 2014).” - “...I suggest three to four weeks of recovery (Villarin, 2014).” - “Retrofit the bridges of national highways as alternative routes in case the expressway is down (Dimasacat, 2014).” - “Expressways should not rely only on from national generating power supplier. It should install its own power generator to expedite its recovery program without delay (Villarin, 2014).” <p><i>points to be further improved, Table 6-3 specifically</i></p> <ul style="list-style-type: none"> - “Consider the use of NGCP’s communication system as an alternative means. NGCP’s communication is at par with other telcos. The repeater stations can operate a minimum of one hour without electricity (Echano, 2014).” - “Additional proposed measures of back-up electricity generating facilities of private businesses. Also, consider continuity of food supply of back-up generators (Villegas, 2014).” - “NGCP should be included as stakeholder because MERALCO can only restore power if the transmission lines are ready which in a worst case scenario will be greatly affected (Echano, 2014).” - “Adoptation of solar panels as alternative/backup source of electricity (Angeles, 2014).” - “Other nearby ports (private and government) should also be identified instead of just Batangas and Subic (Villegas, 2014).”

Summary of Group Work at 4th WS: Infrastructure Group

[Topic2] Question 2	<ul style="list-style-type: none"> - “MOA among [surrounding] business organizations and other LGU’s [support] (Villarin, 2014).” - “Ensure that all stakeholders will have its own “realistic” BCP in order to help the affected areas (Echano et al., 2014).” - “Involve surrounding/nearby regions in the alignment of BCPs to come up with the area BCP (Echano et al., 2014).” “Inventory of equipment per area to substantiate the needs of affected area (Echano et al., 2014).” - “NGCP should have adequate stocks of ERS in nearby stockyard areas (Mexico, Pampanga and Lumban, Laguna) for early restoration of toppled transmission towers in CALABARZON (Echano, 2014).”
[Topic2] Question 3	<ul style="list-style-type: none"> - “Request the active participation of major stakeholders in this noble undertaking (Echano, 2014).” - “What are the capabilities of stakeholders in performing their tasks given (that) they are also victims? Do they have their own continuity plans to carry out the functions in times of a big disaster (Villegas, 2014)?” - “To have an interagency knowledge sharing/benchmarking on industry best practices (Dimasacat, 2014).” - “[Skills] training, sharing of available information, understanding, support by top management and crafting of an entity/agency continuity plan (Villegas, 2014).”
[Topic3] Question 4	<ul style="list-style-type: none"> - “[Agreed]. [ABCM/P] is a nice initiative to kickoff this endeavor (Echano et al., 2014).” - “The PEZA proposal is a good way forward for the business sector to continue (Villegas, 2014).”
[Topic4] Question 5	<ul style="list-style-type: none"> - “Enhance BCM campaign to attract other government and local business organizations to participate (in) this noble program (Villarin, 2014).” - “Add additional [hazards] or disaster scenarios such as strong winds, storm surge and floods (Echano et al., 2014).” - “Integrate the BCP/BCM as a strategy in the local, regional, and national disaster risk reduction management plans (Villegas, 2014).” - “Enforcement of RA 10121; CSC and DBM to provide permanent positions of City/Municipal DRRM Officer (Echano, 2014).” - “Add NGCP, NEA, and PPA as major supporters. Add Petroleum Association of the Philippines (Echano et al., 2014).”

Summary of Group Work at 4th WS

Name of Group	Lifeline Group
Name of Facilitator	Maria Lynn Melosantos
Members	Lucky PLDaT Raul PLDT Arnel DOE Conrad MWSI Joms MWCI Marco Meralco
[Topic1] 1)	<ul style="list-style-type: none"> - Table 3-1. Leader, in case of emergency or earthquake, who calls the shots - suggest to define the structure of the A-BCP Management Team - 2.0 suggest to add a clause for RESOURCES to support A-BCP - 2.1.1 Leader, the phrase “acting on behalf of the NDRRMC” is this a legal [or proper description of the] delegation of authority - 4.2 for improvement: did not see the element of Risk Assessment, while Business Impact Assessment is present. Add statements about risk assessment before section 5.0 Strategies -5.0 strategies are not clearly defined or missing -7.1 A-BCP System (diagram) – inefficiency may result from not identifying, at the outset, SCOPE (from the results of BIA and RA)
[Topic1] 2)	<ul style="list-style-type: none"> - Rank 1 support of top management (relate to the question Who calls the shots) - all others – skills, training, sharing information are also needed - -
[Topic3] 1)	<ul style="list-style-type: none"> - As lifeline organization in relation to A-BCP, in case of emergency, what is our reporting structure for information? Will the A-BCP impose a layer of reporting requirements?

Summary of Group Work at 4th WS

	<ul style="list-style-type: none"> - A-BCP can be promoted to the CNDR- Corporate Network for Disaster Response - -
[Topic4] 2)	<ul style="list-style-type: none"> - Is PEZA's mandate sufficient to cover this activity (A_BCP) – asked in reaction to a statement of PEZA presentor that their influence in limited to ecozone - As a group, they feel that A-BCP is realizable. - -
Other comments (if you have)	<ul style="list-style-type: none"> -



“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
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A Joint Project of the ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre) and
Japan International Cooperation Agency (JICA)

4th Working Group Meeting on Area BCP Formulation, Vietnam

December 3, 2014, Nam Cuong Hotel, Hai Phong City, Vietnam

Participants

Country	Name	Organization	Position
Working Group Member 1			
Vietnam	Do Trung Thoai	Hai Phong City People's Committee	Vice Chairman
Vietnam	Tran Ngoc Duc	Hai Phong City People's Committee	Officer
Vietnam	Nguyen Ba Tien	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department (DARD)	Director
Vietnam	Nguyen Duc Tho	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department (DARD)	Head of Department
Vietnam	Nguyen Thi Thu Ha	DMC -MARD	Head of Department
Vietnam	Tran Vinh Hoan	Hai Phong Economic Zone Management Board	Deputy Director
Vietnam	Vu Lan Anh	Dept., of Industry and Trade	Expert
Vietnam	Vu Duy Tung	Dept., of Transportation	Deputy Director
Vietnam	Pham Van Tuan	Dept. of Information and Communication	Deputy Director
Vietnam	Nguyen Phuc Lap	Hai Phong Radio and television	Head of Department
Vietnam	Tran Sy Hoa	Police Department	Head of Department
Working Group Member 2			
Vietnam	Le Anh Tuan	Hai Phong Electric One Member Limited Company	Expert
Vietnam	Dang Quang Anh	Dept., of Construction	Head of Department
Vietnam	Tran Thi Hong Cam	Dinh Vu Industrial Zone	Expert
Vietnam	Vu Tru Tia	Do Son Industrial Zone	Deputy Director
Working Group Member 3			
Vietnam	Vu Dinh Toi	VCCI Hai Phong	Expert
Vietnam	Vu Xuan Binh	VCCI Hai Phong	Head of Department
Japan	Tsuyoshi Kanda	JICA Vietnam - Project Formulation Advisor, Disaster Management	Donnor
Working Group Member 4: Observers			
Vietnam	Jonh Sanders	World Vission Vietnam	Director
Vietnam	Nguyen Thanh Ha	World Vission Vietnam	Project Coordinator
Vietnam	Tran Thi Thuy Duong	World Vission Vietnam	Expert
Vietnam	Nguyen Van Hiep	Hai Phong Security Transport Company	Deputy Director
Vietnam	Nguyen Thi Le Hang	Hai Phong Maritime University	Teacher
Vietnam	Dang Van Tam	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department (DARD)	Officer
Vietnam	Tran Luu Khanh	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department (DARD)	Officer
Vietnam	Nguyen Thi Phan Hue	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department (DARD)	Deputy Director

Country	Name	Organization	Position
Vietnam	Nguyen Hong Nhung	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department (DARD)	Officer
Vietnam	Nguyen Dong Luc	Hai Phong Trading and Transport Company	Head of Department
Vietnam	Nguyen Lan Huong	Hydrometeorology Center in Northern East Zone	Officer
Vietnam	Pham Quang Khang	Hai Phong Concrete and Construction Share Holding Company	Deputy Director
Vietnam	Doan Xuan Bao	Truong Anh Trading and Service Company	Deputy Director
Vietnam	Le Trung Thanh	Hai Phong Economic Zone Management Board	Head of Department
Media Group			
Vietnam	Tran Duy Lan	Hai Phong Newspaper	Reporter
Vietnam	Nguyen Thanh Ha	Hai Phong Newspaper	Reporter
Vietnam	Nguyen Duy Thuc	Hai Phong Online Newspaper	Reporter
Vietnam	Nguyen Duc Thinh	Hai Phong Newspaper	Reporter
Vietnam	Tran Phuong	Hai Phong Security Newspaper	Reporter
Observers/Jica-AHA Project Team group			
Japan	Masakazu TAKAHASHI	AHA Center -JICA Project Team	Team Leader
Japan	Yoshiyuki TSUJI	AHA Center -JICA Project Team	Deputy Team Leader
Japan	Shukyo SEGAWA	AHA Center -JICA Project Team	Leader of Natural Disaster Risk
Japan	Akira WATANABE	AHA Center -JICA Project Team	Coordinator
Vietnam	Hoang Minh Nguyet	Facilitator	MC
Vietnam	Ngo Gia Trung	Facilitator	
Vietnam	Nguyen Thanh Ha	National Coordinator	
Vietnam	Nguyen Duc Trung	Facilitator	
Vietnam	Nghiem Ba Hung	Facilitator	
Vietnam	Nguyen Tien Dung	Facilitator	
Vietnam	Nguyen Phuong Nhung	Facilitator	
Vietnam	Ngo Thi Minh	Assistant National Coordinator	
Vietnam	Bui Bich Ngoc	Intepreter	
Vietnam	Tran Thi Duyen	Rapporteur	

**Workshop 4 for Area BCP Formulation, Hai Phong
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

December 3, 2014, Nam Cuong Hotel, Hai Phong, Viet Nam

Agenda (Version 06)

December 3, 2014, Wednesday

Agenda	
7:30-8:00	Registration
8:00-8:20	<p>Welcome Address</p> <p style="text-align: center;">Mr. Do Trung Thoai Vice Chairman, Hai Phong People’s Committee</p> <p>Group Photo Session</p>
8:20-9:30	<p>Inputs for Discussion</p> <p style="text-align: center;">Review of Area BCM process and options for the next cycle Dr. Masakazu Takahashi Leader of the Study Team</p> <p style="text-align: center;">Review of the Plan by the working group members Mr. Yoshiyuki Tsuji Deputy Leader of the Study Team</p> <p style="text-align: center;">Sum up of the Project and way forward for Hai Phong Mr. Nguyen Ba Tien DARD Hai Phong</p> <p style="text-align: center;">Approach for Area BCP by industrial zones in Haiphong Mr. Tran Vinh Hoan, Hai Phong Economic Zone Authority (HEZA)</p> <p>Q&A</p> <p>Grouping</p>

9:30 -9:40	Coffee Break
9:40-11:00	<p>Group Work</p> <p>Topics for Discussion</p> <ol style="list-style-type: none"> 1. How the Plan (Area BCP) was improved by reviewing by your organizations? 2. What would be our responsibilities in Area BCM? 3. What would be the next cycle of Area BCM in Hai Phong? <p>Guided by Mr. Yoshiyuki Tsuji Deputy Leader of the Study Team</p>
11:00-11:45	<p>Presentation by the Groups and Q&A</p> <p>Mr. Yoshiyuki Tsuji Deputy Leader of the Study Team</p>
11:45-11:50	<p>Wrap up</p> <p>Dr. Masakazu Takahashi</p> <p>Q&A</p>
11:50-12:00	<p>Closing of the Workshop</p> <p>Mr. Tsuyoshi Kanda Project Formulation Adviser JICA Vietnam</p>
12:00	Adjournment
12:00-13:00	Lunch

MC: Ms. Hoang Minh Nguyet

“Natural Disaster Risk Assessment and Area Business Continuity Plan (BCP) Formulation for Industrial Agglomerated Areas in ASEAN region”

Workshop 4

Nam Cuong Hotel, Hai Phong, 3rd December 2014

Meeting Minute

The workshop started at 08:20 am 3rd December 2014. On behalf of JICA Study Team, MC Hoang Minh Nguyet welcomed all participants to take part in the 4th workshop on Natural Disaster Risk Assessment and Area Business Continuity (BCP) Formulation for Industrial Agglomerate Areas in ASEAN region, and Hai Phong as pilot area of project in Vietnam. The project has received contribution and support from many stakeholders: governmental and local agencies, private enterprises, industrial parks, NGO... to finish the first stage of plan. She also introduced the presence of Dr. Do Trung Thoai, Vice Chairman of Hai Phong People’s Committee, Mr. Tsuyoshi Kanda, Project Formulation Adviser of JICA Vietnam, Dr. Takahashi from JICA Study Team and other stakeholders.

Firstly, Dr. Do Trung Thoai made the welcome speech to open the workshop. On behalf of Hai Phong’s authority, Dr. Thoai thanked for JICA Study Team to organize the project in Hai Phong, highly appreciated the big efforts of all stakeholders as well as the outputs of project in recent time when the drafted Area BCP for Hai Phong’s industrial agglomerated areas was formulated. He emphasized the negative impacts of climate change on the global in general, on Vietnam and Hai Phong in particular. Haiphong is evaluated as among the most prone areas from natural disaster in Vietnam. And at the moment, Hai Phong is on the way to re-structure the economy, especially restructure the industrial zones and economic zones. In Haiphong’s economy, the industrial parks play an important role: total outputs of Industrial parks accounted for over 40%, total export volumes accounted for over 60% and total labor force in industrial parks accounted for approximately 50%. Such statistics are just temporary data, in fact, such numbers change day by day, month by month. Therefore the natural disaster risk assessment plays very important roles to the development of Hai Phong city. He reminded the topics in this workshop with the revision of 2nd drafted BCP, next steps for the plan in Hai Phong. He also suggested the experts, managers, directors from national/local authority, industrial management board and private companies... in this workshop to actively negotiate to have feasible plan. He asked the continuous support from international organizations, NGO, central agencies, local authorities and JICA to create favorable conditions for Hai Phong to improve the disaster response. In the stage 2, he hoped that JICA Study Team may give more detailed, more specific and more feasible plan to support Hai Phong regarding to disaster management, to mobilize resources to implement.

On behalf of Hai Phong’s authority, Dr. Do Trung Thoai committed that they would try their best to implement BCP in industrial agglomerated areas. He re-emphasized that Hai Phong will continue to build a city safe from natural disasters as committed to the United Nations.

After Dr. Thoai’s speech, all participants took photos for memory.

At 8:50 am, the workshop welcomed presentations from JICA Study team and comments from Hai Phong’s organization and agencies.

Dr. Takahashi presented about “Review of Area BCM process and options for the next cycle”. He recalled 5 steps of Area BCM, tools for Area BCM including guidebook, risk profile reports, country reports. And he emphasized the importance of reviewing and updating the plan as well as next steps for the pilot areas.

Detail of his speech: please refer documentation WS_VN_03 “Review of Area BCM Process and Options for the Next Cycle”

09:05 am, Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team introduced Review of the Plan by the working group members. Based on comments and reviews from group members for drafted Area BCP for Hai Phong area, he summarized all changes and new proposals to Area BCP and supposed some improvements for Area BCP-version 2.

Details of his speech, please refer documentation WS_VN_04: “Review of the Plan by the Working Group Members ABCM Vietnam”.

09:15 am: Mr. Nguyen Ba Tien from DARD Hai Phong made presentation on the summary of project and way forward for Hai Phong. He clarified the roles of Hai Phong Steering Committee in this project, gave assessment on Area BCM with gained benefits, necessity for improvement and detailed contribution of Hai Phong to Area BCM. He also expressed the project’s objectives, scope & responsibilities as well as expected outputs from the project. Last but not least, Mr. Tien pointed out the participation, support and coordination from all stakeholders to help Hai Phong in term of human resources, finance to carry out Area BCP successfully.

Details of his speech, please refer documentation WS_VN_07 “Sum up of the Project and way forward for Hai Phong”

The last presentation is from Mr. Tran Vinh Hoan, Hai Phong Economic Zone Authority (HEZA) about the approach for Area BCP by industrial zones in Hai Phong. From point of view of an economic zone authority, Mr. Hoan gave summary on situations of all industrial parks in Hai Phong, in term of infrastructure such as sea ports, railway, and airports. By the way, Mr. Hoan also introduced plans for industrial parks to cope with storm surge and floods such as foundation at +5.00 altitude, water supply system, drainage system, dyke system, power system and so on. After that, Mr. Hoan gave a basic background about the current situation of enterprises in Industrial parks, roles of IP. He mentioned the recent BCM on business. He said that the enterprises in Hai Phong areas obtained low awareness on the definitions of BCM, the cooperation amount enterprises and local agencies was not so close. Therefore, on behalf of HEZA, he proposed some suggestion to make strategy to ensure BCM in Hai Phong areas.

Detail of his presentation, please refer documentation WS_VN_08 “Approach for Area BCP by industrial zones in Hai Phong/Current Status and proposals to make business continuity plan/strategy and Area BCP”.

After presentation of Mr. Hoan, no question was raised up, the workshop had coffee break.

After 15 minutes of coffee break, the 4th workshop came to the working group session. All participants were divided into three groups to review Area BCP version 2, to discuss about the problems in implementation of BCM as well as requested actions from stakeholder to implement Area BCM. In addition, groups are required to comment the next stage of Area BCM prepared by HPPC and point out the important task in next stage of project.

First group making presentation was infrastructure sector. They gave some comments to clarify the positions and capacity of 3 power plants, 26 power sub-stations in Haiphong (not 25). They asked the coordination between stakeholders via standing committee. And they emphasized the need of studying storm, super typhoon which were evaluated to have much negative impacts to Hai Phong IPs in the future. The plan was too general, impossible to apply to an organization. It was required to have a detailed and specific plan based on the current situation. In the opinions of such group, difficulties to implement Area

BCM was the lack of information system to popularize the disaster management, warning and response to the workers, staff and owners; in addition in IP now, there was no specialized experts in Disaster Management. For requested information or actions from stakeholder, 1st group mentioned to the information sharing mechanism, a contact list of key persons in each stakeholder responsible for DRM, training workshops for representatives of stakeholders to disseminate Area BCM/Area BCP. Lastly, for proposed next cycle, the group agreed with the HPPC's proposals, however, they suggested that the plan should be more detailed with specific timeline and some pilot areas to exercise Area BCP. And it should be exercised frequently to withdraw lessons and improve Area BCP.

The second group was private sector. This group agreed with the reviewed plan, however they gave some comments to clarify and improve Area BCP-version 2. Group wanted to analyze current status, provide solutions for specific area, and point out the participation level of enterprise in Area BCP. The plan should update and share results of previous workshops, provide detailed solutions for each matter and to develop awareness strategy to each targeted sector participating in the BCP. This group also said that the main difficulty was lack of information. Enterprises had limited knowledge about the responsibility in disaster risk management and climate change adaption. When implementing Area BCM, the matters that group concerned about were the support policies, incentives to the enterprises; information provision from HPPC to enterprises, guidance on integration of BCP into current policies from the government as well as the enforcement of risk management practices to the enterprise. Lastly, regarding to the next cycles proposed by HPPC, this group hoped to conduct a survey to analyze the current status of enterprises, recommend detailed solutions for local authority and businesses. The most important tasks in next cycle, in according to their opinion, were to improve the attraction and strengthen the participation of all stakeholders, to issue policy asking enterprises to apply ABCM/ABCP, provide solutions for different groups and so on.

Last group making presentation was Advisory group. Regarding to the reviewed BCP-version 2, they advised to localize the language for easy understandings, to structure in an appropriate order, to use correct terminologies. About the obstacles as implementing Area BCM, they also mentioned the limited awareness and understanding of businesses in Hai Phong and poor infrastructure in disaster management such as early warning system. In their opinion, it was necessary to disseminate the BCP/BCM method to business and stakeholders, to upgrade quality of climate change and early warning system which would increase the participation of businesses. By the way, the stronger leadership and support from HPPC was regarded as one among the requested action to implement Area BCP. About the proposed next cycle, it was necessary to disseminate the Area BCP, raise awareness and understanding of stakeholders, to develop framework for HPPC to implement BCP/BCM and undertake pilot implementation of BCP in one industrial park.

After that, Dr. Takahashi summarized the 4th workshop in term of the participation of stakeholders, opinions of groups for three topic. He hoped that in 2016, new cycle would be implemented in Haiphong with more specific details in one pilot industrial park.

At the end, Mr. Tsuyoshi Kanda, project formulation adviser from JICA Vietnam gave closing speech of the workshop. He showed the deepest thanks to the support from Vietnam's government, Haiphong's authority and all stakeholder to support this project until now. Once again, he reminded the threats of natural disasters to Vietnam and to Hai Phong and the importance of this project. He hoped to receive more support from stakeholder to review and improve the drafted Area BCP to be more practicable and workable, to implement BCM in Hai Phong successfully.

12:40 pm. The workshop ended.

A4 Record of Seminar for Practitioners

A4-1 Record of 1st Seminar for Practitioners (Manila)

A4-2 Record of 2nd Seminar for Practitioners (Ha Noi)

A4-3 Record of 3rd Seminar for Practitioners (Jakarta)

A4-4 Record of 4th Seminar for Practitioners (Bangkok)



**“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”**

A Joint Project of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) and
Japan International Cooperation Agency (JICA)

1st Seminar for Practitioners

Dusit Thani Hotel, Manila, the Philippines, December 5, 2013

Invited Attendants from 10 ASEAN Member States

Country	Name	Organization	Position
Cambodia	Khun Sokha	National Committee for Disaster Management Council of Ministers	Director of Preparedness and Training Department
Cambodia	Va Sophal	General Directorate of Planning Ministry of Planning	Deputy Director General of Planning
Indonesia	Sigit Padmono	National Agency for Disaster Management (BNPB)	Head of Sub Directorate of Community Participation, Directorate for Community Empowerment
Indonesia	Najamudin	Directorate General for Industrial Region Development, Ministry of Law	Head of Legal and Cooperative Division
Indonesia	Heru Kustanto	Secretariat of Directorate General Industrial Region Development, Ministry of Industry	Head of Program, Evaluation and Reporting Division
Lao PDR	Kindavong Luangrath	National Disaster Management Office, Department of Social Welfare, Ministry of Labor and Social Welfare	Deputy Director
Lao PDR	Sengchanh Keobouavanh	Lao National Committee for Special Economic Zone and Specific Economic Zone (NCSEZ), Secretariat Office, Government's Office	Deputy Director of Land and Environment division
Lao PDR	Korakan Luangrath	Investment Promotion Department Ministry of Planning and Investment	Senior Officer of One Stop Service, IPD
Malaysia	Mohamed Fauzi bin Mohamed Salleh	Disaster Management Division, National Security Council (NSC) Prime Minister's Department	Assistant Secretary
Malaysia	Ahmad Khairuddin Bin Abdul Rahim	Clean Technology and Environment Management Division, Ministry of International Trade and Industry (MITI)	Director
Myanmar	Thein Htay Aung	Relief and Resettlement Department, Ministry of Social Welfare, Relief and Resettlement	Deputy Director
Philippines	Corazon T. Jimenez	Metro Manila Development Authority (MMDA)	Undersecretary (General Manager)
Philippines	Justo Porfirio LL. Yusingco	Philippine Economic Zone Authority (PEZA)	Deputy General Director for Finance and Administration
Singapore	Kwok Shun Yung	Operations Department, Singapore Civil Defense Force (SCDF)	Senior Staff Officer Current Operations
Thailand	Chaiyatorn Boonmajareanwong	Department of Disaster Prevention and Mitigation Ministry of Interior	Director of Disaster Prevention and Mitigation Academy, Prachinburi Campus
Thailand	Chumnun Darnsawadi	Entrepreneurial Society Creation Division, Bureau of Entrepreneurship Development, Department of Industrial Promotion, Ministry of Industry	Industrial Technical Officer
Thailand	Surachai Koomsin	Office of the National Economic and Social Development Board	Acting Director of the Office of Agriculture, Natural Resource and Environment Planning
Viet Nam	Nguyen Viet San	International Cooperation Department, Ministry of Industry and Trade	Head of Division
Viet Nam	Do Duc Huan	Ministry of Planning and Investment	Deputy Director of Agency for Business Registration (MPI)

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1st Seminar for Practitioners

Dusit Thani Hotel, Manila, the Philippines, December 5, 2013

Other Attendants from the Philippines

Country	Name	Organization	Position
Philippines	Adelaida C. Duran	Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA)	Weather Specialist
Philippines	Renato U. Solidum, Jr.	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	Director
Philippines	Bonifacio Lim	Oakwave (Phils.) Corporation Cavite Economic Zone (CEZ), Philippine Economic Zone Authority (PEZA)	Operations Manager
Philippines	Corsinio B. Ambion	Oakwave (Phils.) Corporation Cavite Economic Zone (CEZ), Philippine Economic Zone Authority (PEZA)	Facilities Manager
Philippines	Jommel Omar A. Gomez	Business Continuity Operations Support Services Division, Manila Water Company, Inc. (MWCI)	Business Continuity Head
Philippines	Nathaniel S. NAÑASCA	Ayala Property Management Corporation	Assistant Director

“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”

A Joint Project of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) and
Japan International Cooperation Agency (JICA)

1st Seminar for Practitioners

Dusit Thani Hotel, Manila, the Philippines, December 5, 2013

JICA and JICA Study Team

Country	Name	Organization	Position
Indonesia AHA Centre	Janggam Adhityawarma	AHA Centre	Senior Disaster Monitoring and Analysis Officer
Indonesia AHA Centre	Andy Musaffa	AHA Centre	Disaster Monitoring Officer
Japan	Masahito Miyagawa	JICA Headquarter Office	Disaster Management Division1
Japan	Hayato Nakamura	JICA Philippine Office	Project Formulation Advisor (Disaster Management)
Japan	Takaaki Kusakabe	JICA - Office of Civil Defense	JICA Expert
Japan	Masakazu Takahashi	JICA - AHA Centre Study Team	Team Leader
Japan	Yoshiyuki Tsuji	JICA - AHA Centre Study Team	Deputy Team Leader / Area BCP
Japan	Shukyo Segawa	JICA - AHA Centre Study Team	Expert on Risk Assessment
Japan	Shiro Matsunami	JICA - AHA Centre Study Team	Coordinator
Philippines	Ramon J. Santiago	JICA - AHA Centre Study Team	National Coordinator
Philippines	Josephine R. sy	JICA - AHA Centre Study Team	Project Staff
Philippines	Lynn P. Melosantos	JICA - AHA Centre Study Team	Project Staff
Philippines	Alex Nicolas P. Tamayo	JICA - AHA Centre Study Team	Project Staff
Philippines	Rizza Mae C. Yson	JICA - AHA Centre Study Team	Project Staff

1st Seminar for Practitioners

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas In the ASEAN Region”

Dusit Thani Hotel, Manila, the Philippines
December 5, 2013

*A Joint Program of Japan International Cooperation Agency (JICA) and ASEAN
Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

PROGRAM OF ACTIVITIES

December 4, 2013, Wednesday Arrival of the participants at Manila

December 5, 2013, Thursday

SEMINAR PROGRAM AGENDA	
8:30-9:00	Registration
9:00-9:45	<p>Welcome and Introduction</p> <p>Mr. Hayato Nakamura Project Formulation Advisor (Disaster Management) JICA Philippines</p> <p>Introduction of Participants</p> <p>Group Photo Session</p>
9:45-10:50	<p>Discussions about the Project</p> <p>Introduction of the Project Dr. Masakazu TAKAHASHI Team Leader of JICA-AHA Centre Project</p> <p>Introduction of the Concept, Methodology and Benefit of Area Business Continuity Management Mr. Yoshiyuki TSUJI Deputy Team Leader of JICA-AHA Centre Project</p> <p>Q&A (Feedback Time)</p>

10:50-11:10	Coffee Break
11:10-12:30	<p>Natural Hazard and Risk Assessment in the Philippines</p> <p>Introduction of Natural Hazard and Risk Assessment of the Project and the Results Mr. Shukyo SEGAWA Leader of Hazard and Risk Assessment, JICA-AHA Centre Project</p> <p>Current Status of Natural Hazard and Risk Assessment of the Philippines 1 (Earthquake, Tsunami, and Volcano) Dr. Renato U. SOLIDUM, Jr. Director, Philippines Institute of Volcanology and Seismology (PHIVOLCS)</p> <p>Current Status of Natural Hazard and Risk Assessment of the Philippines 2 (Flood and Tropical Storm) Ms. Adelaida C. DURAN, Weather Specialist Philippine Astronomical Services Administration (PAGASA)</p> <p>Q&A and Discussion (Feedback Time)</p>
12:30-13:30	Lunch
13:30-14:30	<p>Brief Report on Typhoon “YOLANDA”</p> <p>Mr. Ramon SANTIAGO Advisor to the MMDA on Disaster Preparedness and Risk Reduction and Leader of MMDA Humanitarian Assistance Team that took lead in Task Force Debris Clearing for Tacloban City</p> <p>Mr. Janggam ADHITYAWARMA Senior Disaster Monitoring and Analysis Officer AHA Centre</p> <p>Q&A and Discussion (Feedback Time)</p>
14:30-15:30	<p>Business Continuity Management in the Philippines</p> <p>Business Continuity Management in the Philippines’ Economic Zones Mr. Bonifacio Lim Operations Manager, Oakwave (Phils.) Corporation Cavite Economic Zone (CEZ), PEZA</p> <p>Manila Water Company Business Continuity Practice Mr. Jommel Omar A. GOMEZ Department Head, Business Continuity Operations Support Services Division, Manila Water Company, Inc. (MWCI)</p>

	<p>Ayala Property Management Corporation Business Continuity Planning Mr. Nathaniel S. NAÑASCA Assistant Director, Ayala Property Management Corporation</p> <p>Q&A and Discussion (Feedback Time)</p>
15:30-15:50	Coffee Break
15:50-16:50	<p>Pilot Study for Formulating Area BCP in the Philippines</p> <p>Pilot Study for Formulating Area BCP Dr. Masakazu TAKAHASHI</p> <p>Pilot Study for the Philippines Mr. Yoshiyuki TSUJI</p> <p>Results of the First Workshop for the Philippines Undersecretary Corazon T. JIMENEZ General Manager, Metro Manila Development Authority</p> <p>Q&A and Discussion (Feedback Time)</p>
16:50-17:00	<p>Wrap-up</p> <p>Dr. Masakazu TAKAHASHI</p>
17:00-17:10	<p>Closing of the Seminar for Practitioners, Manila</p> <p>Mr. Janggam ADHITYAWARMA Senior Disaster Monitoring and Analysis Officer AHA Centre</p>
17:10	Adjournment
18:00	Dinner

December 6, 2013, Friday Departure of the participants from Manila

Transcript of Proceedings of the 1st Seminar for Practitioners

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

Dusit Thai Hotel, Manila, Philippines

5 December 2013

The Seminar for Practitioners started with an Opening Statement from **Mr. Hayato Nakamura** of JICA Manila.

Mr. Santiago:

As roughly stated by Nakamura San, the Philippines is reeling from natural and man-made disaster recently. We've been hit by a 7.2 magnitude earthquake in Visayas, and more recently we suffered widespread devastation from typhoon Yolanda, as we call it here. So the holding of the seminar of JICA and AHA here in the Philippines, a great deal of knowledge that our country can also learn and later on move on to industrial agglomerated areas. By the way I am Ramon Santiago. I'm the national coordinator here in the Philippines. I am also doing a dual role as the JICA and MMDA disaster risk reduction and management point person. At this point may we call on our participants to please introduce yourselves starting from the right... (participants introduce themselves, please see attendance sheet)

Mr. Santiago: Thank you very much everybody. We will have our group picture... (participants arrange themselves for the picture taking.)

Mr. Santiago:

As we move along with our program this morning, the topics will be discussed by two speakers, namely Dr. Takahashi and Mr. Tsuji. Dr. Takahashi will introduce us regarding the project and natural disaster risk management and area business continuity framework for the industrial agglomerated areas. So, Dr. Takahashi...

Dr. Takahashi discussed the first topic – Introduction of the Project. (Please see slide/hand-out of the same title).

Mr. Tsuji's presentation on Introduction of the Concept, Methodology and Benefit of Area Business Continuity Management follows.

Q and A (this portion was not recorded; based only on notes)

Q from Thailand – Why is the study concentrated only on man-made disasters?

Dr. Takahashi: ABCP is also for natural disasters. What is important is that at the end of the project, the participating countries should be able to make guidelines that are applicable to other countries and different types of disasters.

Q – Who leads the BCP?

Dr. Takahashi: In Japan, the government makes the guidelines for the BCP. It is mainly the national government who make the guidelines for private companies.

Q – What is the target of the ABCP?

Dr. Takahashi: The ABCP targets small and medium companies to develop their BCP. Big companies already have their BCP which means they can do it by themselves. However, small to medium industries and companies do not have the capacity to develop their own BCP. In Japan, there is no specific target companies as whole industries are required to have their BCP.

Q. – How would politics influence the BCP? How much political will from the current administration is needed?

Dr. Takahashi – We need to demonstrate how disasters and having a BCP affects the economy of the region, so there is a need to educate national leaders because BCP is a political decision.

Q. – How would you do it in the Philippines?

Dr. Takahashi asks representative from PEZA.

Mr. Yusingco – As far as PEZA is concerned, major agencies are involved. Any policy on BCP can be elevated to the cabinet level and transformed into an executive order which can apply to all PEZA.

Q - Manila Water Representative – How can you ask others to join the ABCP when there are those (companies) that don't have enough resources or will not participate because of competition?

Dr. Takahashi – Information is important in ABCP. It could be proposed to use different approaches to collecting information so that it can't be used for competition.

Q. – Who is the first to formulate? The companies or the gov't?

Dr. Takahashi – the approach should be all at the same time. Vietnam for example will carry out the project at all levels.

Q. – In terms of geographical areas, how big is the most effective area to make BCP?

Dr. Takahashi – It depends on the location. In the Philippines, industry are located in Cavite, Laguna, Batangas...It is easy to work on these areas because they have similar situations. In Vietnam, the city has 7 industrial parks and only one administrative area. However, everything is just in trial stage. We will look at the best approach as we move along.

Coffee Break at 10:50 am

Mr. Santiago – For the next session, we will be talking about Natural Hazards that can affect not only the Philippines but also the regions. We have three discussants: Mr. Shukyo Segawa who will introduce the natural hazard and risk assessment. The second will be from Philippine scientific agencies, they are conducting their own natural hazard and risk assessment for the Philippines. We have one hour and 30 minutes, including the question and answer. In the initial session we had a very good information exchange and participation. We do hope that we can carry on with this for the next sessions ahead of us. At this point I would like to call on Segawa san who will discuss the next topic.

Mr. Shukyo Segawa discussed the Introduction of Natural Hazard and Risk Assessment of the Project and the Results. Please see hand out and slides.

Mr. Santiago – While waiting for the next speaker and based on our schedule, the question and answer will be at the end of the session. But to maximize the time, maybe if you have any questions...while the next speaker is preparing.

Q – How is the habagat, south-west monsoon in the Philippines affected Metro Manila...but the target hazard for industrial area Cavite and Laguna (is earthquake)...how was earthquake selected

A – Basically, the hazard is based on international database on major hazards...this project includes other countries like Indonesia, Vietnam...flood is the number one hazard. We want to try many hazards...based on the hazard map. In the Philippines, many people choose hazard number one to number 10...many selective...but identified earthquake due to location

Mr. Santiago – and if I may add, while there is significant hydro hazard, but considering the pilot area we considered the earthquake hazard for these pilot area...we will still have additional questions. May I now introduce the director of the Philippine Institute of Volcanology and Seismology...he is the fault finder of the Philippines, ladies and gentlemen, Director Renato Solidum Jr.

Dr. Solidum – Thank you. Good morning. I was asked to talk about the current status of natural hazards and risk assessment in the Philippines. The two talks, the first one will be given by myself and divided into hazards above the ground – rain, wind, and of course the ocean...and the hazard that would originate below the ground – earthquake and volcanic eruptions, specially hazard such a tsunami. (Dir. Solidum proceeded to discuss his presentation. Please see presentation slides.)

Mr. Santiago – Thank you very much Dir. Solidum. Please stay around for the next round of questions later. And please give us a copy of your presentation. For the next speaker is Adel Duran of PAGASA.

Ms. Adel Duran: Good morning. I will be talking about the national hazard and risk assessment in the Philippines in terms of ...(proceeds to discuss presentation. Please refer to slides).

Mr. Santiago – are there any questions for our speakers? The first question was whether they will receive a copy of your presentations. Yes, these will be given as they are not in your kit.

Q – In my country, industrial area is concentrated in a safe area...my problem is that Jakarta area is 60-70% export...the problem is flood...roads can be struck by floods. What is the definition of agglomerated areas?

Dr. Takahashi – Agglomerated area is where industry is located. My presentation has shown the importance of ports, airports, road system, and so on. They are more widely distributed...agglomerated area are area of Karawan and...influential area is Jakarta. For example to do an area BCP, we need to consider of course the industry where located, but also we need to consider the Manila Port, Batangas Port in the south and in the North, we need to consider Subic. So this is the area for area BCP...the residential area and industrial area is complimentary...so we consider a wider area.

Q –My question will be for Dr. Renato Solidum...in doing the risk assessment, there is also a lot of exposure data to be collected...are these based on secondary sources or primary sources...?

Dr. Solidum – for the project that I mentioned...we can get it from the secondary sources but we can also supplement that by either doing it together with the local government...and it is time consuming if you do that, so one is to train the surveyors or the person that will do the filling up of the database. But we have other techniques, we can use photographs, satellite images...we have a gadget which is embedded in our software, as part of the module...we go around using a vehicle with a camera embedded to our software computer, and in the office we just look at the video and fill up the database that we have. So there are various modalities that we can do...what we found out is we need to really train...because different local government have different exposure and they are so complete. We also found out that the land use and what the land use planners do now...the classification that we use is not capable for disaster risk assessment. That is why we have been coordinating also with MMDA group, the housing and land use regulatory board, to inform them of a newer classification of land use depending also on the buildings. So it is time consuming that is why my concern really is the exposure database ...in a recent consultation that I was invited to in Australia, I put forth and several other groups put forth the need for doing a better assessment, but one very important factor would be the quality of exposure data that we have at the local level up to the national...because for business continuity you have to go down to the local data.

Mr. Santiago – Thank you Dr, Solidum...any other questions? We still have nine minutes. Nakamura san, you have something in mind?

Mr. Nakamura – As corollary to Dr. Solidum, actually...before I came here ...I fly from Bali to Jakarta and there is an eruption in Bali and the company tried to avoid even Jakarta ...and of course we understand of Mayon and Taal and other volcanic eruption even if it is very far but...

Dr. Solidum – The Indonesian ash will not cross the equator which is kind of impossible with the weather conditions so we are not affected...but if you talk about the Cavite area ...Mayon? Ah Mayon will not affect the aviation...if it is blown towards the north, well ...the finer ash is more dangerous to the aircraft...Mayon's ash can reach here, it happened long ago, but not as long as it is very large...

Mr. Santiago – Actually, Dr. Solidum, the question on exposure to volcanic eruption was also raised during the workshop the other day...

Dr. Solidum – for business continuity in the Cavite-Laguna area, the effect on employees, the effect to electronic industries, they would want a good filter for the air, and civil aviation...will be affected. There is always ash wherever you are as long there is a volcano somewhere...but if you have the risk, the sever impact would be the earthquake because of the destruction to the business office.

Mr. Santiago – anymore questions? We have a few more minutes before the main agenda...So for this morning's session, the participants were exposed to not only the undertakings of the team, but also in determining the hazards for the ASEAN regions, you were also given a bird's eye view on how our scientific research agencies are doing their respective risk assessment for the Philippines...so if there are no other questions...thank you for your interest and active participation during this first two sessions. Lunch will be buffet style, so you can take your lunch at the other side then we will have to eat in this room. Thank you very much.

Lunch break

Mr. Santiago : I'm Ramon Santiago. Presently, I am a member of the AHA-JICA BCP Team serving as the National Project Coordinator for the Philippines. I'm also serving as advisor on Disaster Reconstruction and Management Concerns for the Metropolitan Manila Development Authority. Recently, my experience is leading a group of 200 people to the affected areas in the province of Leyte, more specifically in Tacloban City.

For this afternoon, I was tasked by the team to make a brief presentation on Yolanda or TC Haiyan, perhaps just to give you a glimpse on what has transpired in November 2013.

Even before it hit the country, particularly the Region 8 of the Philippines, entering between the province of Samar and Leyte, the Philippines had already been tracking the path of the typhoon. And in Metro Manila, were also anticipating if there will be a change in the movement... or sudden change in the movement in the path of the typhoon, then we should be preparing for the worst-case scenario. Considering that the instrument indicated that Typhoon Haiyan, or as they called it locally, Typhoon Yolanda, is packing winds as high or as strong as 300 kilometers per hour. And somewhat had a radius of 300-600 kilometers. Therefore, it could also affect Metro Manila.

I entered the Philippines between Samar and Leyte provinces, and it is the first typhoon that made 5 landfalls before it got out of the country. So, this is how it looks, as seen from the satellite. Here you could see the eye of the typhoon as it nears the devastated area in Tacloban. Janggam will be making a similar presentation and discuss what the AHA Centre Team had observed and perhaps collaborate with some of the things that I will present. Even international organizations corroborated each other's prediction if you look at the path posted on the internet. The actual path would be somewhat below that line... the green line... and cause devastation to many of these provinces along its path.

And what you see after November 8 would be scenes like these. The force of the wind really brought even ships ashore and devastation to surrounding areas. There are several houses that were damaged, not only in Samar and Tacloban. These are familiar sights for those who have visited the areas in Samar and Leyte. In Tacloban City, which is highly urbanized already with a population of about 250,000, you could not see any house at all after the typhoon close to the shoreline. Now, infrastructures and vital facilities were not saved. Even those of better building materials were also damaged. And of course, the impact to life lines were devastating. Before I left for Manila, there was still no power. I've seen some of the lines

being brought into the city. I left on the 29th of November, considering it was my birthday and my wife was already waiting for me. The Department of Energy estimated that it would take until the end of December for power to be fully restored. Anywhere you train your eyes, or take a look at the surroundings, you will see lots of devastation. Debris is everywhere. I just did not include in the images that I am showing you, which are mostly posted in the Internet, dead bodies sprawled on the roads and you know, even under the debris.

Security and order was a major concern and apart from that, there were rumors going around that there were armed men trying to hijack relief goods or assistance. And well at least it was contained when more policemen and military were deployed to the area to address the aspect of looting. More than 1,500 policemen and another 1,000 or 2,000 soldiers were brought into this area in order to address criminality and lawlessness brought about the scarcity of goods and other essential items.

Now, if you have been to the airport during that time, there were lots of military flights conducting humanitarian operations and they virtually occupied the landing rights of the small facility which was also affected by the typhoon. Eventually, the airport was converted into a logistics area, or a logistics hub, not only for Tacloban. The city hosts the Romualdez Airport and also the neighboring towns within Leyte. Commercial flights were often diverted to Cebu and some were even cancelled at the height of the relief operations.

Now, the image of devastation that I showed you a while ago is part of the task of the team which I led. We virtually had to work day and night in order for us to remove the debris at the capital city. We brought people and equipment to move the debris in order to somehow change the mind set already seeping into the populace... a sign of desperateness, hopelessness. So what we did was really ensure that the debris was cleared as fast as we could. While there was a curfew, we capitalized on the curfew to work on the removal of the debris along the major streets like the downtown area of Tacloban, in the hope that if the people would see cleaner streets, then that would change the atmosphere from being hopeless to being hopeful so that they can recover faster.

Now the debris that was blocking was about 70,000 cubic meters in the city proper alone. And it took us more than 6,000 truck trips just to remove the debris on the major streets of Tacloban City. What we did was to put up two temporary dump sites, just to collect the debris. Later on, the UNDP, as I was told, would be moving them to a permanent landfill. They would be transferred. But the idea is you have a temporary storage and that would hasten your movement and disposal of debris. We were only given a handful of dump trucks and a few pay loaders at that time. But later on, as we moved, there were volunteer groups and other international agencies that joined us and participated in the debris-clearing. That's why it took only a matter of 12 days for us to substantially clear most of the area of Tacloban.

Now, this was already reported as of latest count... the death toll, not only in Leyte and Tacloban, but in all the provinces that were affected, they listed 5,719; more than 6,000 were injured with close to 1,800 still missing. Now, in terms to destruction to properties, more than a million houses were affected, half of which were totally destroyed. And cost of damage to infrastructure and agriculture would stand to be around 34 to 35 billion pesos, in the amount of money. Now, in terms of life lines, facilities, we are talking about close to 2,000 transmission facilities, power. Now, water... while the local water district said that ... in reality, there were certain issues concerning the potability of water supply.

Communications, well, one good thing about wireless is that it is easily restored, compared with landlines. But it took more than a week for some of the major service providers to restore their services.

As of now, not counting the cost of international assistance, the cost of assistance from the Philippine government, minus the private sector and the civic organizations, has now reached to 900 million pesos.

The challenges that were really posed to those who are responding, to those who are managing the events... by the way, the City of Tacloban that we worked in, had around 2,500 employees. But when we arrived there after a few days, about 5 days after the impact, there were only a handful of employees that have reported for work. And for the past two weeks, only 450 staff were reporting regularly. This is a major challenge that I failed to include here, apart from the fact that one of the issues raised by the local population, even those who were educated enough who were supposed to understand what the storm surge is all about, was that they don't know how to differentiate between a storm surge or as they know it in the vernacular, storm waves, so everybody was somehow complaining that had a particular term been used, such as tidal wave, then they could have understood and could have, you know, evacuated far from the shore. That's one issue.

Now, to continue, what we immediately foresee was the challenge in the immediate restoration of many of the services, especially the utilities. While we have brought in forces, utility forces or security forces there, it would linger on until enough goods have come in to these damaged areas.

Another challenge is the recovery of businesses, especially in the capital town. People would be relying on the business people. But because of the security and order, some of them had to get out of the city in the meantime.

And of course, in the immediate term, we have taken the repair of vital facilities to be a major challenge. It is not a matter of pouring in money but rather ensuring the availability of materials that would be needed in the... and more importantly, in terms of the economic and psychosocial rehabilitation for those who were affected, especially to the families who have lost almost all their relatives and they remained... just take the case of one man who joined us in our trip back home to Manila. He lost his wife, his four children so there's nobody to work with or to play with and so he decided to take his chance here in Manila. So, such situation is really, you know, quite sad for all of us, especially when Filipinos would like to have a very joyful celebration of the Christmas season.

So this is just the brief information that I could share with you regarding Yolanda. And perhaps Janggam can share with you other information... especially from the perspective of somebody from outside of the Philippines.

Thank you very much for your attention. (Applause)

Mr. Santiago: So, before we entertain any of your questions, I'd to call on Janggam (?) to share his version of... his observation and his view about the impact of Yolanda.

Mr. Janggam : My name is Janggam, I am from the ASEAN Humanitarian Assistance Coordinating Center. I want to give a perspective from the ASEAN emergency response... pictures of the typhoon Yolanda or Haiyan, its international name. So, basically, that is what we are trying to provide an immediate disaster assessment... and support from ASEAN member states.

So, to continue, as you can see here in the pictures... this is Tacloban, and it is quite ironic that our team had to use tarpaulin for a temporary shelter... (See powerpoint presentation)

Now, this is my last... we left Tacloban on the 4th of December and then... I know through the MMDA's hard work of clearing out the debris, we can see now the city... the major roads to the city has been cleared so we can pass. And yesterday, a lot of people had migrated outside Tacloban but now they are having a program called "cash for work program", for volunteers to clear out more debris... now you can see a lot more coming to Tacloban to do more of clearing. So, and then, last... small establishments,

some of the shops started to open... and then we tried to go to the airport... but there was only one way to the airport, there is no other way to go to the airport. And this was... .. very heavy traffic. Now... .. you know there is a... San Miguel... Incidentally, both of this...and _____ in the coastline.

So that's the... ASEAN overview... we shall continue, and hopefully, with more assistance coming, we can continue to provide...

Thank you very much...

Mr. Santiago : Thank you very much, Janggam for such informative presentation. So, ladies and gentlemen, any questions? Or are we already sleeping... questions...? Yes, Joel, please...

Q by Jommel : Good afternoon. Sir, based on your experience in Tacloban and in Leyte, what do you think is the problem, particularly in the distribution of relief goods, as well as in storage? This has been a continuing problem of the Philippines with regards to these assistance, learning from the past typhoons, it has always been the problem. So, what do you think this is and what is the solution to this problem?

Mr. Santiago : For me, personally, I think, it's a problem of logistics and the capacity to really manage the distribution considering the large, very large amount of aid coming in, from the past, there are constraints caused by the... mode of transport... because these are island provinces, and partly connected by bridges. The roads are good but generally, during the height of the typhoon, most of these were not passable. The main problem that they encountered was the access. They cannot obtain any report coming from the different towns, in the different places, so there's the problem of communication... all bogged down, and therefore, if you combine these two elements, that would somehow delay the provision of assistance. Assistance came, very large volume of assistance. Unfortunately, if you look at the airport that I showed you, the apron could only accommodate three C130s at any given time. And I had observed that when there was a C130 that got stuck in the apron side, definitely, no other airplanes could land. Eventually, they diverted all flights, both humanitarian assistance... in Tacloban City Airport. It's an issue of logistics basically, the capacity of the facilities to absorb these amounts of assistance. Add on to that is the problem of communication and access to these areas. Janggam might want to add...

Janggam: Thank you, I think I have mentioned quite on the... but ah, just one more... strategy now is they created several hubs for the relief items so that would be the Ormoc, also the Tacloban and the Guiuan. In Tacloban itself, they set up the warehouse in Palo. It is close to a helicopter landing. It is about almost... they are trying to set up about 30 warehouses, mobile stores... in Palo. So, that, hopefully that would reduce... absorb all the amounts of assistance. Another thing that is being considered there is how to distribute them to the people. So, I think, the DSWD and the other organizations there are working very hard on this one. They are trying... the trucking, and the... to distribute these relief items.

Mr. Santiago : Just a rejoinder, what was basically absent is a plan. So, it is some sort of trying to find a solution confronted with the huge task of handling relief. There are several airports in those islands but it was only after two weeks that those responsible started thinking to create several hubs. So, in essence, the need for that plan... was not taken into account even prior to any catastrophic event. So there were shortcomings in terms of scanning the resources, and what would be the appropriate mode of transportation, and what are the other resources that could, you know, help facilitate the... had there been any... what contingency plans... not to mention, of course, on the part of the businesses, how would... Well, but of course, in instances like this, even if you have a plan, or big enterprise, you would also be dependent on other stakeholders to provide the necessary, you know, services, or infrastructure, or things that you would need for you to sustain, or for your to carry out your BCP (?) Or perhaps, in these things

that we've seen, although this is not a highly industrialized area, okay, unlike maybe, if compared with Cebu... but I understand that they have about two ecozones in Leyte, well, but not that big. But it happened in Cebu which is a major hub... the BCP will have a great impact on the country's economy.

Other questions? Yes, sir...

Man : What economic activity would you recommend be put in place to facilitate recovery?

Mr. Santiago : Not exactly, it could still be, if I am not mistaken, tourism and agriculture.

Man : Can you estimate the number of victims in the affected areas?

Mr. Santiago : Right now, the death toll is around 6,000 even after we are trying to clear the area and trying to put the relief downwards... to the community. The government has already started putting up temporary shelters, bunkhouses. The government have plans already, at the local level, they already, and even the administrative councils at the local levels, are already contemplating on declaring a no build zone, especially in those areas that were affected. But there will be consequences to that. The national government has put in an additional 7 billion pesos for humanitarian relief in the area. And I think the national government is mobilizing 30 billion for other types of assistance. But in terms of providing shelter and trying to infuse agricultural credit or seeds for the farmers who for their crops... Maybe we can, and, we still have plenty of time for your experience in Indonesia, regarding the... how many years? Nine years...

Man: Thank you for that. In fact, we could... .. in Indonesia... .. it took nine years to... .. earthquake... .. 4 to 5 years... but in this case... .. the program, in the community _____ in Tacloban or ... disaster can take the lives of so many victims, earthquake... . I'd like to know what are the programs for Tacloban... ..

Mr. Santiago : Okay, thank you very much for sharing that experience. Are there any other questions? |Okay, should be now moving on to the next session... if you forgot or... anyway, the speakers are still here. So, if you happen to forget any questions in any of our sessions, you can ask them again.

So, for this afternoon... now, the next session will somehow give the participants a glimpse or an overview as to how... .. in the Philippines apply their business continuity practices...

For this afternoon, we have the first speaker, coming from the private sector, which is a locator in the Cavite Export Economic Zone. The second speaker will be from the Manila Water Company. And ah, some of the programs that were printed did not include Ayala Land Properties, Inc. Am I correct in... Ayala Land, Inc. or Ayala Land Properties, Inc.? Ayala Land, Inc. who is a major competitor of the Laguna Technopark who will also share with us how they view Business Continuity Planning area... so, did I miss anyone? Without the ah... so, ah, the first speaker.. from the private sector? The first speaker is from the Philippines....

Jonjon Lim of OAKWAVE: (Sings)... Minsan pa ulan, bumuhos ka, wag nang tumigil pa. Dala mo ma'y bagyo dalangin ito ng puso kong sumasamo... That was a Tagalog love song... it's a lover's prayer asking the rain to continuously pour down and nowadays, that song is becoming lesser appealing to me. By the way, I am Jonjon Lim from Oak Wave Philippines. In my talk, the Bangkok flooding, way back 2011, I got instructions from Oak Wave Japan's president asking me to device a contingency plan. That's why I am here in front of you to discuss and to share Oak Wave Philippines flood control system.

Location is a great factor for self-locator. We are located in Cavite and this is the map of CEZ, ah, Cavite Economic Zone. Oak Wave is located in the north, parallel to the diversion road. There, you could see Oak Wave Philippines... there, _____ ...

Cavite is just 5 minutes away from Cavite... the Manila-Cavite Expressway that was... is expected to have liquefaction, as explained earlier by the speakers. We are surrounded by different river channels also. (See powerpoint)

To sum up my presentation, Oak Wave Philippines

With this ABCP and with the different sectors working hand-in-hand, we could do something big or huge. And I'm very hopeful that with this ABCP, we could lessen the impact of any catastrophe. That's all. (applause).

Mr. Santiago: Thank you very much, Jonjon, for that wonderful insight. The next speaker will be Mr. Jommel Omar Gomez, from the Manila Water Company, who also service partly the concessionaire area in Laguna... Sta. Rosa, Laguna... So, he will be with us this afternoon to discuss the preparedness and contingency plans of Manila Water...

Jommel Gomez : Good afternoon, ladies and gentlemen. I'm Jommel Gomez, I will be presenting to you the Manila Water Preparedness Plan, as well as our Business Continuity Plan. The outline of my presentation will be divided into three parts, mainly our experiences from previous disasters, what our preparedness response plan, our business continuity plan, as well as the new emerging challenges and the things that we think will be major factors in continuing to develop... improve our continuity plan. (See powerpoint presentation).

Mr. Santiago: Thank you, Jommel, for the very informative presentation. Let's now proceed to the next speaker from one of the developers, major developer of the Laguna Technopark, from Ayala Land, Inc., let's welcome, Engr. Nat Nañasca...

Nath Nañasca of Ayala Land Properties, Inc.: Good afternoon, I am Nathaniel Nañasca, representing Ayala Land. Actually, I am from the Ayala Property Corporation which is a wholly-owned subsidiary of Ayala Land, we are in-charge of managing the properties which were developed by Ayala Land. As of today, we are managing more than 200 properties including residential properties, office buildings, malls, and estate and carpark development. This is my presentation outline... (See powerpoint presentation)

That's all for my report. Thank you. (applause)

Mr. Santiago: Thank you, Engr. Nath. So, we still have 10 minutes for our question and answer portion which you may direct to our presenters from the private sector. Yes sir, please...

Q & A Portion

Man: I have this question... .. I think among the ASEAN Countries... in my country... .. we don't have those things... .. so, we don't have that yet... so, is it possible that in the future, that you may be able to support our... maybe our trade center... .. for other ASEAN Countries... what training can you... .. we might learn from each other...

Mr. Santiago: with respect to the feedback (?) _____ policy... it has always been recently, well... it has recently been adopted, I mean, the policy was adopted in the light of the recent disasters in the Philippines. So, coupled with this would be the practice of immediately addressing some land use or

zoning issues after a very devastating earthquake. Actually even the group of Dr. Solidum, the Mines and Geosciences Bureau and PAGASA, they are very much involved with producing hazard maps for the entire country. But the... as in the case of development planning and... or land use... zoning, these are actually measures that takes a while to gestate... especially if the areas are highly built-up already. So, this is also an attempt of, especially in the case of Metro Manila... Metro Manila Development Authority is also pursuing a Green Print 2030, a master plan, a development master plan for Metro Manila, but this time, also taking-in the other neighboring provinces or areas. Unlike before, the planning was more inclusive. If it is just the city, this is your domain, basically, you plan within the confines of your territorial jurisdiction. But with this Green Print that the MMDA has taken, the agency now tries to bring in the neighboring provinces. Because what was experienced was that, whatever they do in the surrounding areas, will definitely affect their neighboring region. So, apart from building back better... the government right now, with so much... now with heightened awareness on the risks that we take, it is really adopting a more proactive stand towards land use and development planning.

Now, the other question, I think, can be answered by Janggam... we do not... among the scientists that we have, there's already a collaboration among them. But in terms of center to center, apart from ADMER, perhaps Janggam can answer... some of your desire, you know, to learn from each other.

Janggam: I think we are going towards that direction. There is already established ... especially for the ... so we will go there. And also, there is ... that we are trying to develop where one can also learn.

Mr. Santiago: So, we are ready for the break? Five minutes early... so we can take another question... yes sir...

Man: ... but I think in the wide scope, we need ah... okay ah... , we have a simple BCP practice... ... sector which is water, externally, in construction.. but I think in the wider scope, we need a coordinator that will coordinate with each of the stakeholders. Then I want to know what is the role of the government to support the CP... especially to ... thank you...

Mr. Santiago: Perhaps the answer to your question would be answered by this particular project, where we have dedicated towards achieving exactly what you wish to find out in terms of the role of the various stakeholders, etc. As we mentioned a little while ago, the BCP primarily concerns the organization. But if we find out that nothing moves outside your perimeter wall, then there is no way by which you can have an effective BCP. A classic example of Ayala is that Ayala would be somewhat homogenous and they take care of their estates. Okay. Maybe in a wider area, compared with the, perhaps with Oak Wave... so that with Manila Water, may we can do that with the other stakeholders within a specific area so that the objective of this particular project could be achieve in the future and thereby adapted within the ASEAN... Dr. Takahashi?

Dr. Takahashi : ...

Mr. Santiago: Ah, okay, okay... some of the questions are pre-emptive... you know, for the latter part of the session today. Questions... at least we are on time... one minute more before we break, so we come back here... 15 minutes no? Ah, 20 minutes... 20 minute break... Congratulations, we are on the right track. Thank you very much... (applause)...

Break

Mr. Santiago: We will start in 30 seconds... Thank you very much. We hope that you have enjoyed your snacks. So, for this session, the team will now provide insights on the conduct of the final component of the Area BCP, specifically here in the Philippines, as we could recall, there are 3 pilot areas

of the project, namely, Vietnam, Indonesia and the Philippines. So the team will provide some information on how things went in the case of the Philippines. The first to present would be Dr. Takahashi, followed by Tsuji-san and Undersecretary Corazon Jimenez who would give us the results of the first workshop. Okay, Dr. Takahashi...

Dr. Takahashi: Thank you Mr. Santiago, in this session, we are to explain how we struggled to develop the ABCP to selective countries from ASEAN because we like to have a variety of conditions. So we selected different sets of locations... and also ... (See powerpoint presentation)

So this is the outline on how we will struggle in performing the Area BCP... (applause)...

Mr. Tsuji: And now, I'd like to explain what we are doing at the pilot study in the Philippines. I'd like to touch up on 6 big topics. At first, I'd like to present the preview of performing the Area BCP. And second and third and the fifth, I'd like to explain the workshop. And before I explain the sixth topic, the group work, I'd like to explain the homework because before we had the group work, we provided the homework to with the stakeholders and then we received the homework and reflected it in the group work. So, before this, I'd like to explain the homework. And lastly, I'd like to explain the orientation meeting for the workshop facilitators. The workshop facilitators are very important to support the group work. We have 6 facilitators in the Philippines, and one of them is Mr. Santiago, Ms. Melosantos, Mr. Tamayo, and other 3 members.

First, I'd like to explain the schedule of performing the Area BCP. (See powerpoint presentation)

Mr. Santiago: Thank you, very much, Tsuji-san. At this junction, we would like to call on the General Manager of the MMDA, who was herself part of the advisory group that took part in the workshop that was held last December 3 at Crimson Hotel. Ladies and gentlemen, Undersecretary Corazon T. Jimenez, the General Manager of MMDA.

Usec Jimenez: Thank you very much, Mr. Mon Santiago. If you have a Mr. Santiago like Mon Santiago, especially for the Philippines, we are... I think Mr. Takahashi, it's no longer a challenge. It's already a concept that we would like to accept and embrace here in the Philippines because with what happened with Yolanda, in the affected areas in the Western Visayas region, we see that had they planned out, had they done something like this ahead of time, business will be continuing easily. So up to this time, citizens are having difficulty, not because... not because we don't have the money, but it is more or how to transport things which is really difficult. It took me something like a total of 36 hours round trip, to go to Tacloban and back to Manila, by land and by boat.

But anyway, I am tasked to give you what transpired last December 3 and how we did it with flying colors and as witnessed by Mr. Takahashi, we were very quick and understanding what the workshop is, you will have 3 workshops, like what you will do in Vietnam and in Indonesia. But is the secret there is getting the right participants. You get the decision makers right away, who would be able to make the concept into a reality.

So, the participants' profile, actually, we were divided into advisory, infrastructure, lifeline, private sector and observer. So, if you notice, right away, in advisory, we have the Office of Civil Defense. Then the head of NDRRMC, the National Disaster Risk Reduction Management Council. For it to be very strategic, the National Economic Development Authority or what we call NEDA, and of course the MMDA who takes care of the Metro Manila area, the region; the Cavite Provincial Governor, the Laguna Fire Department, PAGASA and the Mines and Geosciences Bureau.

For infrastructure...(See powerpoint presentation)

Mr. Santiago: Thank you very much, GM. So now we come to... are there any questions to the presentations? If there's now, we could now proceed to the wrap-up portion of this activity. So, I again, give you Dr. Takahashi.

Mr. Santiago : In the meantime... while waiting... we would like to inform everybody and request you... there is a form... a survey questionnaire regarding the workshop in your kit... may we request you to fill them up and then later submit them to us... so that we will able to you know, determine, what are the areas for improvement... okay na?

Dr. Takahashi: Okay, thank you very much for today... for accommodating us... I think we put a lot of information to you.. so I'd like to wrap-up today's talk and discussion for you... so... this is the outline of my presentation... the objective of this seminar is determine the concepts, methodology forming the benefits of Area Business Continuity Plan. We don't have any final answer for this. But today, in this process, we are going to develop the answer with you at the end of the project.

Three seminars will be done... (See powerpoint presentation).

Mr. Santiago: Thank you Dr. Takahashi. We now come to the closing moments. But before that, we'd like to make some announcements. Some of the presentations that were done will be captured in CD format or in... either in PDF or in powerpoint format, and will be distributed to our participants... the presentations... before the day ends. The secretariat will work on it. We will have a dinner after the program at 18:00 or 6:00 pm. We can move it a bit to 6:30 so that we can have cocktails and dinner at the same time. So that can also give a chance to the management to rearrange the settings here. It is quite difficult to socialize in that kind of arrangement. So, we'll have dinner at 6:30 so you'll have time to freshen up. Ah, will it be formal, Dr. Takahashi? Or... they can do away with the coat? For the dinner and cocktail? Any attire, except for slippers and robes (laughter). And there's a request from our colleague from Thailand that he'd like to make a presentation of token to the Team. Usually, nothing follows after the closing remarks but they have prepared something. I think they will sing and dance. So we'll give way to their request. (applause). And they'd like to give something to the organizers. The delegation from Thailand.

Thai: Please accept this small token... for conducting this seminar... ... 5-point prevention...

Thai: .. we learned a lot... it means a lot. Hopefully.... (applause)

Mr. Santiago: Okay, thank you very much. So at this point, ladies and gentlemen, we'd like to call on Janggam... to make the closing remarks.

Janggam: Thank you very much. I'll try to make it short and quick before we get too cold. And, first of all, we'd like to thank you, the hosts, for this event, the government of the Philippines. We'd like to thank you, Usec Cora, thank you for your contribution, and all of your support to the workshop we did... also to the other agencies, from Director Rene who already left... and also to the basically the OCD and the NDRRMC, we understand that if not for this major calamity, then they wouldn't... ... Second thing, we would also like to thank the participants and the representatives from the ASEAN member states... and the... of course, without all of you, this work cannot be done.. . so, your inputs, valuable inputs, are really expected and they are highly regarded. And last, we'd like to thank Dr. Takahashi and Tsuji-san for your hard work and for your continuous effort with the marathon work that you have conducted, hopefully it will be successful. Finally, we are all eager to see the outcome of this project, this study, not only into becoming into like... books or hard copy that will be put in the shelf. But we would like this to be, the outcome, you know, we would like it to be implemented... we would like to see it's real life,

practical application. So, let me, this seminar, end it, but this is not the end of our meeting. Hope to see you soon. Thank you. (applause)

Mr. Santiago: With that, we'd like to bring this activity to an end. And start with the activity at 6:30. So, we'd like to thank all the participants for their active involvement in this seminar and on behalf of the team, we'd like to bid you a safe trip tomorrow as you go back to your respective countries... looking forward to see you again. Thank you very much and have a good stay. (applause)

Recession



**2nd Seminar for Practitioners, Vietnam
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for
Industrial Agglomerated Areas in the ASEAN Region”**

February 24, 2014, Melia Hotel, Ha Noi City, Vietnam

*A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

Invited Attendants from 10 ASEAN Member States

Country	Name	Organization	Position
Cambodia	Mr. Ross Sovann	National Committee for Disaster Management Council of Ministers	Deputy Secretary General
Cambodia	Mr. Khim Fadane	Ministry of Planning (Social Planning Department)	Deputy Director, and Member of NSDP Secretariat
Indonesia	Ms. Anny Isgiyati	National Agency for Disaster Management (BNPB) (Community Empowerment)	Director
Indonesia	Mr. Sigit Padmono Dewo	National Agency for Disaster Management (BNPB) (Community Empowerment)	Sub Director
Indonesia	Mr. Wahyu Firdhianto	Ministry of Industry (Industrial Estate Development Facilitation)	Section Head
Lao PDR	Mr. Vilayphong Sisomvang	National Disaster Management Office, Department of Social Welfare, Ministry of Labor and Social Welfare	Director
Lao PDR	Mr. Phouthone Sayaseng	Government's Office (Land and Environment Division, The Secretariat to the Lao National Committee for Special Economic Zone and Specific Economic Zone)	Director
Lao PDR	Mr. Outakeo Keodouangsinh	Ministry of Planning and Investment (Investment Promotion Department)	Deputy Director General
Malaysia	Ms. Sharwani Binti Mohd Shahrin Silva	Prime Minister's Department (Disaster Management Division National Security Council (NSC))	Assistant Secretary
Myanmar	Ms. Nilar Htun	Ministry of Social Welfare, Relief and Resettlement (Relief and Resettlement Department)	Assistant Director
Philippines	Ms. Norma B. Cajulis	Philippine Economic Zone Authority (Cavite Economic Zone, Rosario, Cavite)	Zone Administrator,
Philippines	Mr. Richard P. Engasa	National Economic and Development Authority (NEDA) (Calabarzon: IV-A))	Economic Development Specialist 1
Singapore	Mr. Chen Yong Kai	Singapore Civil Defense Force (SCDF)/MHA	SSO Ops Policy and Development
Thailand	Mr. Korn Panthusane	Ministry of Interior (Department of Disaster Prevention and Mitigation)	Human Resource Officer, Professional Level
Thailand	Mr. Thanin Pa-Em	Office of the National Economic and Social Development Board	Deputy Secretary General
Vietnam	Mr. Nguyen Huu Phuc	Disaster Management Committee, Ministry of Agriculture and Rural Development	Director
Vietnam	Mr. Dang Quang Minh	Disaster Management Committee, Ministry of Agriculture and Rural Development	Deputy Director
Vietnam	Ms. Nguyen Thi Thu Ha	Disaster Management Committee, Ministry of Agriculture and Rural Development (Training and Technology Transfer Department)	Vice Head
Vietnam	Mr. Le Huu Phuc	Ministry of Industry and Trade (International Cooperation Department)	Deputy Director General,
Vietnam	Mr. Ngo Van Hung	Ministry of Transportation	Dyke Management and Flood and Storm Prevention Division
Vietnam	Ms. Vuong Thi Minh Hieu	Ministry of Planning and Investment (Department of Economic Zones Management)	Officer
Vietnam	Ms. Kim Ngoc Thanh Nga	Ministry of Planning and Investment (Technical Assistance to Business Registration Reform in Vietnam)	National Registry Operation Expert

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Other Attendants from Vietnam

Country	Name	Organization	Position
Vietnam	Mr. Nguyen Duc Tho	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department, Hai Phong (Flood and Storm Prevention Division)	Head
Vietnam	Mr. Dang Van Tam	Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department, Hai Phong (Flood and Storm Prevention Division)	Officer
Vietnam	Mr. Huynh Cho	Vietronimex Danang (Human Resources Department)	General Director
Vietnam	Mr. Do Vu Anh	VNPT (Telecommunications Department)	Director
Vietnam	Mr. Pham Ngoc Thach	Vietnam Chamber of Commerce and Industry (Legal Department)	Vice Head
Vietnam	Dr. Dinh Van Hung	Geonvironment and Territorial Institution	Director
Vietnam	Ms. Pham Viet Hoa	Vietnam Academy of Science and Tecnology (VAST)	Vice Head of Department
Vietnam	Dr. Nguyen Tien Giang	Hanoi University of Science	Associate Prof.
Vietnam	Mr. Nghiem Ba Hung	Observer	PEAPROS Consulting
Vietnam	Ms. Thai Thi Thanh Huong	Observer	PEAPROS Consulting
Vietnam	Mr. Nguyen Phan Dong	Vietnam Institute of Space technology -	Research Associate
Vietnam	Mr. Le Thanh Y	Department Economic Management - Vietnam Journalist Association	
Vietnam	Mr. Ho Trong Dat	Vietnam Posts & Telecommunications Group - Telecoms Division	Management of Network Design & Development Team

2nd Seminar for Practitioners, Ha Noi

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

Melia Hotel, Ha Noi, Viet Nam

February 24, 2014

*A Joint Program of Japan International Cooperation Agency (JICA) and ASEAN
Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

Agenda

February 23, 2014, Sunday

Arrival of the participants at Ha Noi

February 24, 2014, Monday

Agenda	
8:30-9:00	Registration
9:00-9:40	<p>Welcome Address</p> <p style="text-align: center;">Ms. Nguyen Thi Thu Le (10) JICA Viet Nam</p> <p>Opening Address</p> <p style="text-align: center;">Mr. Nguyen Huu Phuc, Director Disaster Management Centre – Water Resources General Department Ministry of Agriculture and Rural Development (20)</p> <p>Introduction of Participants</p> <p>Group Photo Session</p>

9:40-11:00	<p>Introduction and Progress of the Project</p> <p>Introduction and Progress of the Project (30) Dr. Masakazu TAKAHASHI Team Leader of JICA-AHA Centre Project</p> <p>Introduction of a Concept, Methodology and Benefit of Area BCM (20) Mr. Yoshiyuki TSUJI Deputy Team Leader of JICA-AHA Centre Project</p> <p>Q & A (Feedback Time) (30)</p>
11:00-11:20	<p>Coffee Break</p>
11:20-12:20	<p>Pilot Study for Formulating Area BCP in Viet Nam</p> <p>Introduction of Natural Hazard and Risk Assessment of the Project and the Results (20) Mr. Shukyo SEGAWA Leader of Hazard and Risk Assessment, JICA-AHA Centre Project</p> <p>Results of Workshop 1 for Area BCP Formulation (20) Mr. Nguyen Duc Tho Chief of Flood Control Department Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department (Working Group Member)</p> <p>Q&A and Discussion (Feedback Time) (20)</p>
12:20-13:30	<p>Lunch</p>
13:30-14:50	<p>Natural Hazard and Risk Assessment in Viet Nam</p> <p>Current Status of Natural Hazard and Community Based Disaster Risk Assessment of Viet Nam (20) Ms. Nguyen Thi Thu Ha Disaster Management Centre, Water Resources Department Ministry of Agriculture and Rural Development (MARD)</p> <p>Current Status of Natural Hazard and Risk Assessment of Viet Nam (Academic Approach) (20) Dr. Nguyen Tien Giang Associate Prof., Faculty of Hydrology, Meteorology and Oceanography, Hanoi University of Science</p>

	<p>Overview on Action Plan Response to Climate Change in Vietnam (20) Dr. Dinh Van Hung, Director Geoenvironment and Territorial Institution</p> <p>Q&A and Discussion (20)</p>
14:50-15:10	Coffee Break
15:10-16:40	<p>Business Continuity Management in Viet Nam</p> <p>Capacity Enhancement of Disaster Risk Management for Vietnam's SMES (25) Mr. Pham Ngoc Thach Vice Director, Legal Department, Vietnam Chamber of Commerce and Industry</p> <p>Business Continuity Management by Private Sector 1: (20) Mr. Huynh Cho General Director of Human Resources Department, General Department, Viettronimex, Danang</p> <p>Business Continuity Management by Private Sector 2: Ensuring Communication for Natural Disaster Control in VNPT (20) Mr. Đỗ Vũ Anh Director of Telecommunications Department VNPT Group</p> <p>Q&A and Discussion (Feedback Time) (25)</p>
16:40-17:00	<p>Closing of the Seminar for Practitioners, Ha Noi</p> <p>Mr. Bachtiar Andy Musaffa ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)</p>
17:00	Adjournment
17:30	Dinner

MC : Hoang Minh Nguyet, Moderator : Mr. Nguyen Thanh Ha

February 25, 2014, Tuesday Departure of the participants from Ha Noi

2nd Seminar for Practitioners, Ha Noi

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

Melia Hotel, Ha Noi, Viet Nam

February 24, 2014

*A Joint Program of Japan International Cooperation Agency (JICA) and ASEAN Coordinating
Centre for Humanitarian Assistance on disaster management (AHA Centre)*

Seminar Minutes (DRAFT)

9:00 am MC Hoang Minh Nguyet started the Seminar. Firstly, she welcomed all participants to the Seminar, and highly appreciated their presence. She also introduced the special participants, from AHA Center- Mr. Bachtiar Andy Musaffa; Ms. Nguyen Thi Thu Le from JICA Hanoi, Mr. Nguyen HuuPhuc, from Ministry of Agriculture and Rural Development and Dr. Masakazu Takahashi, Team Leader JICA- AHA Center Project Team. MC overviewed the concept, progress and importance of the project. Nevertheless, this seminar was the chance for ASEAN countries to share experience and knowledge on disaster assessment and response.

MC. Hoang Minh Nguyet introduced Ms. Nguyen Thi Thu Le, from JICA Vietnam to have a welcome address.

9:05 am: Welcome Address- Ms. Nguyen Thi Thu Le- JICA Vietnam

Firstly, on behalf of JICA Vietnam, Ms. Le welcomed all participants in the Seminar. She mentioned to the globalization movement in the world in all aspects with both advantages and disadvantages. People had to cope with more and more risks and challenges, especially the natural disasters. And now the negative impacts of natural disasters were on a large scale in terms of economy, society, and environment and so on. So it is necessary for all stakeholders to mutually implement the natural disaster assessment in the world in general and in the ASEAN region in particular. JICA Vietnam had completed a project named “Data Collection Survey on ASEAN Regional Cooperation in Disaster

Management” and 02 ongoing projects with AHA Center. One project was Assistant for Training ASEAN Capacity for Disaster Observation and Information Analysis. And the second one was this project – JICA/AHA Center Project on Natural Disaster Assessment for Industrial Agglomerated Area and BCP Formulation. This seminar was one of the activities under the second project. In this seminar, the participants would have the chance to listen to the progress of the project and results of pilot study, real experience on business continuity management in private sector. She was looking forward to an effective discussion and information exchange in this seminar, in order to have good plan to response to disaster.

9:10 am: Opening Speech- Mr. Nguyen HuuPhuc- Ministry of Agriculture and Rural Development

On behalf of MARD, Mr. Phuc warmly welcomed all participants to take part in this Seminar and hoped the works in good improvement and progress. He summarized the natural disasters occurred in Vietnam in 2013 with 15 storms and 04 tropical cyclones. Many hazardous weather phenomena passed over the historical landmarks in 50 recent years. He also shared the sympathy with the Philippines in Haiyan Storm and Vietnam’s representatives planned to come to the Philippines to learn their experience to solve all disaster problems. He also took an overview on the damages due to natural disaster in some aspects such as human life, economy and society in Vietnam in 2013 with estimated material damages about 1 billion USD. In his speech, he also mentioned that Vietnam had about 200 industrial parks with about 500,000 SMEs, 18,000 cooperatives and millions of families as individual business. And to protect the industry and economy from the negative impacts of natural disasters was very important. The Government of Vietnam passed a law on prevention and preparedness of natural disasters to encourage the participation of enterprises in the disaster prevention and preparedness. By this seminar, Mr. Phuc hoped that all experts from ASEAN countries would strengthen the cooperation and share experience on natural disaster management.

9:25 am: Introduction of Participants

All participants of the Seminar introduced themselves and express their opinions on natural disaster issues in turn.

9: 35 am: Group Photo Session

9:40 am: Introduction and Progress of the Project- Dr. Masakazu Takahashi- Team Leader of JICA- AHA Center Project

Firstly, Mr. Takahashi screened a promotion video about this project. The video took an overview on the whole parts of the project: concepts, objectives, contents, necessity, Area BCM, BCP and so on.

Then, Mr. Takahashi talked and analyzed the details of project, steps to form Area BCP, three pilot areas for this project and risks & scenario for each area accordingly.

The details of his presentation: “Introduction and Progress of the Project”- PRC_VN_05

10:15 am: Introduction of a Concept, Methodology and Benefit of Area BCM- Mr. Yoshiyuki Tsuji- Deputy Team of JICA- AHA Center Project

In his presentation, Mr. Tsuji talked about business resources in BCP, benefits of Area BCP/BCM, concepts of Area BCP/BCM, methodology of Area BCP Formulation and Progress in the Pilot Areas.

Details of Mr. Tsuji’s speech: “Introduction of a Concept, Methodology and Benefit of Area BCM and Progress of Their Development”- PRC_VN_06

After the presentations of Mr. Takahashi and Mr. Tsuji, some comments and questions were raised.

1. Ms. Norma B. Cajulis from Zone Administrator of Philippine Economic Zone Authority asked about the content of guideline, what support JICA needed from all participants (ASEAN countries) or from the representative of the concerned countries (pilot countries).

Mr. Takahashi answered that in this project, JICA wanted to understand the area, then to determine the Area BCP/BCM Strategy and to Develop Area BCP for three pilot areas. Then the study team would issue a guideline. But team still needed to exercise, to review, to maintain, to improve the Area BCP. After finishing such 05 steps, the study team would complete set of the Area BCM system. This system focused on local governments, local institutions to run the

cycle again and again for pilot areas. And of course, the study team still needed the assistance from all participants to complete the concept, the methodology as well as the support from local governments, local institutions.

2. Mr. Richard P. Engasa, Economic Development Specialist from National Economic and Development Authority of the Philippines asked Mr. Tsuji about 10th slide in his presentation (address problems/bottleneck resources) regarding to RTO standards for the whole stakeholders because the RTO for private sector may take a longer time than the overall RTO, so it may affect the overall recovery operation of this area.

Mr. Takahashi replied that RTO was based on a company, a region, a country so it could be defined by the stakeholders. It was the basic information for the discussion among the stakeholders in agglomerated industrial areas. And the local government also made their efforts to recover it. The purpose of this project was to share the bottleneck/shortcomings of this area, so each stakeholder should make the best to improve themselves and better the economy recovery.

Mr. Tsuji gave his explanation also. It found difficult to evaluate the RTO in a region. Many companies found it difficult to have RTO; some companies regarded RTO as secret strategy of their company. So, to approach the RTO of companies was not easy. However, it was typical approach idea in natural disasters.

3. Mr. KornPanthusane, HR Officer from Ministry of Interior (Department of Disaster Prevention and Mitigation) of Thailand gave some experience in Thailand. Actually they had plans to response to the disaster. But the plan was one thing, but the action was another thing. It should be required the government to recognize the prevention of natural disaster and to implement the mitigation measures, but the utility of the common sector is critical. Another thing was the attitude to deal with the disaster. It was necessary to build up the business continuity plans. According to his opinion, the government needed to stimulate and raise awareness among all stakeholders to deal with the natural disaster. And it was the fact that in some recent years, the most vulnerable stakeholders in natural disasters were business community. So he was looking forward to the programs in Vietnam on raising public awareness and natural disaster assessment.

4. Ms. Anny Isgiyati, Director of Community Empowerment, National Agency for Disaster Management of Indonesia, gave their experience on disaster response of floods. For example, in Jakarta, BNPB made the response on the damage and loss; they got information on losses and damages on infrastructure from Earthwork Department; and on industry from Industrial management department. They had 05 national commanders. In Tangharang, they had BCP which would be discussed in workshops with JICA.
5. Mr. Wahyu Firdhianto, Section Head of Ministry of Industry from Indonesia commented that natural disasters affected many areas in Indonesia. They had problems with the accessibility to and from the industrial areas. In Karawang, there was no flood in this area, but the industry surrounding of this districts had a lot of floods so it influenced the supply chain of this area. They usually cooperated with national government and local governments, so when they did some actions for industry, they also reported the actions to the provincial government. They hoped to have an operation standard procedure to mitigate the damages of the natural disasters and they would persuade the government to do such standards. They hoped the guidelines from JICA would be the base for their standards and it would be conducted by the provincial government accordingly.
6. Mr. Phothone Sayaseng from Government Office of Lao PDR also gave some comments. He recognized that it was a new understanding on natural disaster. Regarding to Lao, because they have less impact from disasters, in order to make more understanding on this project, he asked Mr. Takahashi that what kind of information that the research team collected from Lao. Moreover, the most economy of Laos was agriculture, not industry; therefore the impact of disaster on their industry was less. And they had a border from Vietnam, Laos to Thailand, and in this border, they tried to promote economic zone including Vietnam, Lao and Thailand. So, he wanted to know whether study team did the research on this area or not and any guideline to deal with such problems.

Mr. Takahashi replied that there were some targeting places in ASEAN region for this project. In Indonesia, JICA chose a concentrated industrial area. However, they still concerned about other areas such as ports in Jakarta, floods in Jakarta, water supply, earthquake in other areas in Indonesia. They considered all, but chose the vital areas.

- For Laos, they took the research in an overall area with same information such as industry, economy, key infrastructure, natural disasters... It could be meaningful not only business continuity management but also for general disaster management. So they needed to summarize country report.
 - For Thailand, so far the management focused on death, industrial damages, and community. So they were the big challenges in disaster management. So they just only focused on the economy. For Area BCP, they were studying differently developed companies, big companies, SMEs... and SMEs community was the most so research on SMEs community was more useful and suitable for this project.
7. Mr. Ross Sovann from National Committee of Disaster Management of Cambodia commented that although Cambodia was not the pilot area but he recognized the importance of this project for the economic development and industrialization of the country. He emphasized the need to advocates more and more to the stakeholders on disaster management and requirements to make sure the business development and cost savings if the stakeholder applied BCP/BCM in comparison with traditional business. In his opinion, when the stakeholder applied BCP/BCM, they could save much against natural disasters, if not, they would lose much. It was important to convince the stakeholders. For the guidelines, he wanted to know whether the guideline should be adopted by the country, and a policy on the guideline could be complied or not.

Mr. Takahashi reminded that BCP/BCM was new approach and guideline was still on the way to be finished for the areas. So they need to improve guideline and database. JICA also appreciated much that when the participants came back countries, the participants would introduce BCP/BCM to the Government, to support JICA to fulfill the project effectively.

Mr. Nguyen Thanh Ha, the moderator, highly appreciated the participation of all delegates in Q&A section, especially representative from Laos and Cambodia, which countries were less impacted by natural disasters.

11:00 am: Coffee Break

11:25 am: Pilot Study for Formulating Area BCP in Vietnam

Instruction of Natural hazard and Risk Assessment of the Project and the Results- Mr. ShukyoSegawa, Leader of Hazard and Risk Assessment, JICA-AHA Center Project.

Detailed of Mr. Segawa's speech: "Natural Hazard and Disaster Risk Assessment of the Project", PRC_VN_07.

Results of Workshop 1 for Area BCP Formulation- Mr. Nguyen DucTho, Chief of Flood Control Department, Dyke and Flood & Storm Control Department, working group member.

Details of speech: PRC_VN_08

After the presentation of Mr. Segawa and Mr. Tho, some questions and comments were raised.

1. Mr. KornPanthusane from Thailand gave some comments on the presentation of Mr. Tho, regarding to the critical problems. First of all, he wanted to mention to the role of reliable information. He gave examples of information channel, communication channel in a big flood in Thailand 3 years ago. They did have reliable information from the official sources like media channel, radio... The experts also participated to give analysis and recommendation. It was very important. But sometimes, in each area, each group, they tried to talk and then the disputes occurred. So, in case of Haiphong, he wanted to know what their analysis for this kind of critical problem was.

To Mr. Segawa's presentation, Mr. K. Panthusane also gave some opinions. It was quite good but most of them were separate analysis for the impacts. It looked like standing alone. We have findings during the big practices. It occurred from accommodation, from infrastructure.

When the rapid tide was getting high very quickly and due to the lack of reliable information, they failed to move critical equipment to the higher place. About 16-20% equipment were destructed. So sharing information among the infrastructure provider was very important. In the concentrated industrial areas, they were getting together well, but the response to the natural disaster was too late. So, the management based on reliable information was also very important.

2. Mr. Richard P. Engasa from the Philippines gave some comments to Mr. Tho about the critical problems. Natural disaster not only affected the business and economy only, but in a wider scope, in all aspects including loss of people's live. With a good BCP/BCM, especially to the infrastructure companies, utility companies such as water supply, electricity supply, when the critical time came, they would response quickly and recover better, and then could save more life. And from the results of the workshop, he thought that to identify many critical problems would be the challenges and home-works to make it work. So in the future, they could overcome the critical problems due to the natural disaster.

Mr. Tho answered, regarding reliable information source, to HaiPhong city, before storm season, all mass media like telephone communication/mobile network were installed VHS system, a communication system to response to the natural disasters. In flood response in Vietnam, they usually mentioned to 4 things at spot motto, in which communication was prepared in advance. Before the storm season, areas and regions had to prepare all communication networks to connect to the city authorities. When natural disaster came to any areas, this area would inform to the city authorities on the disaster alert, response and recovery.

About the coordination in disaster response in Vietnam and in HaiPhong, all stakeholders would participate to response it, from local authorities, disaster control disasters and others. In Vietnam there were 3 levels of coordination, commune level, provincial level and national level. In each level, they had the participants from different sectors, different stakeholders to make a plan and rescue. In case of small disaster, the local authorities could solve. If it was beyond their capacity, they would report it to provincial authorities for help and

the same to ask support from national level.

3. Mr. PhouthoneSayaseng from Laos: in recent time, Laos also faced some natural disasters, mainly floods and flash floods in 02 years ago, typhoon in 2011 (from the Philippines), typhoons in 2013 causing flooding and landslide due to the heavy rain. So the damage for the infrastructure in industrial areas was huge, about 2,000 billion Lao's kip. So now it was very important to make disaster assessment for all planners (Government and businessmen) to see how the natural disaster impacted to the sector. The disaster assessment could help them to have countermeasure in order to reduce negative impacts of them. He wanted to know the assessment tools of this project. Secondly he wanted to mention about discussion matter/ carried action issue in disaster management. Actually Lao government still did not involve in this matter. He hoped to catch, to learn and to share all actions to response to natural disasters to all enterprises in Laos. They would encourage the businessmen, especially private sector to engage in natural disaster preparedness, control and recovery.

Mr. Segawa answered the issues from Mr. K. Panthusane that everyone could use the information from the study (page no.27). The study team used open source simulation models for all analysis with data collected from the open source database. In addition to the analytical information, another important thing was that the experience in the city, the area and the local. All these gathered information would be summarized in the country reports, as one of the outputs of this project.

12:20 pm: Lunch time

13:30 pm: Current Status of Natural Hazard and Community Based Disaster Risk Assessment of Vietnam- Ms. Nguyen Thi Thu Ha, Disaster Management Center, Water Resource Department, MARD

- Details of her presentation: PRC_VN_09

13:45 pm: Current Status of Natural Hazard and Risk Assessment of Vietnam (Academic Approach)- Dr. Nguyen Tien Giang- Associate Prof., Faculty of Hydrology, Meteorology and Oceanography, Hanoi University of

Science.

- Details of his presentation: PRC_VN_10

14:10 pm: Overview on Action Plan Response to Climate Change in Vietnam- Mr. Nguyen Phan Dong, Geo-environment and Territorial Institution

- Details of his presentation: PRC_VN_11

Mr. Takahashi explained the reasons to ask Vietnamese experts to talk about the natural disaster and risk assessment in Vietnam. Vietnam had sufficient information and capacity to conduct natural hazard and risk analysis. BCM should be carried out by local institutions and local organizations. From such 3 presentations, some information could be directly use for BCM. Regarding to the capacity to stimulate the natural hazard and risks, the study team also found the same situations in Indonesia and the Philippines. That was the reasons why the study team asked experts to demonstrate the current status of natural disaster and risk assessment in Vietnam. In guidebooks for BCM, in the section of natural hazard and risk assessment, the study team would recommend using existing data, and existing natural hazard and risk analysis, discussion remarks, local information with locally available techniques. They also cooperated with scientific institutions, private sector that now has no direct relationship of corroborative work. Therefore in the guidebook, it is recommended to connect every sector from local government to scientific institutions in each country.

1. Mr. Sigit Padmono Dewo, from National Agency for Disaster Management of Indonesia asked about the measures to ensure the plan between the local authority and communities. The second question was about the link between the local authority and SMEs.
2. Mr. Korn Panthusane from Thailand gave some comments. Firstly he appreciated 3 presentations. Regarding to the presentation of Ms. Thu Ha, he wanted to know the kind of mechanism to make their plan work. Secondly, regarding to database, database evaluation was very important for the risk management in the long term. It might raise some problems in database analysis, monitoring and evaluation. The second presentation was under academic exercise. It was good to apply the knowledge and study in formation of risk management policies. For the 3rd presentation,

they categorized and showed what kind of critical problems in each area in Vietnam. He said that in Thailand, some flood areas could become the drought areas in some months. So the detail information and management in areas were very important. All information was just the background but they were important and useful in making the policies and action plans.

Ms. Thu Ha answered that they usually conducted the capacity assessment in the local areas and gave support to the local authorities, then to the community in the commune. Then DMC asked the communities to create a map of disaster distribution. They would help the community to realize their risks, to guide them how to response to the risks and recorded all feedbacks on the negative impacts. The communities also showed their ideas on measures to response to the risks. The measures would be recorded in the report. After that the DMC would come to see the local authorities and get opinions of the local communities about the risk management. After the communities made the plans with the support from DMC, DMC would report to the local authorities for approval and implementation. That was the link between local communities and local authorities.

Regarding to mechanism to make plan into the action, Ms. Ha confirmed that it was the real action, real implementation in some pilot areas and now they were training the officers and did the vulnerability capacity assessment. And they would try to apply it in a large scale.

Regarding to the database, at the moment they were building a database monitoring evaluation framework. It had already finished the draft and asked for the feedbacks from 24 provinces. After that they would submit this framework for the approval as well as collect the database for the management.

Mr. Giang answered the question related to the climate change, about the design probability under the disaster conditions. They chose the climate change to be the challenges under the probability approach because the probability assumed that there was no change in the independent events. But due to the sea level rise, the extreme disaster events like typhoon, high water level upward, and drought also, all of them were likely to happen. Actually at the moment, when Mr. Giang did the research, he still use the probability approach like 20% for urban awareness, 100% for second dykes...In Hanoi, he used 215 years for the probability of flood.

He only added some effects of climate changes into the research to have above numbers.

3. Questions from Ms. Cajulis, from the Philippines concerned about the government policies to mitigate the impacts of floods and climate changed. Because similar to Vietnam, in some recent years, the Philippines had to face with a lot of natural disasters like typhoons, flood. She highly appreciated the database from the Vietnamese experts. And she also wanted to know the way to manage the database.

Mr. Dong gave some opinions on climate change and disaster mitigation. They did some researches in local scale and regional scale to determine the location of disaster and to determine the impacts of disaster in some aspects such as property, human and economy. He also did some researches relating to the supply data and GRS for the flooding and landslide. The data from satellite had a lot of effects for the research in different scales: the details, overviews about the reasons. For the climate changes, they could use some methods to predict and research situations of climate change based on satellite data.

Ms. Hà answered questions from Ms. Cajulis for the database management. For the government, they called it DANA, software to collect information from the local level. The officer locating in the local level would collect the data and then they input information directly into the software. So in the central level, they could receive all information immediately. They also had updated reports on the damage, situations of disasters at the local level. They also wanted to improve it in more sectors and more information could be collected. Disaster software was developing to provide enough information for decision makers. They would try to upgrade the data management for those purposes.

14:50 pm: Coffee Break

15:10 pm: Capacity Enhancement of Disaster Risk Management for Vietnam's SMEs- Mr. Pham NgocThach, from Vietnam Chamber of Commerce and Industry.

- Details of presentation: PRC_VN_12

15:25 pm: Business Continuity Management by Private Sector- Mr. Huynh Cho from Viettronimex Da Nang

- Details of presentation: To develop Enterprise Support Policies to Response to Natural Disaster Risks- PRC_VN_13

**15:45 pm: Ensuring Communication for Natural Disaster Control in VNPT-
Mr. Do Vu Anh, VNPT Group**

- Details of presentation: PRC_VN_14
1. Mr. P. Sayaseng from Laos gave first comment. He appreciated valuable information from 3 presentations. It showed how SMEs linked to the natural disaster assessment in Vietnam. In Laos, SMEs still didn't involve in disaster response and mitigation. They learned a lot of experience from Vietnam. And in the presentation, Mr. Cho mentioned to the insurance for natural disaster. Mr. Sayaseng wanted to know what kind of natural disaster insurance the enterprise covered to protect their properties against natural disaster.
 2. Mr. W. Firdhianto from Indonesia asked some questions relating to the support policies from Vietnam Government to SMEs to cover the damage. The sharing experience would be very valuable to the Indonesia because there were about 29% of SMEs in Indonesia. So, he wanted to know there is any guideline or regulations from the government to apply BCP for SMEs in Vietnam or not.

Regarding to insurance policies, Mr. Cho, ViettonimexDanang said that most of commercial companies and manufacturing companies maintained insurance for their fixed assets and goods via commercial insurance companies. In Haiyan typhoon last year, Viettonimex suffered some loss and damages that were compensated by the insurance companies. And he advised that each company should purchase insurance to protect themselves from natural disaster and to mitigate the loss and damage.

Mr. Tuan from VCCI answered the question regarding to the link between SMEs and BCP. The most important thing was how to engage, how to convince the enterprise about the importance of BCP to cope with disaster. VCCI gave examples to the enterprise on what kind of loss and damages they may suffer in disaster. They chose the location that people under high risk of disaster. They organized a lot of training course to draw the attention and helped them to

develop plans to cope with natural disasters like Viettronimex did.

Guidance of State to SMEs concerning to BCP, actually at the moment no detailed guidance on this matter was issued. However, after the study of JICA finished, the guidance would be applied for enterprises to implement it.

Mr. Takahashi replied that the situation of other companies in the ASEAN region was rather same to Vietnam. SMEs lacked of approach to BCM and disaster management. JICA study tried to support SMEs to do BCM planning. JICA approach from the upstream and approach from VCCI from the bottom up. So VCCI and JICA would cooperate to promote BCP for companies. In Japan, big corporation had BCP, but SMEs was planning to make BCP. The situation seemed to be similar. After 2011, Japanese government promoted SMEs to implement BCM, in supply chain for example.

Mr. Tsuji added some comments to explain their activities in Japan. National government gave 02 types of guidance about BCP to all types of enterprises. They also had 02 kind of financial support systems. If the SMEs formulated BCP, they could borrow money with better conditions. Moreover, the Agency for SMEs in Japan organized a lot of workshops and seminars for SMEs.

3. Mr. Richard P. Engasa from the Philippines mentioned to the fact that, after the disaster occurred, the prices of all commodities rose up. So what he concerned about was the strategy for the Government to stabilize or reduce price of commodities so that SMEs could recover timely.

Mr. Nguyen Duc Tho from Hai Phong Dyke and Flood & Storm Control Department said that because of acknowledgement of increasing trend of price after disaster, Hai Phong Authorities assigned Department of Commerce to prepare the list of commodities. This list was planned annually by Hai Phong People's Committee. When the disaster occurred in any area, the local authorities were responsible for stabilizing the price of such commodities. Moreover, the authorities would release their prepared goods into such areas in order to keep price stable.

4. Mr. Richard shared some experience on this matter in the Philippines. Normally after disaster, the Department of Trade and Industry would implement the freeze price commodity policy to ensure that the price

before disaster would be similar to the price after the disaster. It would help to stabilize the lives of the people. Furthermore, the Department of Trade and Industry also determined how long the freeze-price would be: about 1 week, 2 weeks... it depended on the extent of damages caused by the natural disaster. This damages are assessed by the office of Civil Defense. (59:45)

Mr. Nguyen Thanh Ha, National Coordinator from JICA-AHA Center Project Team also added some comments and explanation. The same policies applied in Vietnam. The Ministry of Trade and Industry took responsibilities, in which the Market Surveillance authorities usually went to such places to ensure no high price in this area. But in fact, the department and authorities could only control the prices in big enterprises. For smaller traders and businesses, it was more difficult.

Mr. Tho explained more about Hai Phong policies on price stability. When the disaster occurred in Hai Phong, all the prepared commodities such as foods, water... should be provided to the people under free of charge. One more thing, before the disasters, all stakeholders had to prepare all necessary commodities to respond to it. But if the damage was beyond their control, they would receive the support from the local authorities.

5. Mr. Tsuji asked Mr. Anh from VNPT for the priority recovery in his enterprise, the possibility to apply RTO for private companies and any suggestion to have reliable communication ways in the disaster of the private companies.

Mr. Anh from VNPT answered as follows. Before the disasters, the government would inform to all enterprises and stakeholder and then the enterprise would make the message system. Actually all SMEs and enterprise had to prepare budgets for that. In the telecommunication sector, in some companies, they needed to protect the Data Center. It was very important. Some companies such as Samsung or Sony, they needed to protect the customer's data. If they lose data, it would become a big problem. VNPT always proposed the technical solutions for SMEs and big companies: how to protect the networks, how to design the network to avoid the damages of disaster... For the private companies, after any disaster, VNPT and other telecommunication operators would have quick

response to recover the data. For examples, a big typhoons in Thai Binh and Nam Dinh provinces, when the communication tower was broken, the customers run out of accounts, so VNPT deposited accounts for such customers to come back to work normally. It was the good support policies from them

6. Ms. M. B Cajulis from Philippines commented that in the Philippine, the 1st priority was for the human life and then for the businesses. The communication in disaster was via radio, television networks from the central level to the local level. And she asked about type of the financial support from the Vietnam government to the enterprise for quick recovery such as giving loans for private sector except from bank...

Mr. Cho from Viettronimex Danang, the States usually had policies to support the enterprises to help them overcome the consequences. Some policies were follows: debt frozen, financial support, support on human resources and materials for early recovery. All local authorities would base on the government's policies to give detailed support to local enterprises.

Mr. Hà added some comments regarding to the financial support to the enterprise after the disaster. In the special cases like disaster, the Government may instruct the banks, especially the social policy bank to help the enterprise. The Social Policy Bank was not the commercial bank, so the Government may require the social policy bank and commercial bank to provide loans without security or interest in a certain time and certain cases.

Mr. Tho said that actually there were no detailed policies on this matter. However, via instructions and circular of the government, some sectors like agriculture, farming, forestry, seafood... still got the financial supports such as the death, injured, damaged houses, damaged animals.... There were detailed policies on that.

7. Mr. Ross Sovann gave his comments. He acknowledged the impacts of the disasters on the productivity and continuity of the business. And all the enterprises usually talked about the support and subsidies from the government to the SMEs. Other policies may be the tax exemption to mitigate the loss and damage of disasters. Another experience from

Vietnam with social policy banks to provide loans without security or interests in a certain time. He may apply these ideas in Cambodia.

16:35 pm: Closing of the Seminar for Practitioners, Hanoi- Mr. Bachtiar Andy Musaffa- AHA Center

Mr. Musaffa expressed his thanks to all the participants of the seminars. This was the 2nd seminar of the project with a lot of information sharing, experience sharing. It would help all participants to achieve the objectives of such seminar, about the concepts, methodology, benefits of BCP/BCM. By the way, with presentations Vietnamese experts, the participants could acknowledge the state, the situation of natural disaster assessment in Vietnam. He did hope that this seminar could benefit all of us. And the results of the research could improve the standards from the government, the private sector in their efforts to cope with the hazards and risks to better the business continuity management. Once again, he said thank for the participation and cooperation of all members in this seminar.



3rd Seminar for Practitioners, Jakarta
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formulation For Industrial Agglomerated Areas In The ASEAN Region”

June 16, 2014, Jayakarta Room, Sari Pan Pacific Jakarta, Indonesia

*A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
 Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

List of Invitees

ASEAN Practitioners

No.	Name	Country	Organization	Position
1.	Mr. Sokun Ing	Cambodia	Ministry of Planning	Deputy Director, ID-Poor Department
2.	Mr. Sigit Padmono Dewo	Indonesia	National Agency for Disaster Management (BNPB)	Sub Director, Community Empowerment Directorate
3.	Mr. Andriyana Tresnawan	Indonesia	Ministry of Industry	Head of Cooperation Subdivision
4.	Ms. Renti Montiska	Indonesia	Ministry of Industry	Staff at Subdirector Industrial Estate, DG of Regional Industry Development
5.	Mr. Souphasay Komany	Lao PDR	Department of Disaster Management and Climate Change, Ministry of Natural Resources and Environment	Director of Division, in-charged of DRR
6.	Mr. Vilakone Sengsavang	Lao PDR	Lao National Committee for Special Economic Zone (SNCSEZ), Government's Office	Deputy Head of International Relations and Cooperation
7.	Dr. Souphaphone Saignaleuth	Lao PDR	Ministry of Planning and Investment	Technical Staff, Investment Promotion Department
8.	Ms. Mass Ayu Haslinda Binti Haji Md. Salleh	Malaysia	National Security Council (NSC), Prime Minister's Department	Assistant Secretary
9.	Mr. Fahrulrazy Othman	Malaysia	Embassy of Malaysia in Jakarta, Indonesia (Commercial Section)	Second Secretary (Economy)
10.	Mr. Than Soe	Myanmar	Ministry of Social Welfare, Relief and Resettlement	Deputy Director, Relief and Resettlement Department
11.	Mr. Aung Myint Than	Myanmar	Ministry of National Planning and Economic Development	Director, Planning Department
12.	Mr. Elvis Cruz	Philippines	Office of Civil Defense (OCD)	Planning Officer III
13.	Ms. Sheila Marie P.	Philippines	Philippine Economic Zone Authority (PEZA)	OIC-Zone Manager
14.	Mr. Fidel T. Udarbe	Philippines	National Economic and Development Authority (NEDA) Regional Office IC-A	OIC – Assistant Regional Director
15.	Mr. Wilfred Lim	Singapore	Singapore Civil Defence Force (SCDF), Ministry of Home Affairs	SO Terrain & Security, Operations Department
16.	Ms. Chomphoonut Chuangchote	Thailand	Office of The National Economic and Social Development Board	Senior Policy & Plan Analyst
17.	Mr. Nguyen Huynh Quang	Vietnam	Disaster Management Center, Ministry of Agriculture and Rural Development	Head of Community Based Disaster Management Division
18.	Mr. Nguyen Thien Quan	Vietnam	Ministry of Industry and Trade	Specialist, International Cooperation Department
19.	Ms. Nguyen Thanh Hoa	Vietnam	Agency for Business Registration, Ministry of Planning and Investment	Officer

Speakers / Organizers / Observers

No.	Name	Country	Organization	Position
20.	Ms. Linda Al Amin	Indonesia	Regional Development Planning Board (BAPPEDA), West Java Province	Speaker, Head of Physical Division
21.	Dr. Kridanto Surendro	Indonesia	Bandung Institute of Technology (ITB)	Speaker
22.	Ir. Dody Ruswandi	Indonesia	National Agency for Disaster Management (BNPB)	Deputy Chief for Prevention and Preparedness
23.	Mr. Hiroaki Nakagawa	Japan	Japan International Cooperation Agency (JICA)	Principal Representative for ASEAN Coordination
24.	Ms. Nami Kasahara	Japan	Japan International Cooperation Agency (JICA)	Project Formulation Advisor (ASEAN Partnership)
25.	Mr. Hideki Katayama	Japan	Japan International Cooperation Agency (JICA)	Disaster Management Advisor
26.	Mr. Said Faisal	Indonesia	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)	Executive Director
27.	Mr. Bachtiar Andy Musaffa	Indonesia	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)	Disaster Monitoring and Analysis Officer
28.	Ms. Putri Handayani	Indonesia	Mercy Corps Indonesia	Observer

JICA-AHA Project Team / National Staff

No.	Name	Country	Organization	Position
29.	Dr. Masakazu Takahashi	Japan	JICA-AHA Center Project Study Team	Team Leader
30.	Mr. Yoshiyuki Tsuji	Japan	JICA-AHA Center Project Study Team	Deputy Team Leader
31.	Mr. Shukyo Segawa	Japan	JICA-AHA Center Project Study Team	Leader of Hazard and Risk Assessment
32.	Mr. Kotaro Fukuhara	Japan	JICA-AHA Center Project Study Team	Coordinator
33.	Dr. Krishna S. Pribadi	Indonesia	JICA-AHA Center Project Study Team	National Coordinator
34.	Ms. Aria Mariany	Indonesia	JICA-AHA Center Project Study Team	Junior Researcher
35.	Ms. Lusiana Rumintang	Indonesia	JICA-AHA Center Project Study Team	Interpreter

3rd Seminar for Practitioners, Jakarta

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

Jayakarta Room, Sari Pan Pacific Jakarta, Indonesia

June 16, 2014

*A Joint Program of Japan International Cooperation Agency (JICA) and ASEAN
 Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

Agenda

June 15, 2014, Sunday Arrival of the international participants at Jakarta

June 16, 2014, Monday

Opening Session	
8:30-9:00	Registration
9:00-9:45	<p>Welcome Address</p> <p style="padding-left: 40px;">Mr. Hiroaki Nakagawa Principal Representative for ASEAN Coordination Japan International Cooperation Agency (JICA)</p> <p>Opening Address</p> <p style="padding-left: 40px;">Mr. Said Faisal Executive Director ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)</p> <p>Introduction of Participants</p> <p>Group Photo Session</p>

Session 1 Introduction, Project and Area BCM	
09:45-10:30	<p>Project and Area BCM</p> <p style="text-align: center;">Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Q & A / Discussion</p>
10:30-10:50	Coffee Break
Session 2 Developing Area BCM	
10:50-12:00	<p>Understanding the Area</p> <p style="text-align: center;">Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment</p> <p>Determining Area BCM Strategy and Developing Area BCP</p> <p style="text-align: center;">Mr. Yoshiyuki Tsuji Deputy Team Leader of the Study Team</p> <p>Q & A / Discussion</p>
12:00-13:00	Lunch Break
13:00-14:10	<p>Workshops and Draft Area BCP for Indonesia</p> <p style="text-align: center;">Ms. Linda Al Amin Head of Physical Division Regional Development Planning Board (BAPPEDA), West Java Province</p> <p>Practices of BCM in Indonesia</p> <p style="text-align: center;">Dr. Kridanto Surendro Bandung Institute of Technology (ITB)</p> <p>Q & A / Discussion</p>
14:10-14:40	<p>Exercising and Reviewing, and Maintaining and Improving</p> <p style="text-align: center;">Dr. Masakazu Takahashi</p> <p>Q & A / Discussion</p>

14:40-15:00	Coffee Break
Session 3 Strategies for Promoting Area BCM in the ASEAN	
15:00-16:50	<p>Inputs for Discussion</p> <p style="text-align: center;">Dr. Masakazu Takahashi</p> <p>Inputs from Participants and Discussion</p>
16:50-17:00	<p>Closing of the Panel Meeting</p> <p style="text-align: center;">Ir. Dody Ruswandi Deputy Chief for Prevention and Preparedness Indonesian National Agency for Disaster Management (BNPB)</p>
17:00	Adjournment
18:00	Dinner

MC and Moderator : Dr. Krishna Suryanto Pribadi,

June 17, 2014, Tuesday Departure of the international participants from Jakarta

3rd Seminar for Practitioners, Jakarta
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

Jayakarta Room, Sari Pan Pacific Jakarta, Indonesia
June 16, 2014

A Joint Program of Japan International Cooperation Agency (JICA) and ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)

Minutes of Meeting

The seminar is facilitated by Dr. Krishna S. Pribadi as a moderator. The summary of seminar process is described below.

09.00-09.03

Welcome Address by Mr. Hiroaki Nakagawa, the Principal Representative for ASEAN Coordination, Japan International Cooperation Agency (JICA)

He extends his regards to the representative of AHA Center, West Java Bappeda, Asean members and all participants.

The implementation of seminar is held with the collaboration of JICA and AHA Centre and also Asean Secretariat. This seminar is for practitioners, following previous seminar in Manila last December and in Hanoi last February. This is possible for the disaster management and policy maker in central government, regarding Area BCP and disaster management in the area that are exposed. This issue is to be accrued in this project. We will introduce you to the procedure of Area BCP and the plan for Indonesia. I expect active participation to the discussion in this seminar, in particular focused on the potentiality of Area BCP and the responsibility of organization, Ministry, department, and the major to introduce. So that, the understanding on Area BCP could be given in the area. This seminar will bring you to the understanding of Area BCP. Appreciate to the JICA and Study Team, also AHA Centre and Asean Secretariat to implement the project, and to disseminate it to the relevant organization to promote disaster management and ABCP. Thank you very much.

09.05-09.08

Opening Address by Mr. Said Faisal, Executive Director ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

He extends his regards to Mr. Nakagawa, study team of JICA, Ibu Linda, and all participants for ABCP conference and says a very good morning to everyone and thank you for participants coming to the seminar.

First of all, we would like to thank to JICA and all study team for helping us in formulating in this important BCP/BCM which is considered as emerging issues, integrated for important disaster management. Disaster management is no longer business of disaster management agency but also for private sector because it has impact to the member of private sector. For example flood in Thailand that impacted seriously to the industrial zone and earthquake and tsunami that happen in Japan that give serious impact to the private sector. Disaster management becoming issue where it interlinks with the private sector in the area that are impacted by disaster, particularly private sector in global world, it has supply chain over the world and that supply chain is also impacted.

This will have serious issue for company that be impacted by disaster, particularly in small scale where is not designed to cope with such big disaster. For example to reduce the impact, for the organization or private sector, where it has a reputation and production line that need also to be managed during disaster. BCP/BCM is anticipating how we can continue the production during disaster and anticipate earlier and able to formulate the business model that can be resilience continue even the industry or private sector is impacted. The important of private sector as well because when we have serious disaster moment and private sector collapse, it will impact to the employee and to the economy of the area where the disaster impacted.

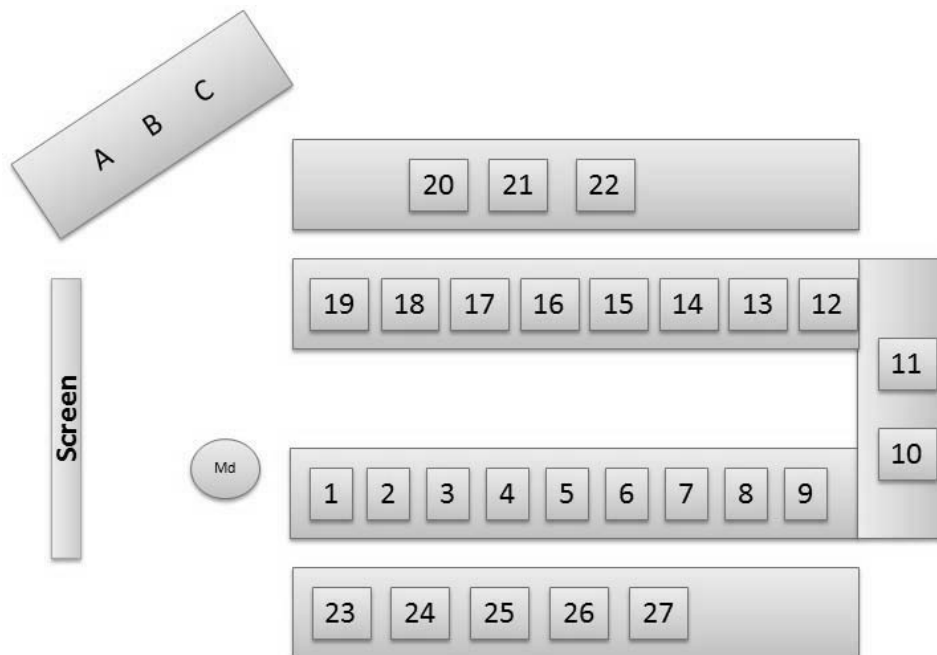
This is a very important seminar for us to have similar understanding important, how it can work in private sector. I believe that your contribution to the study conducted by JICA study team will help us to understand more. Together we strengthen the region to anticipate the region from the future large-scale disaster. We hope no more disaster, but we have to consider the region that impacted by disaster very often.

At the end, he extends his thank to JCA Study Team for the implementation of the study and to all participants for their contribution.

09.09-09.20

Participants Introduction, facilitated by Dr. Krishna S. Pribadi.

The participants based on their sitting arrangement are as follows:



Sitting Arrangement of the Seminar for Practitioners - Jakarta, 16 June 2014

Md	Mr. Krishna S. Pribadi	Bandung Institute of Technology (ITB)
A	Mr. Said Faisal	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)
B	Mr. Hiroaki Nakagawa	Japan International Cooperation Agency (JICA)
C	Ms. Linda Al Amin	Regional Development Planning Agency (Bappeda) West Java

1. Mr. Nguyen Thien Quan Agency for Business Registration, Ministry of Planning and Investment, Vietnam
2. Ms. Nguyen Thanh Hoa Ministry of Industry and Trade, Vietnam
3. Mr. Nguyen Huynh Quang Disaster Management Centre, Ministry of Agriculture and Rural Development, Vietnam
4. Ms. Comphoonut Chuangchote Office of The National Economic and Social Development Board, Thailand
5. Mr. Wilfred Lim Singapore Civil Defence Force (SDCF), Ministry of Home Affairs, Singapore
6. Mr. Fidel T. Udarbe National Economic and Development Authority (NEDA), Regional Office IC-A, Philippine
7. Ms. Sheila Marie P. Pidlaoan Philippine Economic Zone Authority (PEZA), Philippine
8. Mr. Elvis Cruz Office Civil Defence (OCD), Philippine
9. Mr. Aung Myint Than Ministry of National Planning and Economic Development, Myanmar
10. Mr. Than Soe Ministry of Social Welfare, Relief and Resettlement, Myanmar
11. Mr. Fahrulrazy Othman Embassy of Malaysia in Jakarta, Indonesia (Commercial Section)
12. Ms. Mass Ayu Haslinda National Security Council (NSC), Prime Minister Department, Malaysia
13. Dr. Souphaphone Saignaleuth Ministry of Planning and Investment, Lao PDR
14. Mr. Vilakone Semgsavang Lao National Committee for Special Economic Zone (SNCSEZ), Government's Office, Lao PDR
15. Mr. Souphasay Komany Department of Disaster Management and Climate Change, Ministry of National Resources And Environment, Lao PDR
16. Ms. Renty Montiska Ministry of Industry, Indonesia
17. Mr. Andriyana Tresnawan Ministry of Industry, Indonesia
18. Mr. Yulianto National Disaster Management Agency (BNPB), Indonesia
19. Mr. Sokun Ing Ministry of Planning
20. Ms. Nami Kasahara Japan International Cooperation Agency (JICA)
21. Mr. Hideki Katayama Japan International Cooperation Agency (JICA)
22. Ms. Putri Handayani Mercy Corps Indonesia
23. Mr. Masakazu Takahashi JICA-AHA Centre Project Study Team
24. Mr. Yoshiyuki Tsuji JICA-AHA Centre Project Study Team
25. Mr. Shukyo Segawa JICA-AHA Centre Project Study Team
26. Ms. Aria Mariany JICA-AHA Centre Project Study Team/Junior Researcher
27. Mr. Kotaro Fukuhara JICA-AHA Centre Project Study Team

9.20-9.25

Photo session

9.26-10.31

Project and Area BCM Presentation by Dr. Masakazu Takahashi, Team Leader of the Study Team

Show the Film regarding ABCM and ABCP

The film shows the reason why JICA develop ABCP in Asean. There is also explanation regarding the Asean countries that are prone to disaster, and impact of disaster to the infrastructure and economy. One of them is the impact of disaster to the supply chain. The industry introduces BCM. This film explains the definition of BCM, introduces the Area BCM to sustain the regional economy, to keep the stagnation of economy in the regional due to disaster. To achieve this goal, it requires collaboration among local government, operator, city government and community. For example in flood disaster, industry as

individual cannot overcome the impact in the regional. To fix this situation, the collaboration among stakeholders is needed to determine the bottleneck that restrict the sustainability of industry, and then determine the business continuity plan for the region. They also determine the common goal, to response the disaster quickly, efficiently, and effectively. ABCM is linking the individual private sector to the regional. Government, industry and other stakeholders will work as one to resilience the Asean, and first step is started now. And JICA will continue to support Asean in enhance economic resilience by Area BCM

Presentation: Project and Area BCM

After showing the film, Dr. Takahashi presents the reason why this approach is needed for Asean.

This video is an idea of the project, the methodology, and also the way of think ABCM. We spent nearly one year to develop the concept of ABCM and also how to make ABCM in the pilot area. So I like to briefly explain about the project and also draft idea of ABCM we have achieved so far.

The objective of the seminar:

Disseminate and advocate a concept, methodology and benefit of ABCM to Asean member states. This idea is very new. We try to introduce this idea as much as possible, including in pilot countries and other countries in Asean.

3 seminars are first step to Asean and held in:

- Manila, 5 December 2013
- Hanoi, 24 February 2014
- Jakarta, 16 June 2014

The invited participants are from Agency of Disaster of management agency, Ministry of industry, as well as agency of national planning.

He presents the number of seminar participants, there are 21 participants from 10 countries for each first and second seminar, but there is not participant from Brunei so far.

He introduces the project of Area BCM, starting with the content of the presentation: why ABCM is necessary, brief description JICA-AHA Centre project, how we formulated area BCP, and the difference between Area BCM and Area BCP, basic concept of area BCM, how the dissemination and promotion of the Area BCM project.

Why Area BCM is necessary? I think the video explains most of them. Impact of natural disaster to the company, area, country, and the world, and high natural disaster risks of Asean countries, and loose competitiveness from natural disaster, single company cannot cope with large-scale natural disaster, cooperation and coordination of stakeholders, and necessity of Area BCM. I hope this video explains these important items.

This is the explanation of JICA-AHA Centre project. The objective of this project:

- 1) Development of concept of Area Business Continuity Management (Area BCM). Since this concept is new, we would like to develop the concept during the project.
- 2) Formulation of Area Business Continuity Plan (Area BCP) for industrial agglomerated areas. This is return plan to implement Area BCM. We are targeting 3 countries and choose 3 agglomerated industrial areas in 3 countries. Indonesia, Philippine, Vietnam. We formulated plan for those 3 countries.
- 3) Natural disaster risk assessment necessary to develop Area BCP. We have done for 3 countries.
- 4) Preparation of a guidebook for Area BCM and natural disaster risk assessment. We plan to expand this approach to other industrial area and other country.

- 5) Dissemination and promotion of Area BCM and Area BCP is important in this project. That is why this become the fifth objective of the project.

For Target countries, we have 2 components. Component one, 10 Asean member states target, we have studied briefly of natural disaster countries in 10 countries; we study economy, basic infrastructure, and lifeline of those 10 countries. Component two, we target 3 countries, Indonesia, Philippine, Vietnam, and we have selected industrial agglomerated area in each country, Karawang-Bekasi for Indonesia, Cavite, Laguna, and southern part of Metro Manila for Philippine, and Hai Phong for Vietnam.

Explain the pilot area in Indonesia. We are now in Jakarta, so the area is eastern part of Jakarta, there are industrial parks, so this is a target pilot area for this Project. And he also shows the map of case study in Philippine, southern part of Metro Manila, Cavite, Laguna. There are many industrial parks, we have selected 3 in Philippine; and Vietnam, east of Hanoi, Hai-phong, the city of the port, this is the central part of Hai-phong, there several along the port (slide 11 and 12).

He explains the activities of the project for component 1 and component 2 (slide 13). For 10 Asean Countries, Component 1 consists of mapping of industrial agglomerated areas, assessment of vulnerability of infrastructure of distribution system, and assessment of natural disaster risks of countries. These would be summarized in the country report. For 3 countries, component 2 consists of assessment of natural disaster risk of pilot industrial agglomerated areas, formulation of ABCP for the pilot areas, and preparation of guidelines. So these are activities for 3 countries, for Component 2. So we have workshops, seminars, and this practitioner's seminar is one of the seminars. For this project we have 2 advisory committees, one from Japanese experts, and the other one is from the expert from Asean countries. And the third meeting we have this week in Hanoi.

He explains the stage of the project. We have started the project February this year for component 1 and 2, and we also carrying out Workshop for formulate Area BCP in 3 countries, and practitioner seminar in Manila, Hanoi, Jakarta. So we are now nearly at the end of the project.

For hazard we use for formulating Area BCP, for the Philippine, we have studied earthquake, tsunami, and flood. During the workshop, the stakeholder decided earthquake as the most important hazard for the area of Philippine. In Vietnam, we have studied many of natural hazards, but the stakeholders have decided flood and storm surge from Typhoon, the most threaten for Hai-phong area. For Indonesia, flood has been decided for the scenario to produce the Area Business Continuity Plan.

He explains the formulation of Area BCP. Data and information collection, hazard risk assessment for producing scenario for the plan, we have series of meeting, workshops to produce the plan, and preparation of guideline. The last workshop was completed in May 2014. The three workshops, study team provide basic information for discussion, information of disaster for scenario, information of industry, information of infrastructure and utilities. So, by using those information, the stakeholders, which is composed of local government, industrial park, private company, and operators of infrastructure and lifeline, they discuss the Area BCP and formulate the Area BCP.

During the discussion, we have divided the stakeholders into advisory group, which is composed of local government, national government, research institution, and the private sector, and companies, and industrial park, and infrastructure operators, and lifeline operators. They discuss those topics. First workshop, we discuss the item to understand the area, definition of fundamental terms, critical hazard to consider and critical problems. Workshop 2, determine Area BCM strategy: impacts on local community and industry, critical problems (*bottleneck*) for business continuity of area, measures for business continuity of area. Based on these two workshops, draft Area BCP return plan was prepared, and in the workshop 3, the stakeholder discusses the comment on the plan and administrative arrangement,

resources for sustainability, and next step. The draft of Area BCP was updated in the handout.

He explains the number of attendants of the workshop in Indonesia, Philippine, and Vietnam from first to third workshop. We have 32-40 participants every time we have discussion.

He explains the basic concept of Area BCM, started by the proposed Area BCM, continues approach. The first step is the understanding the area, in this case is pilot industrial agglomerated area. We need to know the natural hazard and this for industry, infrastructure, lifeline, capacity of organization. The next step would be determining Area BCM strategy, we can survive from natural hazard, from serious disaster. Based on those steps, we need to prepare the plan. In this project, we have done here (*in slide: understanding the area, determining area BCM strategy, developing area BCP (plan)*), next step would be exercising the plan. The last step would be maintaining and improving the plan. This is the complete cycle. This cycle should be repeated as many as possible. This is based on ISO for individual companies. This is Area BCP, this is written document describing procedure and improving information for strategy of Area BCM. Area BCP is a written document, Area BCM is risk management system. So, this is the different between Area BCM and Area BCP.

We divide the stakeholder into three categories, leader, members, and supporters. These three groups promote and implement Area BCM at the target area. In this project, for Indonesia, is in Bekasi and Karawang, and also for Philippine, in Southern part of Metro Manila, Cavita, Laguna, and Hai-phong in Vietnam. Organization will be leader and members. We also need supporters to support the leader and member in implementing and promoting the Area BCM. They provide information and data and services for Area BCM, and the supporters promote Area BCM at national level.

This is the leader for Indonesia, so the stakeholders agree that West Java Bappeda and also BPBD could be the leaders. And for Philippine, PEZA, OCD, DILG, NEDA (Region IV-A) would be the leader of Area BCM in that area. In Vietnam, Hai-Phong People Committee HPPC (DARD) would be the leader of Area BCM at that area. The roles of the leader are promote and manage Area BCM, formulate and maintain Area BCP, in charge of studies, they conduct disaster risk assessment, workshops/seminars and other necessary activities for implementing Area BCM systems, that would the responsibility of the leader.

This would be a member of Area BCM: local government, local offices of national government, operators of infrastructure, utility, and lifeline, industrial parks, and private enterprises. They have to participate in the Area BCM, and they also need to formulate and promote the Area BCP, these would be the role the role of the members in Area BCM (slide 27).

The supporters would be national government, governmental research institutions, universities, and others. They will provide information, knowledge and technical advices for Area BCM, and also needs to provide services such as study and disaster risk assessment for Area BCM. Especially for national government they need to provide and promote Area BCM at national level.

This is our key for implementing Area BCM (slide 29), i.e.:

- Identification of the stakeholders and establishment of a system (organizational arrangement)
- Active participation of stakeholders of the area
- A continuous approach and endeavour of the stakeholders, these key of a success of Area BCM.
- Private and public coordination are necessary

Since the Area BCM and Area BCP is a new concept, we conducted several activities to disseminate and promote the Area BCM and Area BCP. In the pilot areas, we have done several exercises, workshops, meetings, and final seminar that would be held at the end of August. For pilot countries at national level,

we have progress seminar, meetings and final seminar. For 10 Asean member states, there are area practitioners' seminars and panel meetings.

For today's program I introduce the project of Area BCM, Mr. Segawa will explain about understanding the area, Mr. Tsuji will explain determining ABCM Strategy and also developing the Area BCP, Ibu Linda from Bappeda will introduce workshop and the plan for Indonesia, we are planning to have Dr. Kridanto, but today he is not available. I will explain exercising and reviewing, and also maintaining and improving. This input for the discussion in the afternoon. So, in the discussion, we would like to know how to introduce the Area BCM into other Asean countries. So this is introduction of the project and also introduction of Area BCM and Area BCP.

Questions and Answers:

The moderator please the clarification and question from the participants

1. Souphasay Komany - Lao PDR

Thank you for the explanation to provide some models, but I still have something to be clarified, if the area is the best for the study and the dissemination, I like to know the detail that you added the area with the characteristic of industrial, manufacturing, and business area. But, how if the area you approach based on different sector, for example agricultural area in rural area, and they also have same impact when flood comes, so how can you connect and whether you consider it. As we know, many industrial areas are located in the centre of the area that is surrounded by farming areas, are farmers considered as most vulnerable people in the area. How can we integrate this plan or use the same approach.

Dr. Takahashi

This project is primary focused on the industry. However, industrial area is as you mentioned, surrounded by community, farmers, and so on. This approach is including the surrounding community as well, because most of workers of industry come from surrounding area of community, and also farmers maybe are the employee of the industry. Maybe they are interconnected each other. When the severe natural hazard occurs, then community and industry will suffer at the same time. This approach would stress the importance of cooperation between industry, community, and farmers. And it is also important aspect in this project. Recovery of the industry probably has to recover the surrounding community and farmers as well. I think this is a very good point to stress. Thank you very much.

2. Fidel T. Udarbe - Philippine:

My question is how flexible is this plan? For example, the disaster that is considered in this plan is earthquake. But just in case the earthquake does not happen, but suddenly we experience flood, can we use this plan to overcome such disaster. The second question is, does the plan also consider the role of the international community, since the international community will also come to help if there is disaster, is there a clear window for international community that systematically can assist the area that are devastated by disaster to overcome this problem.

Dr. Takashi

Thank you for the question. For the Philippine, we use earthquake for the scenario for the plan. But this plan can also stand for using the scenario of the flood. This is very flexible. If the people in the pilot area think that this plan is important, they can develop the plan for flood disaster by following the procedure developed by this project.

And also for international community, I think it is very important, especially for community and other aspect of natural disaster. And international company, they also have system of supporting their own company in disaster area. So this is assistance from the private side, and international organization, they start to thinking of industry to introduce their ABC assistance program after the disaster. I think this is

one of the first approaches of international organization; we would like to expand this approach to the other organization as well.

Fidel T. Udarbe - Philippine:

Further clarification, just in case we have not developed an Area BCP for flood, but the flood came. Is the plan for earthquake flexible, we can already implement some of measures in the plan, such as institutional arrangement and maybe it is able to add in the plan regarding the role of international organization, is there in the plan when define the area that the international organization should coming, like UNDP, UN, so it will not overlap in the assistance providing to the area.

Dr. Takashi

This plan, such as institutional organization, is common for every disaster. And also approach we introduce here is common for different type of hazard. So the area can develop the plan by itself. And also this plan provides basic information and also basic approach for the area. This can also be used by international organization for the approach.

3. *Comphoonut Chuangchote - Thailand*

Give the more explanation regarding the mainstreaming of Area BCM system.

Dr. Takashi

We explain briefly about this activity. Understanding the area is for example for Bekasi Karawang area, we need to know what natural disaster strike to those areas, first we need to know the situation, and we also need to know what type of industry are located, what is their product, supply chain of those industry. We need to know that information. And also industry requires electricity, water, telecommunication system, port, and airport. We need to know that information of infrastructure used by industry in the area. This also information we need to simulate disaster by technical way and from that basic information, we need to discuss what should do to survive form serious natural disaster. This is stage, and we need to develop the plan. This is the next stage, and exercising and reviewing. We need to do some exercise to validate those plans. Maintaining and improving because the condition of the area may change in the future, so when the area changes, then we need to change the plan. For example the flood, if the community thing flood is important, we need to study the survey to accommodate the flood. This is the brief activity of Area BCM system. Each item will be explained more detail in next term.

4. *Wilfred Lim - Singapore*

I would like to ask the question on the scope of the project. I would to ask, whether agriculture, beside the industry, is included in the scope of the project. Understanding that agriculture is part of regional economic and it can impact to the economy and to the food security in that country, and in Asean in general.

Dr. Takashi

This approach can also apply to agriculture industry as well. But at this time, we focus on industry producing goods.

Wilfred Lim - Singapore

Why I ask this question because even in Singapore, small sector and also farms related to food supply chain in Singapore. Even it is a tiny segment of economy, it is important for business continuity plan to manage, whether there is methodology to manage the agriculture, because it still affects the farming and agriculture.

5. *Souphaphone Saignaleuth - Lao PDR*

The area of the study must be focus on industry that produces goods; my recommendation is taking into other sector of economy that is related to flood management, for example agriculture. It needs to integrate with different sector.

Dr. Takashi

This approach can apply to one sector, area wide, and country wide. It is very flexible.

6. Aung Mint-Thau - Myanmar

I would like to inform present situation in our country, in Myanmar. In our country, in the central part of Myanmar, the rainfall is scarce year to year, so the agriculture progression in those areas is very scarce benchmark year to year, it is part of our country. The area that scarce of water can be part of national of our country. The climate change can be part of it and tracking food security in our country. It should consider the affected area of our country and other Asean country.

7. Elvis Cruz - Philippine

This is not a question, but to share the disaster management in our area. In the Filipina, for damage and food security, we have studied separately. For example in our culture in the business plan, so our participants are from economic zone and from other part of the area. Damage is under health sector, and also food security. In our topic here, to develop the ABCP for the business in the economic zone.

8. Andriyana Tresnawan - Indonesia

I want to ask about the project. JICA is choosing Karawang and Bekasi as pilot study is a question mark, because the only disaster in those industrial areas is traffic jam, and it is second disaster. The industrial area that has many experiences of natural disaster is in Surabaya, such as Lapindo. So, why JICA choose Karawang-Bekasi?

Dr. Takashi

Before starting the project, we did not have any idea of what to do for the Area BCM and BCP. The project has selected typical industrial area and also tries to cover many hazard type, typhoon, earthquake, and flood. This is new approach to invite many stakeholder including public and private sector. One of the main objectives this project is developing the system, which can be applied for different areas, different natural hazard, and different type of sectors. So now we are happy this is very flexible, can be applied for different situation. Maybe during this project, most of the work, cooperation between stakeholder and JICA study team and we would like to transfer the system to stakeholder in the area. It could be next step. In different country can apply this approach to the other area, and other natural disaster, and other sector approach. Anyway, this approach is hoping this approach will continue and sustain in pilot area and pilot countries, and extend to other countries.

Coffee break

10.52-11.16

Understanding the Area Presentation by Mr. Shukyo Segawa, Leader of Natural Disaster Risk Assessment

He explains the contents of presentation, i.e. understanding the stakeholders of the area, understanding the structure of the local industry, understanding the disaster risks that threaten the local industry, and establish the system of implementing area BCM.

This is the first topic. There are many candidates who are participating in Area BCM, for example local government, operators of infrastructure and lifeline, management company of industry or parks, national government, and government research of institute, universities, etc. First step is to restart the stakeholder

and identify the relation of stakeholders in Area BCM, and which organization is leader in the local area.

The second topic, to formulate the Area BCM system, to understand the characteristic of local industry is the essential, for example the main category of business, distribution of industrial parks, means of transportation, workers in the industry, regional GDP, and foreign investment.

He shows the example in Indonesia in Karawang Bekasi area (slide 5). There are industrial parks along Jakarta Cikampek toll road. Most of the cars are transported to Tanjung Priok through the toll road. He also explains regarding the economic activity. Many workers work in the industrial area.

He explains the structure of local industry. To understand the infrastructure that is important for the industry in the area. The traffic and lifeline facilities are essential. Traffic infrastructure is including roads, railways, ports, airports; and lifeline facilities are including electricity, gas, telecommunication, water supply, and sewage.

And necessary of information for facilities such as power station plant and contact information of company and also disaster management system is important because these information necessary to make disaster scenario.

He shows the example in industry in Karawang-Bekasi area (slide 7). He shows the important facilities, for example express way, port, and power plant. The table shows the summary of facilities and organization.

This is another issue to know industrial park itself and local government where industrial parks are located. Necessary information for industrial park, collecting information regarding major industry in the park, and lifeline facilities used in the park and traffic infrastructure used by the company in the park,, and experience and also BCP of tenant companies (individual BCP) if they have.

For local government, necessary information is conduct disaster management system, response in case of disaster, and information of risk assessment of local area. Such the topic is the understanding the hazard of this disaster risk in the area.

He shows the chart to understand the hazards and disaster risks (slide 9). There are four steps, 1) indentify the natural hazard that threaten the area, 2) assess the natural hazard, 3) assess the risk considering the distribution of infrastructure and lifeline facilities, the information of infrastructure and lifeline facilities is necessary in this step, and 4) create the disaster scenario to countermeasures of government in natural hazard. The final conclude of disaster scenario will be input to the business impact analysis. This part will be presented by Mr. Tsuji.

First step of this topic is to identify natural hazard that threaten the area. Collect the existing disaster records from international or national databases. In this step all natural hazards area necessary to be considered, for example earthquake, tsunami, volcanic eruption, flood, typhoon, storm surge, landslide, etc. All information should be collected. Based on these collected hazard records, compares the hazard and to identify which hazard is most important or more severe hazard for this area. Compare the probability that is necessary, it is desirable. For example, once of two thousand or three thousand years hazard is not suitable for the business. And also the identification indicators to compare disaster maybe number of casualties or amount of losses.

This is the example we have conducted for Karawang and Bekasi industrial area. We collected the data from international data base, for example EM-DAT, NOAA, Dartmouth, Flood observation, etc. and from national level we use disaster records from governmental research institute, such as BNPB, it is the

national level for disaster management agency, BMKG, this is the geophysical, climate and meteorological agency, geospatial information agency, centre for volcanology, geological disaster and mitigation (PVMBG), etc. We collect the information and this big issue is the probabilities of hazard and disaster risk by natural hazard, the indicator used is casualty and total losses. First, we consider three hazards, including earthquake for Karawang and Bekasi, but then in the next step flood hazard analysis is conducted for Karawang and Bekasi.

Second step hazard map should be collected from governmental research institution. Because in many countries, government research institution studied the hazard including the historical ones, and prepare the hazard map. If existing hazard map is available, it is better to use those maps. And the important is the probability of the hazard. If the existing hazard map is not available, hazard simulation based on existing data will be implemented. Equal to the hazard simulation, collecting the important data is necessary such as the topographic map, bathymetric map, etc, should be collected. Setting of the probability, for example 1 in 10, 20, 50, 100 years in the country. The disaster becomes more severe if the vulnerability is increasing. But the probability should be discussed considering hazard experience in the area among the stakeholders. In many cases this assessment maybe implemented by governmental research institute or university in each country.

In this project, JICA study team conducted hazard simulation. He shows the example of flood hazard simulation in Karawang Bekasi area in Indonesia (slide 13). It is maximum depth for one in 200 years. The probability is one in 200 years. This is low probability. This is selected to consider catastrophic at past.

He explains the risk assessment, the disaster risk is assessed the natural hazard and the distribution of facilities. The damage to the building, transportation facilities, and lifeline facilities are also important to recovery time for the services. Many based on the past experiences. The target area has information of past experiences is best information in this area. The disaster management system of the government, company or industrial park is necessary especially for the estimation time of recovery. The experience in the world is also useful data. He shows the slide of the example of disaster experience in the world (slide 15-20).

The risk by flood:

- Roads and railways will be closed before inundation finishes
- Ports will stop its operation during flooding and may extended if loading cranes are broken
- Lifeline facilities stop its operation during flooding. If the electric equipment are inundated, it will take long time to recover
- If the factories are inundated, the machines in the buildings may be damaged and it will take longer time to recover than the flooding duration
- If the houses of the workers are inundated, they may be absent

The example risks by storm surge, similar with flood but it will take time:

- Roads and railroads will be closed before inundation finishes
- Ports will stop its operation during inundation and may take long time if loading cranes are broken by sea water
- Lifeline facilities near the coast stop its operation during inundation and may take long time to recover
- If the factories are inundated by sea water, the machines in the buildings may be severely damaged and it will take longer time to recover

The example risks by earthquake will be wider range:

- Buildings, roads, railroads, ports, airports and lifeline facilities may suffer damage by the ground vibration
- If the ground is liquefied, roads, ports and pipelines under the ground suffer severe damage
- The relations of damage and ground vibration based on the past disaster are compiled as the damage function. The recovery functions are also available.

The example risks by tsunami:

- Buildings and facilities in the inundated area suffer severe damage not only by the seawater but by the drifted woods, debris and sometimes by fire due to the spilled oil
- Roads and railroads will suffer severe damage because tsunami dredge the roadbed
- Ports will stop its operation for long time because of the collapse of the seawall and pier

The example risks by volcanic eruption:

- Road traffic may become difficult by the ash fall by volcanic eruption. If rainy, the road become muddy and slippery
- Air traffic will be stopped because of the ash fall. The influenced airspace may vary depending on the wind direction

The example risks by landslide:

- Road and railroad will be stopped if they are running in the affected area by the land slide.

This is the matrix showing compare of the disaster risk. I prepare this matrix to 3 pilot studies for the project. The risk is for transportation, lifeline and others. The colour is most severe for red, and not severe for green. And the others are in between. This matrix is important to estimate the business continuity plan. This matrix should be divided based on local condition. This is final step of understanding hazard and risk, it is the scenario creation. He shows the example of disaster scenario for Karawang Bekasi. If the flood is inundated, it will be disturbed for two weeks.

This is the input to the business impact analysis.

He highlights the presentation regarding the establishing of the system of implementing area BCM. First is to divide the stakeholders into three types: leader, member, and supporter. And then to clarify the roles and responsibilities of the stakeholders, establish the framework to participate all the stakeholders in a body (ex. Virtual organization or playing field), participation of academics as coordinator.

11.16-11.31

Determining Area BCM Strategy and Developing Area BCP Presentation by Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team

The background of this plan in the 3 pilot areas and was formulated through workshop by stakeholders (local government, public and private sectors) with the cooperation of JICA study team and the stakeholders in the areas will be expected to continue the activities of Area BCM, and revise this plan.

This slide is showing the structure of the plan. In many disaster cases, transportation and lifeline become bottleneck. Chapter 3 describes the structure of local industry. In chapter 4, impact analysis and bottleneck for industry continuity are described. And in Chapter 5 and 6, the programs of business continuity plan are described. This issue will be revised through area BCM and will be described in Chapter 7.

The purpose of the plan is shown in chapter 1 of the plan and the purpose is to share the same

understanding of what should be achieved by Area BCP/BCN among stakeholders. Three main of the purpose, i.e.:

1. To sustain the development of the area
2. To assist the activity of stakeholders with their cooperation
3. To share the important information among stakeholders

The stakeholder in that is shown in section 3.1 are they who participate in the Area BCM of the area and their roles are to clarify the organizational structure to promote the Area BCM. The stakeholders are containing leader/owner, members, and supporters of Area BCM. Especially for owner or maintainer, it is one of most important issues in Area BCM, and decided with the consideration of leadership, budget and other factors.

This study showing the category of stakeholders based on international standard organization. The owner or maintainer is the same as leader, chair, captain, or champion of many organizations in the area.

--He skips slide 7-10 because Mr. Segawa has explained them--

I would to explain about the business resources and impact analysis. In Area BCP securing business resources event in disaster situation is very important. Especially it is very difficult for local industry to control external resources like lifeline, utilities, transportation, and infrastructure so the external resources sometimes become bottleneck of Area Business continuity. Bottleneck is clarified by impact analysis of each business resources. In this figure many company that has been impacted and however the recovery time is for two weeks by using adequate measures. These are described in chapter 4-6 in the draft plan. Impact to critical resources are described in section 4.1

And impact to critical resources in the industrial area because the facilities in industrial parks, the employees, infrastructures must be available for business continuity in the area. And bottleneck for business continuity are clarified by this impact analysis.

This figure the example of Bekasi and Karawang area in Indonesia (slide 14). This figure is the example in Philippine in captive and Laguna (slide 15).

And this is the impact to local society and industry that is described in section 4.1. Impacts to local society and industry by the assumed disaster are described to know the bad impacts to be improved. Some of serious impacts may be above individual response. It is expected that stakeholders understand the limitation of individual BCP/BCM and the necessity of Area BCP/BCM. So in this process they are sharing common destiny.

These are the viewpoints to consider impacts for local community and local impacts. These are the examples (slide 17).

This slide is showing the impact of great east Japan earthquake (slide 18), present the casualties, evacuees. This slide is also showing the impact of great Hanshin-Awaji earthquake in Japan (slide 19). We would like to estimate this kind of impact in Bekasi and Karawang area (slide 20). Bottleneck for business continuity is described in section 4.2. among the resources of the local industry, the critical resources that would be damaged greatly by the disaster and could not be taken alternatives are described to consider the measures at the next step. This is the example in Karawang and Bekasi area (slide 21).

There is policy in business continuity. Policy of business continuity is described to share the same understanding of what should be achieved with high priority even in a disaster situation. Have common understanding of policy of industry continuity is very important. This is the example of Bekasi and

Karawang area (slide 22).

Next is the role of the stakeholders. The roles of stakeholders are described to clarify what each stakeholder should do for the industry continuity of the area in a usual time or in a disaster time. This is also the example in Bekasi and Karawang area (slide 23).

It is the improvement of activities. Improvement activities are described to improve the capability of industry continuity step by step through Area BCM. Many programs are described in Area BCM. Category of improvement and progress management of improvement measures are described at Section 6.1 and 6.2. The measures at the draft plan were proposed in the discussion of the previous workshop, however they includes vagueness because of the restrictions of time and information gathered through this project. They will be discussed more concretely at the next step, and Area BCP will be updated.

This slide (slide 25) is showing category of improvement such as prevention, mitigation, preparedness, response, recovery. It is from idea, concept, implement and achieved.

Measures are listed for each stakeholder with the information of category and stage, and the progress will be updated, and new measures will be added. It is expected that measures are considered from the many viewpoints and then practical/effective ones are selected.

This slide (slide 27) is showing the examples of hard and soft measures for business continuity in Japan. And this slide (slide 28-29) is showing the example of measures for business continuity plan that is conducted by central and local government and also by private sector.

11.31-12.00

Question and Answer

9. Andriyana Tresnawan - Indonesia

Flood is different with other disaster, for example earthquake. Because it is predictable, the solution can also be systematic, planning and implementation. We can handle the flood. How far JICA will go? Is it only for planning in the area, or handle the implementation also? Because in Karawang and Bekasi, 70% the industry probably management. Will JICA supervise the implementation or only planning?

Dr. Takashi

This project focuses on planning for give basic information for Area BCP, and BCP for individual companies and organizations. And this information can be used different type of disaster management, this is plan depends on stakeholder in that area, local government, infrastructure operators, and lifeline operators, and individual company are responsible for disaster management system. So this is the answer you like to hear. Next stages will be different, depends on the organization.

10. Souphasay Komany – Lao PDR

My question is that it seems the operation is good for one event basis. But in term of the repeating disaster such as the idea of flooding and the business, the industry have known capacity all disaster that may come those including the community, it should be more resilience strategy that become applied for long term.

Dr. Takashi

There are many types of disasters, like earthquake and tsunami, the consequence is huge, but frequency is very rare. There is another type of disaster, like flood. Flood occurs every year, and the consequence is very small. Company and local government and other stakeholder need to choose what type of disaster should be considered. This is the ideas of this project. This Area BCM or BCP provides basic information and also provide a common platform to share the information and also provide future bottleneck for the

area. And this can be used for long term approach by each stakeholder and also by the group of stakeholders in that area.

11. Nguyen Huynh Quang - Vietnam

In our BCP pilot area in Vietnam, we have river and sea rise system, could you give some suggestion to integrate the system into BCP or BCM? (**Dr. Krishna S. Pribadi**: Do you mean by sea level rise?) yes, because there is river dyke system around company private area.

Dr. Takashi

We have selected flood and also storm surge by typhoon for Hai Phong. We also identify the critical area by simulation. This is basic information for all stakeholders involved in Hai Phong. For example DARD or MARD, they are responsible for management dike system and sea protection. So, this information should be used by DARD or MARD to improve the dike system. And for private company, they know the area inundation by simulation, they need to take their own measures based on existing of local government and national government, this is individual approach and also common approach for all stakeholders.

Dr. Krishna S. Pribadi

Dr. Segawa and Mr. Tsuji explain the basic approach for the determining of the strategy and also for the understanding of the risk. Because only example we are given of what they cover of the other type hazard to be discussed, especially when risk is assessed it is very important from the stakeholder part of what is the level of risk acceptable. Private sector of course business is very important, they have short and midterm need, it is important to consider even small frequency or small impact but high frequency to be considered, rather than very long return period of the hazard which will usually have high impact. But as for business, it is important to see also recovery event for small return creation by disaster.

12. Elvis Cruz - Philippine

My question is about the BC model, is there any European or American model can be used as a model as this one, another type of model?

Mr. Tsuji

Are you asking of BCP or Area BCP?

You are asking about BCP, there are many standard of BCP, Australian BCP. We don't have any information on area BCM. So many examples are in Japan. So as Dr. Takahashi mentioned, now we are trying. This project maybe the first one to be referred in the world.

13. Sheila Marie P. Pidlaon - Philippine

Are they use existing BCP, like for example the other company has their own individual BCP or BCM and then came up into Area BCP or BCM (share individual BCP or BCP from different company and then come up to the model called Area BCP or BCM)? or they use the new approach for Area BCP and BCM?

Dr. Krishna S. Pribadi

I think Dr. Segawa has explained that BCP, individual BCP is individual strategy of company to continue the business by using their own internal resources, while area BCP considers the external resources that may beyond the industry capacity

Dr. Takahashi

This Area BCP or BCM is the master plan for that area. So, the individual stakeholder in that area, they should also have their own BCP and BCM. They are interrelated. For example, company cannot recover the road system or dyke system, it should be government responsibility. So, in the area BCM they have

common understanding what the role of private sector and government. So this Area BCM has common information as a master plan. Individual BCP and BCM could be improved based on Area BCM. My next presentation will show the example.

Mr. Tsuji

I like to explain the different between BCP and Area BCP. BCP for individual company, they selected quantity and internal resources. Individual can control the internal resources, but it is difficult to control external resources. So that's why we need the Area BCP. External resources can be controlled under Area BCP. So, individual BCP and Area BCP should cooperate each other. If the company is very big, and they have more than one factory, they can move, but if they don't, they can use the Area BCP to control the external resources.

Lunch Break

13.09-13.35

Workshops and Draft Area BCP for Indonesia Presentation by Ms. Linda Al Amin, Head of Physical Division, Regional Development Planning Board (BAPPEDA), West Java Province

I will present the workshop and the formulation of Area BCP in Indonesia.

There are 3 workshops in Bandung, Karawang and Bekasi. December last year, March and May this year. Each workshop has objective. The objective of first workshop is hazard affecting the industrial agglomerated area, business environment during disaster situation, and limitations of BCP at individual level. The objective of second workshop is impact of disaster on industries in the industrial agglomerated area and weakness of the industrial agglomerated area for business continuity. The objective of third workshop is direction of approaches as the industrial agglomerated area and future action plan.

This is the participants of the workshop. And this is the photo of the workshop. All of us are involved in the workshop. For the first workshop, it is a new program. We never have the program disaster management program for industrial area. The participants are almost the same. More private sectors are involved in the workshop 3 (slide 4-9).

This is the topic for each workshop (slide 10). In Bekasi and Karawang, the flood is very usual, it occurs every year. There is inundation area in the industrial area because it is located at the downstream of the big river, Citarum River that passes the area. We have to make solution for the whole program of the river, not only for industrial area. Because the problem of the flood never be overcome.

This is the summary of workshop 1 (Slide 11). And this is the summary result of workshop 2 (slide 13). The industrial area in Kerawang and Bekasi use the main toll road that is inundated and it is not functioned when flooded. The problem is not only there, but we have to see the whole problem, such as in upstream area. So many problems in the upstream area, I think JICA should join with the solution of the upstream problem of Citarum River.

This is the summary result of 3rd workshop (slide 14-16). Who will be the owner? We have BPBD, BNPB, and BAPPEDA. So who should the main owner of the main program, resource and systems for sustainability? The next steps means that the program should not stop here, the program should continue.

This is the comments about the workshop. There is effective communication in capturing ideas and making agreement between stakeholders and study team. The problem is the participants are always different. Because government institution work based on task from the leader. For the homework, the respond is not so effective because we face the other job. We hope the homework will be finished at the

workshop. For the facilitators, they work effectively to provide clear explanation and guidance to the participants during the discussion process.

Next slide is about the draft of Area BCP. Some of the presentation has been presented before. West Java Province has 27 regencies; Bekasi and Karawang are two regencies that are located in West Java area. But these regencies are very important in West Java Province since there are the locations of industrial area. They are located near to Jakarta as capital of Indonesia. Jakarta is a metropolitan area, and Bekasi and Karawang should be metropolitan area too, but now they are hinterland of Jakarta. So, West Java Province government has planned to improve Bekasi and Karawang to be metropolitan area, also Depok, etc. If we can make Bekasi and Karawang metropolitan area, so industrial area in Bekasi and Karawang will be improved, including infrastructure will be better than now.

She explains the content of the plan as well as the purpose of the plan. She explains the understanding of industry in karawang and bekasi. But in karawang there is paddy field in the northern part. In the southern part of karawang is industrial area. We have planned to build seaport in Cilamaya and maybe also airport in Karawang. These infrastructures are very important for industrial area in Karawang and Bekasi. Now, all cargo of industrial park is using toll road. The toll road is very busy, so many cars there. So, Tanjung Priok as main port is not good, if all go to Tanjung Priok. We must build one port in karawang to support this industrial area.

This is the inundation area in 200 years. I think every place there is inundated, maybe due to the climate change, etc. Impact of local society is for two weeks, I think it is too long inundated for two weeks. Many people will be casualties and evacuees. Many facilities would be damaged. The security would be declining. The shutdown of production, loss of employment and bankruptcy of companies would be caused. The local economy would be led to decline.

This is the bottleneck for industrial continuity. First the toll road, it connects from the eastern part to the western part. And it connects West Java to Jakarta, especially to Tanjung Priok. Critical concern I sworsening of living condition of people including employees, reduction of communication function, and reduction of transport function of Tanjung Priok. The access to Tanjung Priok is bad.

This is the policy of industry continuity. In the assumed flood, the production activities in the industrial agglomerations could be continued or recovered at an early stage, and the scale of production and employment would be kept as large as before the disaster. I think it is new policy for us. Continue or recover at an early stage, not recover at last stage. To achieve it, the living condition of people and the service of infrastructure and lifeline would be recovered at an early stage with a big effort. For other residual risks, the risk shall be estimated accurately and some practical activities will be operated to reduce the risk. I think policy of industry continuity is very new idea for us.

The roles of stakeholders. Local government has to serious to run this program, the BCM, to promote their own BCM, to strengthen their own facilities, to provide useful information for Area BCM, to promote the flood control project and the land use planning for the flood resilient city, to promote measures of response and recover in disaster, to recover without delay to restart of the industrial park, to coordinate among BCM of companies in the park, and to keep the employment after the disaster.

There are improvement activities and divided into two categories, before and after. Before is prevention, mitigation, and preparedness, and after is response and recovery. The proposed measures are to develop new port and now airport. New airport has been planned. To promote the expansion of toll road, to carry out pumping measures of inundation and traffic control in disaster. And also build a dormitory for employees near industrial parks. Not only dormitory, but also houses.

The last I would like to inform, for the future there will be industrial area in the eastern part of west java, one package with the airport, in Majalengka city, beside Karwang and Bekasi. The new industrial area in Majalengka will be 5000 ha. This formulation could be developed there. If JICA want to join, maybe we can improve there. Not only one industrial area, we will make some industrial areas.

13.37-14.04

Exercising and Reviewing, and Maintaining and Improving by Dr. Masakazu Takahashi

So far we have discussed understanding the area by Mr. Segawa and Mr. Tsuji explain the area BCM strategy and the developing of Area BCP. Ms. Linda explains the workshop and the draft of Area BCP in West Java Province.

This project has conducted from understanding the area until the developing of area BCP (cycle in slide 3). Now I would like to explain the exercising and reviewing the plan and also the maintaining and improving the plan. We haven't done this but I would like to propose the approach to these steps.

This is a stakeholders of Area BCM, leader, members who promote the Area BCM in the pilot area, and also supporters to implement Area BCM. Supporters include national government agencies and also research institute and industry, and so on.

First I would like to explain exercising. We have Area BCM for 3 countries however we consider until those exercise and had to be approved. Exercising should involve validating plans, rehearsing key staff of stakeholders, integrating the plans with those of the stakeholders, promoting activities of the stakeholders and awareness raising.

So, the frequency of exercises will depend on the area, but should take into account and consider the rate of change to the stakeholders and risk profile, and outcomes of previous exercise. So we improve based on those inputs.

This is method of exercising. Testing: important components such as contact list and status of activities of members and the members should test activities of their own plan. And second method of exercising is a discussion based exercise: bring staff or stakeholder together and inform them of the plan and discussion of the plan to identify problems and solutions. Third method is a table-top exercise: scenario based exercise. We have done this exercise during workshop. The most efficient method of validating plans and rehearsing key staff of a stakeholder, and training and seminar. Live exercise, something like this, this is suitable for activities can be done with participant or individual stakeholders. And a large scale exercise covering an area can be done for limited aspect of the plans, such as evacuation.

This is the proposed activities for exercising. First one is studying conformity and integrity of with disaster management plan and/or BCP of members. This can be done through discussion within the organization of members and table top exercise by using a scenario of Area BCP. The result can be summarized in activity report. Next is study desk from natural disaster, such as typhoon occurs in the area and surrounding. Field survey, interview and questionnaire will be used for the study, and also the result of the survey to be discussed among the members. And promoting awareness rising. This discussion can be used promotion and awareness raising within the members. Training and seminar and preparing activity report. During the project we have two studies, response of stakeholders in target areas. One report on typhoon number 5 we have experience in Hai Phong. The workshop was cancelled. So we did some exercise to see the response of Hai Phong People Committee and also the stakeholder and also industrial park. We summarize those findings in the report.

The other is flood is in Jakarta, January and February of this year, the response of the stakeholder as before. The study was conducted by ITB, so we prepare the lesson learned report to improve the area BCP in the future. So exercise for area wide is very difficult to run but I think it is very effective way to raise awareness of the people who live in the big area. For example exercise from Chile, very far from ASEAN, but Chile is acceptable to earthquake and tsunami like Japan and Philippine. This year they have a very big earthquake magnitude 8.2. This is very close to Iquique. This has tsunami as high 2,1 m and the distance is 94 Km from the epicentre. Along the coast of Chile around 900,000 people evacuated after tsunami warning. In 2011, I have visited two places in Iquique and I have experienced the large evacuation drill of these two towns. This is Iquique before and after tsunami (Slide 11), this is a very peaceful town around the Pacific Island, 3 years ago, this immediately after the earthquake. This is a port, fishery. And this is after the earthquake of this year.

Chile has carried out state level evacuation drill. This is carried out by ONEMI (office of national emergency) like BNPB and OCD. We have started this drill since 2010. And five states, 2011 they carried out 15 states. This is the detail of exercise (Slide 12). This is the example, Los Rios volcano, Arica for earthquake and tsunami, Antofagasta for earthquake and tsunami. Around 500,000 people join the drill. This is the state and municipalities. This is the command centre (slide 13), this is the head of ONEMI. This is the communication system. The municipalities should prepare the evacuation route, this is along sea, this is uphill, and this is evacuation site. This is the response of schools and community. For this exercise, the government didn't announce a time of exercise. The signing was 3-4 times training/4 months, according to the rules of ONEMI. This is the cooperation between individual organization and state government.

The other example is private company we are focusing. This is a port (slide 15). This is the area around the port. Chile is producing of copper, this is a very important industry for Chile. Chile export 146 million ton. If the tsunami come and destroy the port, Chile economy will damage seriously. They plan is very simple. When the warning from the government, they run to the higher place. This is the predicted inundation area. The government say they need to evacuate and the place is about 40 m above sea level. This is the plan (slide 16). They have their own damage estimation for their facilities and they have their own BCP. For the minimum operation should be about within 15 days and the full recovery of the port facilities within 45 days. They have drill on August, 2011, all staff of 250 evacuated after the warning issued by the government. So this is the combination of individual approach and also areal approach.

Next is reviewing of the plan. Area BCM arrangement should be reviewed either through experts (or auditors) or self assessment. If there is no expert on Area BCM, so you need to do self assessment of Area BCM. The review should be documented, and the leader validates and approves the review. This is also the process, the review should verify that:

- All key stakeholders, and their plans, activities and internal resources have been identified
- All risks, and important external resources of the area such as industries, infrastructure, lifelines and others have been identified
- Bottlenecks and measures of the area are fit for the purpose, and appropriate to the level of the risk, and
- Area BCM maintenance and exercising programs have been effectively implemented

Maintaining and improving. After putting Area BCM system in place, Bekasi and Karawang and also Hai-Phong, they should be to keep up to date in order to follow the changing conditions, such as:

- If there are any changes of a composition of stakeholders
- If the target area of the plan is changed
- If a new natural disaster risks emerged
- Following lessons learned from exercising and reviewing

- Following lessons learned from natural disasters in the area and other locations, and
- Other necessary occasions

After we have the plan we need to keep up to date the plan.

For reporting, so activity report, lesson learned report, updated plan, plan for new risk, review report of Area BCM, and maintenance program. These would be necessary for sustaining Area BCM.

Next steps after this project, this schedule should be completed by the end of September. Then this project should be done here (slide 21). Continues Stakeholders is very crucial for sustaining of the Area BCM system. This is the suggestion, immediately after the project. We have Area BCP version 1. Review and update the first version by the stakeholders, we called it localized the plan in the region. And update to the 2nd version through workshop and commitment by stakeholders in this plan, start a process of approval of the 2nd version by the leader, and disseminate Area BCM, Area BCP within an organization of the stakeholders. These can be done in the next step.

Further step, this process has been done by local stakeholders and JICA Study Team, so it is more appropriate to do more by stakeholders, so this process very tactful to localize the Area BCM for the target area and also to the countries. Implement those steps by stakeholders, conduct technical services such as field survey and disaster risk assessment by organizations of the country, like ITB, and so on, disseminate Area BCM/Area BCP in the pilot area and the country, and promote BCM and DM activities of the individual stakeholders and other organizations including SMEs. And during this process we can improve Area BCM system as well. This is the idea for next step.

14.05-14.29

Question and Answers

14. Renti Montiska - Indonesia

Area BCP is one new plan for Indonesia natural disaster risk management. It includes program of several sectors, such as transportation, power plant, etc. Many program of the ministry or other local sector or company in the area. What I want to ask you is who the coordinating body for this plan is? Because there is already exist, for example Bekasi and Karawang, already has a regional plan (RTRW), who is the coordinating body and how is to integrate into the current plan?

Dr. Takashi

Area BCP involves many stakeholders including local government, central government, private sectors, and operators of infrastructure and lifeline, and communities. Coordinating body for that area is the leader for that area. For Indonesia, we consider West Java Bappeda as the coordinating body. But this is body for implementing actual Area BCM. We need supervising body for this activity, composed by national government agencies, including BNPB, ministry of industry, and many different type of ministry, that is supervising body. That supervising body is responsible to expand the approach to other country.

Ms. Linda Al Amin

To build main infrastructure, like port, airport, toll road, the authority is by central government, not by provincial or regency. Who is the coordinating body? Central government maybe is the coordinating body for the area, especially for infrastructure. For province and local government, all of the plan should be embedded as spatial planning, for example new airport in Karawang, it is not yet attached in spatial planning because it is new program. The new program is not planned from the first, but if we next year will review the spatial planning, the airport must be attached into the spatial planning. How to integrate this plan? The National, Provincial, and Regency spatial planning is very important thing. Provincial spatial planning refers to the national spatial planning, and regency spatial planning refers to national and

provincial spatial planning. It is much related. So the coordinating must be in central government and must responsible for this area.

Dr. Krishna S. Pribadi

As Dr. Takahashi and Ibu Linda mention, there should be lots of coordinating body, lack of coordination effort between provincial and national government. For example for the routine activities, Area BCM should be done by local and provincial government, but for the major, such as development new roads, new toll roads, or new port should be coordinated by national. Request from provincial government based on the needs of rebuild in the Area BCP. We still have to work on this to develop the mechanism.

Dr. Takashi

For the implementing for the area, the coordinating should be the leader of the area. The coordinating body for infrastructure and so on, should be coordinating by national government. For technical, it can be research institution, etc, it is different type of coordination.

15. Sheila Marie P. Pidlaon - Philippine

I would like to ask you regarding what is the status of national preparedness of the national government institution to overcome the disaster.

Yulianto - Indonesia

BNPB does the coordinating of how to prepare the disaster to all stakeholders, include the 3 components how to coordinate the disaster: 1. government, 2. Community, 3. Private sector, in how to prepare the plan and to develop the plan. It is new concept, and I hope this is helpful to us how to coordinate especially to the private sector, because every disaster occurs, they have more economic impact to private sector. This is very useful to us to have more preparedness about how the Area BCP to implement in our country.

Dr. Krishna S. Pribadi

Basically, Indonesia have national disaster management plan. We are now preparing 2015-2019 national disaster management plan, but as Pak Yulianto mentioned, this is new approach, maybe it is not yet considered, but hopefully it can be integrated within the new plan.

16. Fidel T. Udarbe - Philippine

I have one comment and later question. Comment on coordination, I think this should be a second level of coordinating body, based on certain level that depends on the intensity of the disaster. Like what happen in our country. PEZA should be coordinating body of local government, when themselves devastated, so after the Yolanda disaster, they cannot coordinate, they cannot move all machineries, the mechanism, and they themselves on household, very devastated and destroy. In the plan it will be good that if it is normally determine the level of disaster intensity, the coordinating body come from the outside, such as national government. But in our case, national government were not actually ready, such as we did not expect that Yolanda will be worst, at early start recovery, there is some short coordination. Learn from Yolanda, there is should be the mechanism already. When Yolanda occurs, there are many people from outside help. But there is should be clear coordinating mechanism.

My question is on the exercising. What I understood is drill, just like what have been cited in Chile, the drill is unannounced, what is the type of drill announced one or unannounced. Because when it is unannounced, they will think that there is tsunami and they will move, and tsunami did not come. Afterwards, if they realize it was just a drill, and when there is real situation, they will think it was just a drill and nobody will move. What are the proper approach and the information used in the drill?

Dr. Takahashi

Chile condition is very serious; earthquake occurs very close to shore line, they have only 20 to 30

minutes to run to higher ground. This exercise is for another earthquake in Chile. There is program coordination mechanism between agency and also ONEMI who issues the one, and also there was program between president and the local government, so not improve version of exercise. In Chile, there is another way for runaway to the higher place because those system and also protocol may not be work on big earthquake and tsunami and earthquake focus. They told shaking, they runaway to higher place, by this kind of exercise exercising and awareness raising and also immediate response by themselves. It is also necessary to check the coordination mechanism within the states and also with the central government. In Area BCM, there are also many stakeholders during tsunami and earthquake; there needs coordination mechanism also. This is the best of exercise. For Area BCM, I don't think the kind of exercise is possible. For Indonesia, company and local government, they need to test by themselves by direct exercise. this is the answer of your question.

17. Nguyen Thien Quan - Vietnam

Formulation BCM/BCP in three countries, Indonesia, Vietnam and Philippine, and after participate that focus in workshop in my country and report, I encourage community and private sector to participate in local area in Area BCP and expected the government support it. My question is, in my opinion whether there is similar activity from study team in other country, the option of implement.

Dr. Takahashi

That would be the most serious problem we are facing. This is one and half year project, and very short, we cannot complete mission within this short time. This is approach, one by one with many different approaches together. During the discussion after this, we would like to ask opinion all of you to overcome most important issues.

Dr. Krishna S. Pribadi

This is the opportunity for you to continue. And it is important on the issue of sustainability.

14.29-14.45

Inputs for Discussion by Dr. Masakazu Takahashi

This is input for discussion. Actually we would like to ask your input on how to introduce Area BCM to other Asean countries? For this I would to give you some topics to improve Area BCM, how to sustain the Area BCM in the pilot areas, how to promote Area BCM in the pilot countries, in Indonesia, Philippine, Vietnam, how to secure required information and services for Area BCM, and how to introduce to the new area, like other countries in Asean.

How to improve the Area BCM. Now we have the first version of Area BCP. First step is to review and update the first version and will produce the second version of Area BCP. During this exercise we can have more practical Area BCM system based on local situation. This is how to improve the Area BCM based on local condition.

How to sustain Area BCM in pilot area? These are the question:

- How to keep interest of the leader? Bappeda
- How to keep interest of the top management of the members? The president of the company, head of organization, and so on. This is very important for the sustainability of the Area BCM in pilot area.
- Others?

We have international companies, large enterprises, and SMEs. How to keep interest of private business in the Area BCM, especially for the SMEs?

This is the example for Chile (slide 6). There is BCM for large companies and target time for recovery. So facilities using the corporate to spread BCM and BCP into SMEs, one of the MESO.

How to promote Area BCM in the pilot countries from supporters?

- How to attract decision makers
- How to catch interest of national government
- How to secure information and services for Area BCM. We need services from university and research institution
- Others

We prepare risk assessment report for 3 countries and country report for 10 countries. How can we enhance this report is an issue because Area BCP contains information for the area, information of natural disaster, industry, infrastructure, lifeline, economy, and so on. Those reports are very important. We are now having three locations, but how to expand the report to the other area of other countries. It is very useful for investor to invest those countries.

How to introduce Area BCM into other Asean countries? This is the version of the countries in term of risk of population and risk of economy. This part is high risk in term of population and economy. Philippine, Indonesia, Vietnam, they are located in high risk countries. We have experience for attraction in high risk country. Thailand has high risk in economy and low risk in population. How to attract the organization for this approach? Other country, such as Myanmar, Cambodia, Brunei, we need to think about the strategy to approach for national and local government. Maybe this is one way to expand by using international system, introduce the Area BCM into Post HFA, ISO, international organization, donor, NGO. They can apply in other countries in other location. This is other way to improve the expand of Area BCM system.

Strategy of your country please discuss after my presentation.

Coffee break

15.00-15.56

Discussion

The participants are divided into five groups. The members of each group are shown below.

Group 1	Group 2	Group 3	Group 4	Group 5
1) Mr. Fahrulrazy Othman	1) Mr. Andriyana Tresnawan	1) Mr. Yulianto	1) Mr. Sukon Ing	1) Mr. Souphasay Komany
2) Ms. Renti Montiska	2) Ms. Mass Ayu Haslinda	2) Dr. Souphaphone Saignaleuth	2) Mr. Vilakone Sengsavang	2) Mr. Than Soe
3) Mr. Fidel T. Udarbe	3) Ms. Sheila Marie P. Pidloan	3) Mr. Elvis Cruz	3) Mr. Aung Myint Than	3) Mr. Wilfred Lim
4) Ms. Nguyen Thanh Hoa	4) Mr. Nguyen Thien Quan	4) Mr. Nguyen Huynh Quang	4) Ms. Chomphoonut Chuangchote	4) Ms. Linda Al-Amin
				5) Ms. Putri Handayani

15.59-16.25

Group Presentation

Group 1 is represented by Ms. Renty from Ministry of Industry, Indonesia

For question number 5, how to introduce the area BCM into other ASEAN countries, she answers that:

1. It should periodically dissemination of Area BCP/BCM, for example the delegation of officer country can deliver this idea to other agency when they back to their agency
2. We will have advocacy campaign of Area BCP/BCM
3. Recovery assistance, it is when the disaster occurs in certain country
4. Technical assistance of Area BCP/BCM for country that plan to formulate ABCP.

For question number 1, How to improve the Area BCM, she answers that:

The integration of Area BCP into National and Local plan. It will be more comprehensive, all the stakeholders will contribute to the Area BCM.

For question number 2, how to sustain the Area BCM in the pilot areas, she answers that:

To have regular campaign, continues information campaign, and also to private sector in executing stakeholder.

For question number 3, how to promote Area BCM in the pilot countries, she answers that:

1. We still think about the content how to socialize the important of ABCM to the stakeholder in the pilot project
2. Engage information of ABCM to Local Planning and Development Agency (Bappeda)

For question number 4, how to secure the required information and services for Area BCM, she answers that:

We have to get information provider, like BNPB to be involved in the formulation or task force of Area BCM

Group 2 is represented by Ms. Mass Ayu from NSC, Prime Minister's Department, Malaysia

For question number 1, How to improve the Area BCM, she answers that:

We can make a simple exercise, review the concept, improve it, or in the other hand improve by looking at ABCM model of each country.

For question number 2, how to sustain the Area BCM in the pilot areas, she answers that:

1. To require company or entrepreneur to develop simple plan at the starting level and in the long term, we encourage them to have more sophisticated plans
2. For the large companies, maybe they can create master plan for Area BCM implementation and divide it into phases

For question number 3, how to promote Area BCM in the pilot countries, she answers that:

1. To provide the simple plan and start with the small scale business
2. Continue to introduce the ideas of the project throughout organizing seminars for the business continuity and to increase the engagement of private sectors
3. To create the public awareness

For question number 4, how to secure the required information and services for Area BCM, she answers that:

1. Make contract or MoU among all the stakeholders and to convince that the information are secured
2. Mainly about the confidentiality of the data, the data will not have to be exposed to other parties
3. To have individual contract with the companies or for all the stakeholders

For question number 5, how to introduce the area BCM into other ASEAN countries, she answers that:

1. Start with the introduction of the project through seminar, discussion, workshop, just like what JICA do right now
2. Make sure that the government really understand what is ABCP/ABCM, then we go down from national level to the state and local government

Group 3 is represented by Mr. Elvis Cruz from OCD, Philippine

For question number 1, How to improve the Area BCM, he answers that:

1. Understand the area by doing feasibility studies by engaging academic or private sectors
2. Come up with the strategies to develop Area BCM
3. Implement or review the Area BCM

For question number 2, how to sustain the Area BCM in the pilot areas, he answers that:

1. Creating awareness campaign in the Area BCM, concept in the whole pilot countries at all level
2. Making policy to involve the responsibilities of leaders in Area BCM as well as members
3. Making clearly plan including functions, responsibilities in the Area BCM
4. Funding support for the implementation of Area BCM

For question number 3, how to promote Area BCM in the pilot countries, he answers that:

1. Give the actual data loss or economic impact and compare with the Area BCM implementation
2. Ministry level meeting discussion with enterprise to promote Area BCM
3. Develop information, education campaign materials

For question number 4, how to secure the required information and services for Area BCM, he answers that:

1. Engage the national and local agencies in data collection and survey
2. Give them, the private sector, the templates, format on what data we needs

For question number 5, how to introduce the area BCM into other ASEAN countries, he answers that:

1. Share the benefits of having Area BCM
2. Promote Area BCM as part of the corporate social responsibilities
3. This is the Area BCM is the government approach in addressing business continuity plan
4. Development of a website publications/newsletter for Area BCM
5. Share good practices locally and globally (*note: this is not spoken by the participants, but it was written in their paper*)

Group 4 is represented by Mr. Souphaphone from Ministry of Planning and Investment, Lao PDR

For question number 1, How to improve the Area BCM, he answers that:

Understanding the area is needed before we can identify any problem and to understand the problem well, then we can think about the specific problem or issues in each country in Asean. Because each country is facing different problem, for example in the northern region we don't have tsunami, and in the southern region, especially in Indonesia, there is volcano eruption and earthquake. We also have to consider different geographical issues. So, we have to identify all problem issues and specific.

We can understand, we can identify, and we can determinate the strategy, but what we are trying to suggest the improvement is in one area that is in the developing of BCM plan. We can learn from one case, such as Fukushima issues in Japan. We can see the problem happening and the measures or the method used to solve the problems. Indonesia and other Asean Countries can learn if it happens in their country, what resolution of their problems. Like what technology or other resources can be used, so they can think about internal planning, we can also have exercising. As you know, Asean economic situation is not the same, in some area face infrastructure and also of human resources, etc., whether the government has enough budget to do the maintaining and improving.

Another hard case is against emergency, when the problem happening, if it is not expecting, what would be resolution, it is some kind of plan in the right case, like Japan facing the Fukushima problems.

Resume:

Implementation the Area BCM by considering the financing, human resource, technological/knowledge/hardware equipment, extreme case-don't have mechanism to deal with.

For question number 2, how to sustain the Area BCM in the pilot areas, he answers that:

It is important to recognize the role of government and as we know that the 10 Asean countries have different government administration system, democratic system and socialist. In some cases, we have to consider the government to make a regulation regarding the plan. We have to convenience the public and also the government. We have to promote this issue to the private sector, because this information is about business.

Resume:

- Central government have to recognize the plan
- Reasonable financial budget provided
- Private sector should invest in the project
- Raise awareness to the public, international awareness, Asean Country, donors.

For question number 3, how to promote Area BCM in the pilot countries, he answers that:

I think public education and public awareness is important, such as in Japan, in every school, in very low level, they start to have a drill to face disaster. In term of industrial thing, the awareness should not only at the educational level, but for the private business level. We have to be aware that your business is at this at risk level. Also the government has to go with this. I think in some countries, they have the standard on how to if you want to establish the industry the industrial zone, what we cannot do or what we must do, you have to obey this system, otherwise you cannot establish in this area. But we can help private sector to give them incentive, such as infrastructure in industrial areas.

Resume:

- Public education/public awareness
- Repeating the exercise/drills
- Incentive and regulation/legislation for private sector to participate/invest in this system

For question number 4, how to secure the required information and services for Area BCM, he answers that:

It has to have a good database system. Maybe you can have national database, and has to be link with international, national level, to have effective information. If the problem is coming, you know the situation you will face.

Resume:

- Develop update database, it connect to national data/information system
- Monitoring system
- International cooperation (Japan, Pacific Centre), scientific centre for earthquake, tsunami, or other natural disaster
- Technological development for the region

For question number 5, how to introduce the area BCM into other ASEAN countries, he answers that:

Again we have to look on case by case. Yes, you can tell your country at high risk, what problem occurs in your country. You can campaign to government and public, this is the disaster situation, hundred people may died. Then you introduce the system. But we have to see the law and budget of the government. For example in Lao, we have limited budget to build infrastructure and to maintain it. And there are hundred people to food and to school.

So, I think is the best solution for this is JICA should spend budget to implement the project after this.

Okay, if you see the Asean map, and see the risk level of your country. Then JICA go to the higher risk first, to Philippine, to Indonesia. And JICA should provide budget to other country, for example in Myanmar that threaten by tsunami, maybe it will be next destination for project. Then Thailand, Lao and Cambodia, even though the risk is low, but they still face such problems.

Resume:

- Introduce the success case to the national/local focal point disaster management, establish a new unit
- Convince the public and government
- HFA as a guideline

Group 5 is represented by Mr. Vilakone Sengsavang from SNCSEZ, Lao PDR

For question number 1, the dissemination area should be broader not only for 3 pilot project areas. Some of the countries are affected; some countries are risky and have losses.

For question number 2, disseminate to local government and make the regulation.

For question number 3, share the best practice and challenge base on the application of Area BCP and Area BCM, also create coordination from among 3 pilot project countries

For question number 4, different type of disasters, different degree of impacts. The discussion of forecasting for same disaster type and different disaster type.

For question number 5, Discussion the Best practices. On the other hand you have in term of participant, have one pilot consider what should be. As for stakeholder I can see different area different association among those. What relation, but I can put one size area. You can link from different stakeholders from different area, to learn how to improve. Study that work should apply, if you can, be prepare

Dr. Krishna S. Pribadi

Catch up:

- Establish regional network of practitioners, they will be informed and moving together for this technology
- We have to look at this at long term horizon to develop and to forward this to different countries and to share to different countries, because it has different situation, development level, different hazard level faced by each country.
- To introduce the Area BCM, we have to move to higher level, maybe in Asean meeting should be the Area BCM should be introduced, it can be conspired to government in each country, there is agreement between high level or senior level executive from Asean member state, it should be easier to be promoted.

Dr. Takahashi

During this project we have talked directly to 1000 people, so they know the Area BCM and BCP. From my opinion little approach from the top to the bottom, from the decision maker to the local government and private sector, it is very important. Approach to different sector, different professional also very important. And also public and private sector also needs to approach. There is some people suggest Area BCM should be localized, it is very important aspect. It is a long term approach, and this project is first step of the long term approach. And I am hoping that you are people to spread the Area BCM, Area BCP to the other country member, step by step with cooperation of Asean member countries. And also from many stakeholders in the pilot countries, I hope this approach will spread in Asean countries and in the world. Thank you for attending this seminar.

16.34-16.44

Closing remark by Mr. Yulianto from BNPB

He is representing Mr. Dody Ruswandi (Deputy of Prevention and Preparedness, BNPB). He read the closing remark from Mr. Doddy as attached below.

**CLOSING OF THE 3rd SEMINAR FOR PRACTITIONER ON
NATURAL DISASTER RISK ASSESSMENT AND AREA BUSINESS CONTINUITY PLAN (BCP)
FORMULATION FOR INDUSTRIAL AGGLOMERATED AREA IN THE ASEAN REGION**

**Deputy of Prevention and Preparedness of BNPB
Ir. Dody Ruswandi, MSCE**

Mr/Mrs. Chairman, Speakers, Ladies and Gentlemen,

Good afternoon and *Assalamu'alaikum wr.wb.*

First of all, I am glad to witness an important seminar for practitioners on natural disaster risk assessment and area business continuity plan (BCP) formulation for Industrial Agglomerated Areas. This is a good initiative and if we implement it, we can build disaster preparedness and resilience for business organizations in industrial agglomerated areas benefiting to many people.

Ladies and Gentlemen,

We realize that ASEAN is disaster prone region. We already experienced many disasters in the past, and we may face *more disaster in future, especially due to* climate change, the intensity of disaster in the last 10 years increased. Disaster can occur in many places, and the impact cannot be predicted exactly and it may be widely spread to other areas. For instance, mount Kelud eruption in Kediri East Java on March 2014 has caused disruption up to Central and West Java. Many airports were closed because of the ash. Jakarta flood in 2007 and 2013 is another example of disaster that affected to many areas, not only on set location.

Learning from our experience in dealing with disaster, risk assessment is important to better understanding the risk that we may face due to a particular hazard. During the last 3 years, we have conducted some risk assessment in all provinces, both for developing disaster management plan and contingency plan. However, these could not just stop here. We need to use the assessment result to better develop our prevention and preparedness.

Honorable participants,

Private sector may also be affected by disaster. Some major disasters have confirmed this case, for example flood in Thailand, flood in Jakarta, typhoon in Philippines, earthquake in Yogyakarta etc. Therefore, disaster preparedness needs also to be part of private sector business activities. *Relating to the impact of disaster* for private sector, some studies show that companies with BCP can recover quicker when they are hit by disaster, compared to those without BCP. This should remind us to take serious attention on developing *BCP for companies. Although, as a matter* of fact, many companies, especially middle and small ones, have not had BCP yet, mainly for dealing with disaster risk. This will be more important for industrial agglomerated area, as usually they are located in close places, and many of them

are connected business. Hence, disruption of some companies will trigger impact to many other companies.

Ladies and Gentlemen,

As I remember, this is the third seminar held in Jakarta that is part of serial seminars previously conducted in Manila and Hanoi. And just to remind us, that this project aims to support local efforts in the ASEAN region to minimize economic damages and/or losses of areas where industries are concentrated (industrial agglomerated area), when large scale natural disasters strike. The pilot project has been formulated in the three locations (Indonesia, Philipina and Vietnam). The data on natural disaster risks has been collected and analyzed. Therefore, now we are looking forward the implementation and result of model on developing preparedness in industrial agglomerated area. Once we have one model and proven to be effective, we can replicate in many areas in ASEAN. We from BNPB are pleased to discuss further on the result.

Ladies and Gentlemen,

On this great opportunity, for the success of this project, I would like to give great appreciation to:

1. Executive director of Asean Coordinating Center for Humanitarian Assistance on Disaster Management (AHA Center), that has facilitated the three seminars on BCP in the ASEAN Region
2. Katsuji Miyata, the Director of Disaster Management Division 1 Global Environment Department Japan International Cooperation Agency (JICA) that has sponsored the seminars
3. All participants from ASEAN Countries that have followed the 3rd seminar in Jakarta Indonesia

We hope all of the concept, methodology, and experience of BCP can be implemented in every country in order to minimize the impact of disaster on business process, suppliers from small and medium scale enterprises (SME) and our staffs. Lastly, we are looking forward to have guideline for developing BCP in industrial agglomerated area, written based on this pilot experience, to be promoted in every ASEAN countries for building business resilience.

Representing the Indonesia government, hereby I declare the seminar is formally closed.

Thank you, and see you later.
Wassalamu'alaikum Wr. Wb.

Ir. Dody Ruswandi, MSCE

A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
 Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

The 4th Seminar for Practitioners

The Westin Grande Sukhumvit Bangkok, Bangkok, Thailand, January 28, 2015

Attendees List

No	Country	Name	Organization	Position
ASEAN Delegates				
1	Brunei	Mr. Surfī Abd Hamid	Ministry of Development	Superintendent
2	Cambodia	Mr. Mey Virakk	National Committee for Disaster Management, Council of Ministers	Director of ECC
3	Cambodia	Mr. Theng Pagnathun	General Directorate of Planning, Ministry of Planning	Director General
4	Indonesia	Mr. Yulianto Sukatmo Wiyono	National Agency for Disaster Management (BNPB)	Head Of Business Institution's Role Division
5	Indonesia	Mr. Muhammad Irvan Fatahillah	Directorate of Industrial Development Facilitation Region II, Ministry of Industry	Assistant Director
6	Indonesia	Mr. Raffli Noor	National Development Planning Agency (BAPPENAS)	Staff at Spatial Planning and Land Affairs
7	Lao PDR	Mr. Khamphet Soneniti	National Disaster Management Office, Department of Social Welfare, Ministry of Labour and Social Welfare	Officer
8	Lao PDR	Mr. Phanomkone Dararassamy	Lao National Committee for Special Economic Zone and Specific Economic Zone (NCSEZ), Secretariat Office, Government's Office	Head of the division in Savan-Seno SEZ
9	Lao PDR	Mr. Korakan Luangalath	Investment Promotion Department, Ministry of Planning and Investment	One Stop Service Senior Officer
10	Malaysia	Mr. Wan Mohd Fadli Bin Ab Rahman	Disaster Management Division, National Security Council (NSC), Prime Minister's Department	Assistant Secretary
11	Malaysia	Mr. Ezral Uzaimi	Ministry of International Trade and Industry (MITI)	Economic Counsellor
12	Myanmar	Mr. Myint Aung	Relief and Resettlement Department	Assistant Director,
13	Myanmar	Ms. Yi Yi Myint	Ministry of National Planning and Economic Development	Assistant Director
14	Philippines	Mr. Vicente F. Tomazar	Office of Civil Defence Region IV-A, National Disaster Risk Reduction and Management Council	Director
15	Philippines	Mr. Sansaluna Abiden Pinagayao	Philippine Economic Zone Authority (PEZA)	Economic Zone Administrator
16	Philippines	Ms. Daantos Agnes Arabit	National Economic and Development Authority (NEDA)	OIC-Division Chief / Supervising Economic Development Specialist
17	Singapore	Mr. Lee Peng Yang	Singapore Civil Defence Force (SCDF)	Senior Staff Officer
18	Thailand	Mr. Montree Boonpanit	National Economic and Social Development Board (NESDB)	Senior Advisor
19	Thailand	Mr. Chamnong Paungpook	National Economic and Social Development Board (NESDB)	Policy and Plan Analyst
20	Thailand	Mr. Chainarong Vasanasomsithi	Department of Disaster Prevention and Mitigation (DDPM)	Director of Research and International Cooperation Bureau
21	Thailand	Mr. Buntoon Wongseelashote	Thai Chamber of Commerce	Chairman of Business Continuity Committee
22	Viet Nam	Mr. Le Ngoc Diep	Department of Dyke Management Flood and Storm Control, Ministry of Agriculture and Rural Development	Officer
23	Viet Nam	Mr. Đinh Thanh Sơn	International Cooperation Department, Ministry of Industry and Trade	Officer
24	Viet Nam	Mr. Do Trung Kien	Ministry of Planning and Investment	Official of Agency for Business registration

No	Country	Name	Organization	Position
Thailand Delegates				
25	Thailand	Ms. Ladawan Kumpa	National Economic and Social Development Board (NESDB)	Deputy Director-General
26	Thailand	Ms. Sawanrat Jitkasemsumran	National Economic and Social Development Board (NESDB)	Policy and Plan Analyst
27	Thailand	Ms. Aim-on Pruksuriya	National Economic and Social Development Board (NESDB)	Policy and Plan Analyst
28	Thailand	Ms. Jareevichaya Hatachate	National Economic and Social Development Board (NESDB)	Officer
29	Thailand	Mr. Pornpoth Penpas	Department of Disaster Prevention and Mitigation (DDPM)	Deputy Director-General
30	Thailand	Ms. Chatchadaporn Boonpreerana	Department of Disaster Prevention and Mitigation (DDPM)	Chief of Natural Disaster Policy Section
31	Thailand	Mr. Pisuth Wannachatrasi	Department of Disaster Prevention and Mitigation (DDPM)	Plan and Policy Analyst
32	Thailand	Mr. Kosit Srikritsararat	Department of Disaster Prevention and Mitigation (DDPM)	Plan and Policy Analyst
33	Thailand	Ms. Sippaka Bimol	Department of Disaster Prevention and Mitigation (DDPM)	Plan and Policy Analyst
34	Thailand	Mr. Phoemsak Vichianchaiya	Department of Disaster Prevention and Mitigation (DDPM)	Officer
35	Thailand	Ms. Wiphavee Sriprapai	Department of Disaster Prevention and Mitigation (DDPM)	Social Worker
36	Thailand	Mrs. Phanphen Wongwattanan	Department of Disaster Prevention and Mitigation (DDPM)	Officer
37	Thailand	Ms. Supreeya Predaromroj	Department of Disaster Prevention and Mitigation (DDPM)	Officer
38	Thailand	Ms. Rattana Trirattanatham	Department of Disaster Prevention and Mitigation (DDPM)	Officer
39	Thailand	Ms. Vaewruethai Susilvorn	Airports of Thailand Public Company Limited (AOT)	Deputy Vice President Risk Management
40	Thailand	Ms. Sunita Sukhum	Bank of Thailand (BOT)	Division Executive
41	Thailand	Ms. Piengta Sangsingkeo	Bank of Thailand (BOT)	Team Executive
42	Thailand	Mr. Ariya Arunmas	Communications Authority of Thailand (CAT)	Officer
43	Thailand	Mrs. Wichitra Thongkwow	Communications Authority of Thailand (CAT)	Officer
44	Thailand	Ms. Pimchanok Supannafai	Communications Authority of Thailand (CAT)	Officer
45	Thailand	Mr. Thitipat Wongchanta	Communications Authority of Thailand (CAT)	Officer
46	Thailand	Mr. Chanakamol Petmai	Communications Authority of Thailand (CAT)	Officer
47	Thailand	Mr. Pawish Taruyanon	Department of Highways (DOH)	Policy and Planning Analyst
48	Thailand	Ms. Anongrat Kamsiri	Department of Rural Roads	General Administration Officer
49	Thailand	Ms. Kobkul Rurgsijaroj	Department of Water Resources (DWR)	Policy and Planning Analyst
50	Thailand	Mr. Panu Teerathatchakun	Department of Water Resources (DWR)	Civil Works Technician
51	Thailand	Mr. Wanlop Mekpruksawong	Electricity Generating Authority of Thailand (EGAT)	Engineer Level 11
52	Thailand	Mr. Chonlatarn Paennark	Electricity Generating Authority of Thailand (EGAT)	Officer
53	Thailand	Ms. Sawitree Pannoy	Federation of Thai Industries (FTI)	Technical Officer
54	Thailand	Ms. Sirirat Ounsiri	Federation of Thai Industries (FTI)	Technical Officer
55	Thailand	Ms. Juthamas Chuenpradith	Industrial Estate Authority of Thailand (IEAT)	Analyst
56	Thailand	Ms. Prangneth Fuangfung	Industrial Estate Authority of Thailand (IEAT)	Analyst
57	Thailand	Mr. Torsak Netrattana	Metropolitan Electricity Authority (MEA)	Director of Power System Management and Operation

No	Country	Name	Organization	Position
58	Thailand	Mr. Artid Tongdejsri	Metropolitan Electricity Authority (MEA)	Plan and Policy Analyst
59	Thailand	Mr. Sorakrit Nunduangkaew	Metropolitan Waterworks Authority (MWA)	Engineer Level 7
60	Thailand	Mr. Chalin Kesthongs	Provincial Electricity Authority (PEA)	Manager of Risk Management Plan Division
61	Thailand	Mr. Piyapund Promsawadi	Provincial Electricity Authority (PEA)	Deputy Director of Risk Management
62	Thailand	Mr. Suwapat Thaninthanikote	Provincial Electricity Authority (PEA)	Engineer
63	Thailand	Mr. Phaitoon Jankaew	Provincial Electricity Authority (PEA)	Officer
64	Thailand	Mr. Preecha Sukklam	Royal Irrigation Department (RID)	Senior Expert Engineering
65	Thailand	Mr. Kanchadin Spapratoom	Royal Irrigation Department (RID)	Chief of Loan Project Branch
66	Thailand	Ms. Hattaya Premchad	TOT Public Company Limited (TOT)	General Administrator
JICA and JICA Study Team				
67	Japan	Dr. Hitoshi Baba	Japan International Cooperation Agency (JICA) HQ	Senior Advisor
68	Japan	Mr. Yoichi Inoue	Japan International Cooperation Agency (JICA) HQ	Deputy Director
69	Thailand	Mr. Yojiro Miyashita	JICA Thailand	Representative
70	Thailand	Mr. Katsuya Miyoshi	JICA Thailand	Project Formulation Advisor
71	Thailand	Mr. Kobchai Songsrisanga	JICA Thailand	Senior Program Officer
72	Thailand	Mr. Masanori Takenaka	JICA Thailand	Senior Program Officer
73	Japan	Mr. Yoshiyuki Tsuji	JICA Study Team	Deputy Team Leader
74	Japan	Mr. Shukyo Segawa	JICA Study Team	Disaster Risk Assessment Leader
75	Japan	Mr. Shiro Matsunami	JICA Study Team	General Coordinator
76	Japan	Ms. Akira Watanabe	JICA Study Team	General Coordinator
77	Thailand	Mr. Paisarn Likhitpreechakul	JICA Study Team	Interpreter
78	Thailand	Ms. Parntip Prommart	JICA Study Team	Interpreter
79	Thailand	Ms. Rosemalin Sirikanjanapong	JICA Study Team	Rapporteur
80	Thailand	Ms. Nichapat Rakpongthai	JICA Study Team	Project Staff

4th Seminar for Practitioners, Bangkok

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

The Westin Grande Sukhumvit, Bangkok, Thailand
January 28, 2015

*A Joint Program of Japan International Cooperation Agency (JICA) and ASEAN
Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

Agenda

January 27, 2015, Tuesday Arrival of the participants at Bangkok

January 28, 2015, Wednesday

Opening Session	
8:30-9:00	Registration
9:00-9:45	<p>Opening Address</p> <p>Mr. Pornpoth Penpas Deputy Director-General Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior</p> <p>Mr. Janggam Adhityawarma Senior Disaster Monitoring and Analysis Officer AHA Centre</p> <p>Introduction of Participants Group Photo Session</p>
Session 1 Introduction, Project and Area BCM	
09:45-10:35	<p>Project, Area BCM, and Guide for Today’s Discussion</p> <p>Mr. Yoshiyuki Tsuji Deputy Team Leader of the Study Team</p>

	Q&A / Discussion
10:35-10:50	Coffee Break
Session 2 Plan and Toolkits of Area BCM	
10:50-12:00	<p>Formation of the Plan, Area BCP</p> <p>Mr. Yoshiyuki Tsuji</p> <p>Tools for Area BCM</p> <p>Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment</p> <p>Q&A / Discussion</p>
12:00-13:30	Lunch Break
Session 3 Approaches of Area BCM and BCM in Thailand	
13:30-14:30	<p>Approach for National BCM in Thailand Ms. Ladawan Kumpa, Deputy Secretary-General National Economic and Social Development Board (NESDB)</p> <p>Current Approaches for BCM in Thailand Mr. Chainarong Vasanomsithi Director of Research and International Cooperation Bureau Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior</p> <p>Lesson Learned from the 2011 Thailand Flood Mr. Buntoon Wongseelashote Chairman of Business Continuity Committee Thai Chamber of Commerce</p> <p>Q&A and Discussion</p>
14:30-14:50	<p>Grouping for Discussion</p> <p>Coffee Break</p>

Session 4 Discussion	
14:50-16:10	<p>Inputs for Discussion</p> <p>Group Discussion</p> <p>Topic 1 Current situation of approaches in your countries related to businesses in coping with disaster</p> <p>Topic 2 Comments and areas to improve on Area BCM</p> <p>Topic 3 Comments and areas to improve Tools for Area BCM</p> <p>Topic 4 Approaches to introduce and promote Area BCM in your countries and issues to consider</p> <p>Coffee will be served throughout group discussion session.</p>
16:10-16:40	Presentation by Sub-Groups and Discussion
Closing Session	
16:40-17:00	<p>Closing of the Seminar of Practitioners</p> <p>Dr. Hitoshi Baba Senior Advisor Japan International Cooperation Agency (JICA) HQ</p>
17:00	Adjournment

MC : Ms. Akira Watanabe, Moderator of Session 4 : Mr. Shukyo Segawa

January 29, 2015, Thursday Departure of the participants from Bangkok

4th Seminar for Practitioners, Bangkok

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

The Westin Grande Sukhumvit Bangkok, Thailand

January 28, 2015

A Joint Program of Japan International Cooperation Agency (JICA) and ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Center)

Welcome Address by Mr. Pornpoth Penpas, Deputy Director-General of Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior

On behalf of DDPM, Mr. Pornpoth welcomed everyone to the seminar, which was the collaboration of NESDB, DDPM, JICA and AHA center to promote BCP concept, execution and benefits among 10 ASEAN countries. Southeast Asia is disaster-prone area, which affects the global industry. Philippines, Vietnam and Indonesia have learned about BCM from JICA and AHA Center. Under Hyogo Framework for Action, ABCP is the new and crucial knowledge that helps formulate the disaster management and mitigation plan for the public and private sector in Thailand. However, only large corporations, not SMESs, have BCP. He hoped this seminar would motivate them to pay attention to BCP. Furthermore, the cooperation in this seminar would reflect a helpful guidance for the rest of ASEAN countries, besides three pilot countries. He thanked JICA for the support and participants for the time and comments. Lastly, he wished this seminar a great success.

Opening Address by Mr. Janggam Adhityawarma, Senior Disaster Monitoring and Analysis Officer of AHA Center

Mr. Adhityawarma thanked JICA for the support and conducting BCM project, Thailand for hosting the seminar, and all participants for joining. AHA Center has been closely collaborating with JICA on Area BCP and Area BCM, the important topic that could save lives and reduce cost that might hinder the development and people's livelihood. The organizations have conducted BCM pilot project in Philippines, Indonesia and Vietnam. Therefore, he hoped all participants would learn and benefit from this. Lastly, he sent the best regards to all participants and apologized for being unable to attend the seminar in Bangkok.

Session 1: Introduction, Project and Area BCM by Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team

VDO presentation:

ASEAN plays crucial role in the world of economy but it is prone to disaster, which not only causes damage to the countries, but also spreads the impact throughout the world. To enhance resilience of regional economy, JICA proposes Area BCM. Even though the individual company adopts BCM to protect its employees and equipment, it is not enough to achieve

BCM. To ensure the success, it requires the cooperation among public and private sector and local communities. The stakeholders can identify the bottleneck and come up with BCP, which allows them to restore the businesses quickly and effectively. If the companies in the area unify, it will allow them to restore quickly and effectively.

Slide Presentation

Area BCM is a new approach to solve the problem. Since ASEAN has high risk from natural disaster, three countries, namely Philippines, Vietnam and Indonesia, were selected for the pilot study. In the project, ten ASEAN countries prepared disaster risk profile while three pilot countries prepared disaster risk profile, develop concept of Area BCM, prepare Area BCP for the pilot areas, and prepare guidebook of Area BCM.

Area Business Continuity Management System (Area BCMS) is a management process that helps to manage the risk of continuity/early recovery of businesses of an area in an emergency, such as natural disasters that affect the entire area.

Area Business Continuity Plan (Area BCP) is a documented set of procedures and information intended to promote continuity/early recovery of businesses of an area in emergency such as natural disasters that affect the entire area.

Its cycle consists of five steps, following five steps of ABCM. As the first step, all stakeholders need to understand the area. Next, in determining Area BCM strategy, the project analyzed the impact based on the result of individual analysis before identifying the bottleneck, determining the objective, and planning activities of improvement for future work. In the step of developing Area BCP, the project conducted four workshops, each of which touched upon each step of cycle. In exercising and reviewing, the project used several methods to conduct various activities, such as studying conformity and integrity with Disaster Management Plan as well as lessons from national disasters in the areas. The last step is to maintain and improve the project to keep it updated. Continuous improvement is a 'must' because it takes a long time to put in effect.

Area BCM has a lot of benefits, such as networking of stakeholders, information sharing, risk-informed decision making, benefit both Area BCM and BCM, and from large enterprise to SMESs. Eventually, BCM can be expanded and contribute to risk reduction and sustainable development.

Session 2: Plan and Toolkits of Area BCM

Formulation of the Plan, Area BCP by Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team

The plan consists of three purposes, namely to sustain the development of the area, to assist the activity of stakeholders with their cooperation, and to share the important information among stakeholders. Then, the project needs to understand the area, such as business resources and structure of local industry, to conduct business impact analysis (BIA). It will identify the bottlenecks or great concerns that prevent companies from recovering their

business by RTO (recovery time objective). Since some serious impacts may be above individual response, stakeholders are expected to understand the limitation of individual BCP/BCM and the necessity of area BCP/BCM.

Policy of industry continuity is considered to share the same understanding of what should be achieved with high priority even in a disaster situation. Moreover, the roles of the Stakeholders are considered to clarify what each stakeholder should do for the industry continuity in a usual time /a disaster time. Improvement activities are considered to improve the capability of industry continuity step by step through Area BCM.

The improvement measures are categorized into prevention, mitigation, preparedness, response and recovery. Lastly, the Plan is implemented by Area BCM System. The process of forming area BCP in pilot areas includes forming work group, which requires several stakeholders, and forming Area BCP, which already conducted three workshops.

Tools for Area BCM by Mr. Shukyo Segawa, Leader of Natural Disaster Risk Assessment

In this project, JICA is preparing three kinds of tools for Area BCM.

The first one is Guide Book. The guidebook is a reference document to help starting and implementing Area BCM. It gives step-by-step guide following 5 elements of the Area BCM cycle. An approach can be applied to any countries and modified to fit other types of disasters. Guidebook is composed of Main volume and Tools volume. Main volume includes Area BCM, procedure for Area BCM and the appendices (procedures for developing Area BCP). For Tool volume, Tool 1 contains Area BCP prepared for the pilot areas and Tool 2 describes methodologies of hazard assessment in the pilot studies.

The second one is Risk profile report for three pilot areas. It is the reference document for individuals and organizations of the pilot area who are wishing to integrate disaster risk information for their decisions. It contains profile of pilot area and natural hazard assessments.

The third one is Country report for 10 ASEAN countries. It is the reference document for individuals and organizations who are wishing to integrate disaster risk information for their decisions. The report contains information of the country level, namely natural disaster risk, industrial agglomerated areas and investment risk, relevant infrastructure and natural disaster, economy, industry and trade, physical distribution network, legislative systems and implementation of BCP.

It is now in the last process. JICA received soft copy of guidebook and report from Philippines as well as some country reports.

Q&A

DDPM (Observer):

In pilot projects, before accessing the areas, what were challenges to help SMESs realize the importance of BCM/BCP? DDPM needed to prove that this issue was crucial and convince them to join.

Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team:

For the challenge, it was difficult JICA to disseminate BCM to SMEs in Japan. Japan has prepared guideline for SMEs and had seminar for SMEs. This was effective to promote BCM. Another suggestion to convince SMEs to join was to provide incentive, such as better rate and conditions when they borrow money for BCP.

Dr. Hitoshi Baba, Senior Advisor of Japan International Cooperation Agency (JICA) HQ:

When JICA started the project in three areas in ASEAN countries, there were many discussions among government agencies before conducting the workshops. It was very difficult to convince them to start BCM because this was a new concept and no one knew about the benefits. Once they did, they coordinated with major enterprises and shared common business resources. In case of disaster, major companies provided their workers with shelter, water, and food, which SMEs could share. Since the pilot projects have just started, each country would conduct the implementation themselves and see the benefits in the future.

DDPM (Observer):

Do the pilot countries include BCP in the national plan?

Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team:

No, they do not.

Mr. Theng Pagnathun, Director General, General Directorate of Planning, Ministry of Planning, Cambodia:

Since BCP involves private sector, how to convince the private sector to join BCP? What are challenges for BCP implementation and development?

Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team:

After selecting the pilot areas, JICA selected the representatives (industrial parks) to join activities. JICA request those organizations to get involved and send the same person to join the project for the sake of continuity.

Mr. Montree Boonpanich, Senior Advisor, National Economic and Social Development Board (NESDB), Thailand:

The most important thing for BCM is the leadership. Since Thailand has leading and supporting organizations, who will lead the area? In this case, the leading organization is

local government, which does not have much authority or capacity. What is the appropriate pattern of administration?

Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team:

Cooperative system of Area BCM depends on social system of the country and area.

Mr. Montree Boonpanich, Senior Advisor, National Economic and Social Development Board (NESDB), Thailand:

Is it necessary to set up the committee to manage the project?

Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team:

JICA needed some time to think about the answer.

Mr. Vicente F. Tomazar, Director of Civil Defence Region IV-A, National Disaster Risk Reduction and Management Council (NDRRMC), the Philippines:

In Philippines, the hazard analysis is taken by several agencies based on disaster type.

Mr. Yoshiyuki Tsuji, Deputy Team Leader of the Study Team:

The hazard analysis uses available information from the study in each country.

DDPM (Observer):

Like Philippines, Thailand has many agencies concerning hazard analysis. Who will be the main agency or should it be collaborative effort among agency concerned?

Mr. Vicente F. Tomazar, Director of Civil Defence Region IV-A, National Disaster Risk Reduction and Management Council (NDRRMC), the Philippines:

The Philippines has one entity for disaster risk reduction management (ROA 10121).

Mr. Panu Teerathatchakun, Civil Works Technician, Department of Water Resources, Thailand (Observer):

He explained the scope of work in Thailand. The country lacks focal point because it has many government agents. When crisis occurs, the government sets the level of severity and many agencies collaborate with one another as the National Center of Disaster Mitigation. The Prime Minister as the Chief will give the command and receive the reports from related ministries. Thailand practices BCM every year and sets the disaster areas from both natural disaster and war perils. Ministry of Defence updates the information on the website for other agencies and orders them to conduct BCM in details based on their tasks.

DDPM (Observer):

The new plan for 2018 will include BCP. First, the government agent should have BCM. Secondly, the government should encourage SMEs to have BCP. DDPM will further

implement after approval. DDPM is supported by NESDB to promote BMP as a national policy.

Session 3: Approaches of Area BCM and BCM in Thailand

Approach for National BCM in Thailand by Ms. Laddawan Kumpa, Deputy Secretary-General of National Economic and Social Development Board (NESDB)

A number of countries around the world, including Thailand, have encountered a series of severe and more frequent natural catastrophes, which will harm human security. Thailand faces several kinds of disasters, such as forest fire, flood, drought, tropical cyclone and storm, and tsunami. In 2011, it had a great flood, the largest one in the history, which affected the economy, public health facility, housing sector, education sector and cultural heritage and sites.

For the current status of Business Continuity Management in Thailand, at national level, The National Disaster Prevention and Mitigation Act 2007 authorized the establishment of the National Disaster Prevention and Mitigation Committee to formulate a disaster prevention and mitigation policy and National and Provincial Disaster Prevention and Mitigation Plans. However, the Plans mainly focused on disaster management but did not mention about BCM. Therefore, Thailand tries to include BCP in the national plan and it is now in the stage of preparation.

At governing level, in practice, only banking sector has been urged to create and utilize BCP clearly. Although most crucial infrastructure organizations and governmental agencies develop organizational BCP, the process is still at the beginning and not very effective. At organizational level, large enterprises have enforced BCM. However, SMEs do not because of the lack of awareness and budget. In the future, Thailand needs to conduct Area BCP and encourage SMEs to do BCP.

In December 2014, JICA offered assistance to the government to conduct BCM in Thailand. Several government agencies, such as NESDB, RAD, DWR, AOT, EGAT and BMA discussed on BCM and held two seminars, with JICA providing implementation guidance step by step. In January 2015, 22 agencies established the criteria to choose the pilot area. First, it must be located in industrial areas affected by disaster (flood) and have high foreign investment, such as industrial estate in Ayudya, industrial estate in Pathumthani, Chiang Rai, Phuket, and Map Ta Put (Rayong). Finally, Pathumthani was chosen as the pilot project because it consists of one million people and has 403,408-million-baht value of investment. The loss from the flood is 93,207 million baht.

To start the pilot project, JICA discussed with concerned agencies, namely Pathumthani governance and Ministry of Transportation, to educate them. The responsible agencies will be identified and the structure for operating the pilot project will also be established. If Thailand has knowledge, it can expand to other areas.

Current Approaches for BCM in Thailand by Mr. Chainarong Vasanasomsithi, Director of Research and International Cooperation Bureau, Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior

The 11th National Economics and Social Development Plan 2012-2016 includes the effects of a global warming and a climate change, but not Business Continuity. Moreover, the country has Disaster Prevention and Mitigation Act 2007.

Among different kinds of disaster, flood is in the highest rank of intensity and risk level. It also causes the highest economic loss, 359 billion USD.

Lesson learned from Disaster Management (DM) in Thailand is that the trend has increased due to deteriorated environment and climate change. Disaster Management requires collaboration from agencies concerned. First, structure, organization and mechanism of DM must be unified. Planning, resources mobilization and logistics support are also needed. For knowledge and Information accessibility, the government makes the database accessible, for example mapping, knowledge dissemination via website and other communication channels.

For the new era of DM in Thailand, the country has improved early warning system. After great flood, Thai government has improved DM system in Thailand and earthquake in Chiang Rai triggered the public awareness.

Thailand National Policy and Strategy on Disaster Risk Reduction sets the objectives to integrate all inclusive stakeholders within domestic and international agencies for equitable and transparent victim assistance, to create learning society and community resilience in Thailand, and to initiate safety awareness, safety society and resilience society.

Four strategies in disaster risk reduction include focusing on Disaster Risk Reduction, integrating among agencies concerned during Emergency Management, increasing the effectiveness of sustainable rehabilitation, and promote international cooperation.

For the situation of BCP in public sector in Thailand, after flood 2011, it is compulsory for the public sector to prepare its own BCP. However, the purpose of BCP preparation is the backup plan during the emergency response and emergency crisis to resume the normal system. How, BCP is confused with emergency plan. In the private sector, large companies, such as SCG and Toshiba, started to implement BCP. Their successful plans are used as the model for other companies. However, SMEs do not recognize the necessity to implement BCP.

Way forward:

1. Thailand has opportunity to learn from JICA how to implement BCP.
2. New HFA 2015 also mentioned the public and private partnership.
3. The 12th National Economics and Social Development Plan 2012-2016 has additional chapter for BCM.

Lesson Learned from the 2011 Thailand Flood by Mr. Buntoon Wongseelashote, Chairman of Business Continuity Committee, Thai Chamber of Commerce

The flood caused lots of money and lives. The storm came from the east and attacked Vietnam first. However, why did Thailand suffer the most? The possible causes were

excessive rainfall (5 storms), poor land-use planning caused rice fields inundated, insufficient drainage, poor water resource management, multiple government agencies' overlapping responsibilities but little cooperation, and government's rice subsidy program, which allows the smugglers to store the rice/corruption.

Five storms and water level in dams was high. In 2010, Thailand had a draught. When there was flood in 2011, there was the political campaign promoting rice subsidy program to ensure that the farmer would sell more rice. Then, the storm came in and increased the water level. However, the cabinet did not release the water from the dam. Unfortunately, three more storms came in and the dam could not hold the water. Therefore, Thailand was suffered from flood because of the mismanagement.

Considered the world's 4th costliest disaster, the flood posed devastating impacts - 13 million people affected, 884 lives lost, 575,000 SMEs affected, and 346,500 job lost.

In the government's plan for water management, the procurement is prone to corruption due to unreasonable pre-qualification for bidding participants and undisclosed criteria for selecting winners. Therefore, the project was terminated.

BCM is the new context and only large corporations are aware of this. However, SMEs are not. So, it is the job of Thai Chamber of Commerce to educate them because the counter measure by single company is ineffective and impossible. The private sector needs government assistance.

Hazard & risk in the area of business location must be determined. In addition, the related parties need to consider whether there will be an Area BCP. For response & recovery, what are the networking and information-sharing procedures already put in place among the stakeholders? Lastly, what are government's incentives for insurance, subsidy?

Q&A and Discussion

Mr. Yulianto Sukatmo Wiyono, Head of Business Institution's Role Division, National Agency for Disaster Management (BNPB), Indonesia:

There are many institutes about DM as well as cross-sectoral cooperation. It is therefore difficult to determine who the main authority should be to handle the disaster.

Dr. Hitoshi Baba, Senior Advisor of Japan International Cooperation Agency (JICA) HQ:

In terms of flood management in Japan, the Ministry of Land Infrastructure has the highest authority. It is centralized administration and the responsibilities are clearly divided among the related sectors. Prevention plans are always connected to the national plan. Flood controlling dams are managed by the system and gates are strictly operated. Japan has many other systems of flood management and environment management. Furthermore, the law was established hundred years ago. On the other hand, Thailand has fragmented structure but should integrate the plans in the future.

Session 4: Input for Discussion

Presentation for Sub-Group Discussion

The seminar was divided into five sub-groups to discuss four topics.

1. Current situation of approaches in your countries related to businesses in coping with disaster
2. Comments and areas to improve on Area BCM
3. Comments and areas to improve on Tools for Area BCM
4. Approaches to introduce and promote Area BCM in your countries and issues to consider

Sub-Group 1 (Brunei, Indonesia, Malaysia, Philippines and Thailand):

1. 1.1 Brunei has DM center. However, it neither has nor is aware of BCM. The country has the problem of coordination among different agencies, just like Thailand. Brunei hoped that BCP would be introduced to Brunei and the possible way is to do it under ASEAN.
1.2 Malaysia is the most progressive country because it has the council of national security and Malaysian Administrative Modernization Management and Planning Unit to take care of this issue. BCP is compulsory for all public sectors while being voluntarily for private sector.
1.3 Indonesia does not have national BCM. Under JICA's assistance, it has localized BCM and has special local plan when disaster happens. However, it is still disorganized. The introduction of Area BCP, with JICA's help, is expected at national level to be further implemented.
1.4 Philippines has DM plan at all levels. Under JICA, two cities were introduced to Area BCP and will be driven to the national level.
2. Since Area BCM is not well introduced, comments were limited. Only Philippines suggested that there should be an appropriate organization to sustain Area BCM and monitor the implementation of the plan.
3. 3.1 Area BCM should have framework to go with it
3.2 There must be an international standard that requires private companies to comply with this idea and have BCM.
4. Brunei would do whatever ASEAN countries do. It should be ASEAN initiative so that other ASEAN countries will follow and implement the concept.

Sub-Group 2 (Japan, Lao PDR, Myanmar, Singapore and Thailand):

1. 1.1 Japan: BCM is highly developed in government sector but SMEs is not.
1.2 Singapore: The government has robust framework in government sector but not SMEs.
1.3 Thailand, Lao PDR, and Myanmar: They are in the developing stage. Pilot projects are set for further development.
2. 2.1 The weakness is the coordination mechanism and information sharing. If the countries do not share the data, AHA Center cannot disseminate it.

- 2.2 Infrastructure support, such as IT, may not be comprehensive enough. So, further development is needed to allow them to make use of the data collected.
- 2.3 Many countries have limited measure to implement BCM. Although measures are identified, they cannot source the funding.
- 3. 3.1 The collaboration with NGOs should be put in place because NGOs have the best communication in rural areas.
- 3.2 Area BCM lacks the framework that allows the users to do the cost-benefit analysis to identify cost/benefit and convince the cabinet.
- 4. 4.1 The countries should increase the awareness of the effect of disaster. Even though Singapore does not have disaster, it is useful to engage the media and NGOs to raise the public awareness of the disaster impact.
- 4.2 The necessity of BCM should be mainstreamed and integrated into the ministry's work flow.
- 4.3 BCM should be integrated into the economic development plan, industrial planning and land-use planning. For example, do not put the industrial development into disaster-prone area.
- 4.4 It requires the budget allocation and infrastructure support from the government. For example, how to share the information as soon as possible to reduce the damage
- 4.5 The collaboration between public and private sector is also important.

Sub-Group 3 (Cambodia, Lao PDR, Myanmar, Thailand and Vietnam):

- 1. 1.1 Thailand: Area BCM/BCP was only introduced in the government sector, large companies and financial institutions.
- 1.2 Cambodia: The government considers Area BCM for agricultural sector.
- 1.3 Vietnam: Local communities apply Area BCM, such as Haiphong.
- 1.4 Myanmar and Laos: Area BCM/BCP is new to these countries.
- 2. 2.1 The pilot Area BCM should be spread to other disaster-prone ASEAN countries, especially Thailand and Cambodia.
- 2.2 Agricultural sector should be included in Area BCM.
- 3. Since these countries have not implemented Area BCM, the comments will come after the implementation.
- 4. 4.1 Should raise the public awareness of Area BCM's benefits
- 4.2 Should start from large companies and then to SMEs because they have the budget to implement this concept.
- 4.3 The evidence will show the output of area BCM and SMEs will follow.

Sub-Group 4 (Indonesia, Lao PDR, Philippines and Vietnam):

- 1. Philippines and Indonesia: The companies have their own plans to protect their business from disaster. However, their communication with the government and other stakeholders is not good. So, they need more intensive communication to ensure the effective disaster reduction.
- 2. It requires representative agent to communicate with local government and stakeholders.

3. The tools should be introduced more intensively among all stakeholders.
4. Meetings and workshops should be developed among all stakeholders to introduce the importance and necessity of BCM.

Sub-Group 5 (Indonesia, Malaysia, Philippines and Thailand):

1. Malaysia: The country has DM policy and mechanism.
Indonesia: It has national agency called BNPB and Disaster Management Act no. 24 year 2007.
Philippines: It has NDMO handled by NDRRMC.
Thailand: DM is handled by DDPM. Only large enterprises support BCP but not SMEs.
2. 2.1 JICA should expand the project to other ASEAN countries.
2.2 JICA should set guideline of Area BCM for implementation at national level.
Besides the guideline, the countries should take the best practice, such as from Japan, as an example.
2.3 Intensive approach is required for agencies directly involved with BCM/BCP.
3. 3.1 The tools should ensure that agencies involved understand the concept of Area BCM so that the project is smoothly operated.
3.2 They should use example of best practice.
4. 4.1 The implement of BCM needs the support from the top management.
4.2 It requires sufficient budget.
4.3 It requires sufficient staffing/manpower.

BCM in some countries is still difficult to implement. However, it is possible if the countries have sufficient support and cooperation.

Closing Session

Closing of the Seminar of Practitioners by Dr. Hitoshi Baba, Senior Advisor of Japan International Cooperation Agency (JICA) HQ

Mr. Baba thanked the participants for attending this seminar and Thai government for hosting this seminar and inviting both public and private sector. He also congratulated everyone for providing the output to understand and promote the BCM concept. Then, he summarized the whole seminar.

In the morning, the study team introduced concept of BCM/BCP, which is the new approach to raise economic resilience. Regarding the question about the benefits for SMEs, Japan also applies BCM concept. Some enterprises provide shelters for workers to share the space and this coordinating framework is helpful for SMEs to share the resources. In the afternoon, Thai representatives reported the overview and progress of BCM in Thailand, new National and Economic Development Plan and Disaster Prevention & Mitigation Act, and lesson learned from 2011 flood.

Mr. Baba then introduced the summary of HFA2 (2005 – 2015), which will be adopted next March. It highlights new priority, namely understanding, strengthening the government, investing in economic and social resilience, and enhancing preparedness for response.

JICA is currently using the new concept of Area BCM in ASEAN. It will always support ASEAN nations through the priority 3 and invite important partners to join.

A5 Record of ASEAN Workshop



**ASEAN Workshop
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formulation For Industrial Agglomerated Areas In The ASEAN Region”**

September 1, 2014, Sari Pan Pacific Hotel, Jakarta, Indonesia

*A Joint Project of Japan International Cooperation Agency (JICA) and
the ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

List of Participants

No.	Name	Country	Organization	Position
1	Mr. Sheran Bin Shaari	Brunei	National Disaster Management Centre, Ministry of Home Affairs	Municipal Officer
2	Mr. Norith Ma	Cambodia	National Committee for Disaster Management Council of Ministers	Deputy Secretary-General
3	Mr. Sigit Padmono	Indonesia	Indonesian National Agency for Disaster Management (BNPB)	Head of Sub-division Role of Organizational Social and Community
4	Mr. Khamphao Homphangna	Lao PDR	National Disaster Management Office, Department of Social Welfare, Ministry of Labour and Social Welfare	Deputy Director General
5	Ms. Nurul Fatien Binti Rusly	Malaysia	Disaster Management Division, National Security Council (NSC)	Assistant Secretary
6	Ms. Lae Shwe Zin Oo	Myanmar	Relief and Resettlement Department, Ministry of Social Welfare, Relief and Resettlement	Deputy Director
7	Mr. Cruz Elvis	Philippines	Office of Civil Defence, National Disaster Risk Reduction and Management Council (NDRRMC)	Planning Officer III
8	Mr. Adrian Chong Soon Heng	Singapore	Singapore Civil Defence Force (SCDF)	Captain/Operations Exercise Officer
9	Ms. Pakjeera Promdee	Thailand	Department of Disaster Prevention and Mitigation Ministry of Interior	Plan and Policy Analyst
10	Ms. Nuygen Thi Thu Ha	Viet Nam	Ministry of Agriculture and Rural Development	Head of Training and Technology Transfer Division
11	Mr. Any Isgiyati	Indonesia	Indonesian National Agency for Disaster Management (BNPB)	Director of Community Empowerment
12	Mr. Lee Khiam Jin	Indonesia	ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)	Head of the Corporate Affairs and Programme Division
13	Mr. Janggam Adhityawarma	Indonesia	ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)	Senior Disaster Monitoring and Analysis Officer
14	Dr. Eng Saiful Anwar SE. Ak. M.Si.	Indonesia	STIE Ahmad Dahlan	Vice Director of Postgraduate Programme
15	Ms. Shanti Sukmawati	Indonesia	Indonesia Endowment fund for Education, Ministry of Finance	Head of Business Development and Data Management Division
16	Mr. Koki Yoshida	Japan	Mission of Japan to ASEAN	First Secretary
17	Prof. Kenji Watanabe	Japan	Nagoya Institute of Technology	Member of the Advisory Committee, JICA-AHA Project
18	Mr. Hideaki Matsumoto	Japan	JICA Headquarters	Deputy Director, Disaster Management Division I
19	Mr. Hiroaki Nakagawa	Japan	JICA Indonesia Office	Principal Representative for ASEAN Coordination
20	Ms. Nami Kasahara	Japan	JICA Indonesia Office	Project Formulation Advisor (ASEAN Partnership)
21	Dr. Masakazu Takahashi	Japan	JICA -AHA Project Team	Team Leader
22	Mr. Shukyo Segawa	Japan	JICA -AHA Project Team	Leader of Natural Disaster Risk Assessment
23	Mr. Yoshiki Kinehara	Japan	JICA -AHA Project Team	Team Member, Area BCP
24	Mr. Kotaro Fukuhara	Japan	JICA -AHA Project Team	Coordinator
25	Ms. Akira Watanabe	Japan	JICA -AHA Project Team	Coordinator
26	Dr. Krishna Suryanto Pribadi	Indonesia	JICA -AHA Project Team	National Coordinator of Indonesia
27	Ms. Aria Mariany	Indonesia	JICA -AHA Project Team	Junior Researcher
28	Mr. Bayu Novianto	Indonesia	JICA -AHA Project Team	Assistant of National Coordinator

**ASEAN Workshop
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

September 1, 2014, Sari Pan Pacific Hotel, Jakarta, Indonesia

*Under a Joint Program of Japan International Cooperation Agency (JICA) and ASEAN
Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

Agenda

August 31, 2014, Sunday Arrival of the attendants at Jakarta

September 1, 2014, Monday

Opening Session	
8:30 - 9:00.	Registration
9:00 - 9:45.	<p>Welcome Address Mr. Lee Khiam Jin, Head of the Corporate Affairs and Programme Division AHA Centre</p> <p>Opening Address Mr. Any Isgiati, Director of Community Empowerment Indonesian National Agency for Disaster Management (BNPB)</p> <p>Introduction of Participants</p> <p>Group Photo Session</p>
Session 1 Keynote Speech	
9:45 – 10:15	<p>Regional BCM based on Public/Private Partnership - Importance of interoperability among BCMs for resilient society - Prof. Kenji Watanabe Member of the Advisory Committee Nagoya Institute of Technology</p> <p>Q & A</p>

10:15 - 10:30	Coffee Break
Session 2 Project and Area BCM	
10:30 - 11:20.	<p>Project and Area BCM including Video Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Activities in Indonesia Dr. Ir. Krishna S. Pribadi National Coordinator of Indonesia</p> <p>Q & A</p>
Session 3 Developing Area BCM	
11:20 - 12:30.	<p>Understanding the Area Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment</p> <p>Determining Area BCM Strategy and Developing Area BCP Mr. Yoshiki Kinehara Team Member, Area BCP</p> <p>Exercising and Reviewing, Maintaining and Improving and Next Steps</p> <p>Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Q & A</p>
12:30 - 13:30	Lunch Break
Session 4 Tools for Area BCM	
13:30 - 14:15	<p>Guidebook Mr. Yoshiki Kinehara Team Member, Area BCP</p> <p>Country Reports and Risk Assessment Reports Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment</p> <p>Q & A</p>

Session 4 Approaches for Promoting Area BCM in ASEAN	
14:15 - 15:00	<p>Area BCM; Expectations, Contribution and Related Activities by Indonesia Mr. Sigit Padmono Head of Sub-division Role of Organizational Social and Community, Indonesian National Agency for Disaster Management (BNPB)</p> <p>Area BCM; Expectations, Contribution and Related Activities by the Philippines Mr. Elvis S. Cruz Planning Officer III Office of Civil Defence (OCD) Region IV-A</p> <p>Area BCM; Expectations, Contribution and Related Activities by Viet Nam Ms. Nguyen Thi Thu Ha Head of Training and Technology Transfer Division Ministry of Agriculture and Rural Development (MARD)</p> <p>Q&A</p>
15:00 - 15:20	Coffee Break
15:20 – 16:45	<p>Group Discussion</p> <p>Presentation by Sub-Groups and Discussion</p>
16:45 - 17:00.	<p>Closing of the Seminar Mr. Koki YOSHIDA First Secretary Mission of Japan to ASEAN</p>
17:00	Adjournment
18:00	Dinner

MC: Dr. Ir. Krishna S. Pribadi

September 2, 2014, Tuesday Leaving the attendants from Jakarta

ASEAN WORKSHOP for “NATURAL DISASTER RISK ASSESSMENT AND AREA BUSINESS CONTINUITY PLAN FORMULATION FOR INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”

Saripan Pacific Hotel, Jakarta, 1st September 2014

MINUTES MEETING

Welcome address: Mr. Lee Khiam Jin

Opening Address: Ms. Any Isgiati – Director of Community Empowerment

She represented Mr. Doddy Ruswandi, MSCE, Deputy of Prevention and Preparedness to deliver his opening speech in the ABCP seminar.

She extends her gratitude to the participants for attending the Area BCP seminar. Area BCP is good initiative. She is expecting the participants to support the seminar and also welcoming all the participants to enjoy the Jakarta.

The approach of Area BCM/BCP is interesting since it will protect the industrial area from disaster impact. This is similar with the disaster risk reduction for flood conducted by government of Indonesia. For example flood in Jakarta has affected transportation from Bekasi and Karawang to Tanjung Priok harbor. We should integrate this approach in disaster management because it has been proven more effective to overcome the larger impact.

BCM is the solution for business continuity. It is a management process to identify potential impact, training and organization. It provides resilience and capability to response for all stakeholders.

According to UNISDR, Indonesia is the second biggest disaster prone country in the world from 1981 to 2011. The loss was also suffered by private sector including micro, small medium enterprise. It reminds us to better prepare to reduce the risk of disaster. Private sector is part of affected institution also need to strengthen their capacity. One effort is to develop BCP. A study in Japan confirms this idea that companies with BCP can recover much shorter than it is without BCP.

Abcp should protect business organizing including small and medium enterprise to protect the economic losses from disaster. Similar case for economic loss we can see in the flood disaster occurred in Jakarta in 2007 and 2013, earthquake in Jogjakarta in 2006 and West Sumatera in 2009, and many more cases. In recent disaster, there is volcano eruption in 2014. Even though there are no human casualties, but our economic loss is approximately 90 million US dollar and if it does not overcome in short term, it will cause more losses. Therefore, BNPB hope that all actors will campaign here and support in promoting individual company or group in agglomerated areas, especially SME. ABCP will contribute to reduce the risk at community as well. In this case we can link this idea into develop to contingency plan developed by local and central government.

In 2015 we will hold WCDRR in Sendai, Japan. Hyogo framework for action will end in 2015. Now many international actors and countries are starting to propose for the indicators for the MDGs, such as integrating the disaster risk reduction into development agenda. The idea of ABCP can be raised in the WCDRR. Now, we are developing the study of ABCP and next year we can see the actual result.

She also encourages all organization to implement ABCP in industrial agglomeration areas and disaster prone areas. In this seminar we have more idea, especially experience from your country in reducing economic loss.

She is opening the seminar formally.

Introduction:

All participants were asked to introduce themselves. List of name is attached.

Session 1 Keynote Speech

Prof. Kenji Watanabe – Member of the Advisory Committee Nagoya Institute of Technology
Regional BCM based on Public/Private Partnership –Importance of interoperability among BCMs for resilient society–

He explains about himself, i.e. is involvement in business for 20 years before working in the university. 10 years ago, there is Chille earthquake. At that moment, he realizes that ABCP is important or supply chain will be disturbed and many economy impacts.

He delivers the agenda of his speech, i.e. Quick review of the recent disasters with regional BCM point of view; Importance of the community-based BCM and PPP (Public/Private Partnerships), integration among stakeholders; and some cases for regional information sharing efforts from other countries and economical incentives to promote regional BCMs supported by government.

Quick review of the recent disaster

3 years ago there is great earthquake in Tohoku area in Japan. This is trigger event caused by earthquake many facilities and infrastructure were damaged. There is also tsunami that is triggered or happened by earthquake. So many things happen caused by earthquake, including the economic impact and small medium enterprise. This is the spread impact caused by earthquake. This is what happen to Tohoku area 3 years ago when the great earthquake happen. Before earthquake, government tries to set up the industry in the Tohoku area with many incentives. And many industries concentrate their operation factory in Tohoku area. Recently earthquake happens, and the factories are stoped to operate. Some factories produces important part for Toyota and some produces important part for Panasonic. And it influences the global market share over 50%.

This is the example of leakage of condensor. It is small part but very important and very standard part for everyting. Some condensers are used for spill control for otomobile and some are used to control humidity temperature for electricity in your home. It is very standard and they have to concentrate in the country. After the disaster hit many things, people recognize that the interdependencies and concentration of the risk after the earthquake. They know that risk concentration exist but do not know where it is.

He shows the slide regarding the supply chain of otomotive industry. For example Toyota that orders the auto part from many different big manufactures, such as denso, etc, which is concentrated in in the area. And they order from manufactures from second tier, third, and so on. This is a huge supply chain. But they do not recognize the concentrantion risk at the market share. They try to minimize the risk by separating their order from different supplier. But in forth tier and fifth tier, there is SME, which has special technical and skill to do something. But they are much cost to other supplier (we have much data but they have to keep secret. They are very weak in financial. So they continue to research in development, but do not have money to think about the business continuity. After the last earthquake, they

realize about the concentration risk. And nowadays, they have conducted several kind researches, what is the situation, what is BCP you have. So over 2000 supplier requires for that. But the business situation has changed day by day. It is difficult for them to monitor everything, since this is the large supply chain.

There is another example, i.e. one factory that produces part for Nisan that was influenced by volcano eruption in Japan. Because of the eruption, many flight was cancelled, no plane is allowed to fly. So, even other part has come to be produced, but one tiny part cannot come due to such situation. So, Nisan stops the operation. This is the interconnection of interferences, if something happen in one part of the world can cause something disruption to other part of the world. It is important for you, public sector and private sector, to think about this one, because something may happen day by day like a dot. You have to think how to collect the dot, what will happen to us, what is the impact, this is affect from other region impact, etc.

Another example is flood in Thailand has affected many Japanese factories in Thailand. Over 50% of the companies in Thailand are Japanese cooperation. In March they are affected by earthquake, and then they affected again. Of course they loss their money and they are very visible to operation between Japan and Thailand. Next disaster hit some area in Thailand and Japan, Thailand can shift into Japan factories. They already negotiating for shift into other countries and this are a strategy, so if one area is suffered from heavy damage, they can still operate from other.

The important of community-based BCM dan Public Pirvate Partnership (PPP)

As I mentioned that everything is connected. One production cannot be provided by one single company. Many stakeholders will involve producing one good. And they are interconnected one to each other. So, it has to increase the interdependencies.

He explains regarding the layer of stakeholders involved in the business. First layer is industrial production, second layer is infrastructure and others that support daily operation, and third layer is government with law and regulation. Each layer are connected and they are dependencies.

He explains the background why it affects other areas when one area is disrupted. It is because vulnerability is emerged in business continuity. Scope of business disruption has been expanding the networked business process. The increased speed of chain failure spread, widened area of chain failure spread, increased possibility of impacts from other's failure and increase difficulties in detection in advance were the background why need the interconnection. They have direct impact to increase the unexpected incidents and expanding economic damages per incident.

He shows the slide regarding stakeholders, such as direct buyers and suppliers, bank, family, etc (see slide). And the stakeholders think about the business continuity of the cooperation. Single BCP by single company is not sufficient so because there are many limitation of single BCP. So, it has been expanded with the association of community group. They spread their companies to the areas that are not impact by same disaster. Besides, local government is also important to protect the community and industry in order to keep the economic situation in the area. Local government expands their scope. In disaster situation, local government has huge response to help the people. Therefore, the government needs to interconnect among local government, central government and local community. And now local government shares it with private sector. And for local community, they have highly motivation because they live in common area. And it is important thing to do if you want to locate here.

Some cases for regional information sharing efforts and economical incentives to promote regional BCMs supported by government

The first case study is United Kingdom. The government of UK wants to share risk information with the people through risk communication. Japanese government tries to do that, but if the government provides the risk map, then the Japanese people maybe upset and say no. Sharing risk information is a good starting point. UK government provides risk map. It is not 100% correct. They revise the map for every two years. They communicate with the people. They understand the risk in the UK. And I agree your work to share it with private sector and it is good starting point.

He explains the important of standardization of BCM in region through ISO.

He explains the phase in business continuity. This is before disaster, i.e. preparation and when disaster happens, everybody should response it. And after disaster they need to recover.

This is example, large company apply for the guideline A that maybe is provided by government or industrial association. SME apply for guideline B. Large cooperation applies for ISO 22301. And other government requires their application. They recognize they have to prepare, they have to work together in disaster situation but different principle and thought. Maybe they can work together, who can do one thing, and what can be worked together in disaster preparedness, but when disaster happens, their timing of activation by organization is different. Activate BCP means they change the shift the operational of infrastructure so many things happen at same time in different timing and different principle, so the response activity and recovery activity is incomplete. And incomplete information is going on and nobody knows caused by lack of resources. Every single BCP and DM Plan has very good resources. So the failure in response and recovery activity is lack of resources and conflict of coordination. It is not good because can make everybody lost.

I was working for ISO to make standard, to provide platform to work together in disaster situation. We have five different working group from institution and technical organization from several countries, and Indonesia is one of them. The standard is about BCP in single organization. The standard for single organization is not enough because everything is connected.

Your activity is hoped to go forward. We think to standardize the pure concept. Not only ASEAN region but also global. We can think of this later or in the other session of the workshop. Standardization can be the next phase. But private sector needs incentive to do the business continuity before disaster.

The question is about what the return of investment when disaster happens to our company? and nobody knows. This is like a responsible of company for business continuity. But the market is changing. The investor or credit agencies or bank are now trying to evaluate the preparedness of the cooperation for the next disaster.

There are several financial products in Japan. One of them is that provided by Bangkok Japan that is owned by government. They try to privatize because Japan government assigns the BBJ. In business continuity promotion, it is important to give incentive such as support the financial matter for private sector for emergency response as well as recovery. This kind of scheme of BBJ financing institution, it is doing financial analysis on the preparedness of the cooperation to the disaster. Bank has incentive to interest way because the followers are

ready for disaster preparedness. If there is not BCP, the cooperation will bankrupt and the bank does not want to do that.

The bank will lend the money for preparedness so it will help the community and the industry is ready for the next disaster. There is a scheme to give this loan. The bank will do the credit risk analysis, disaster risk analysis and project analysis. If the rating is good and the bank will give the loan.

The investor has considered the future earthquake in 10 years so they have incentive from the bank for the response activity. This is one of financial product that should be considered in the next phase.

This is the example how to share the information of disaster risk situation when I work for Ministry of Agriculture. Previously, the information from government is not used to the community. For example from the information and then decide the evacuation A but no one go there. So, I try to develop the method to share information.

Session 2 Project and Area BCM

Dr. Masakazu Takahashi – Team Leader of The Study Team
Project and Area BCM

Video presentation of the ABCM promotion (by JICA).

Presentation:

Why Area BCM is necessary and JICA and AHA Center is responding to this programme. The stakeholders of three countries prepare the Area BCM. How about today's program?

This is the summary of video:

- Disasters directly affect business performance and undermine longer-term competitiveness and sustainability;
- Globalized supply chains create new vulnerabilities;
- Business loses its lifeline when critical infrastructure is hit by disasters;
- It's no longer "business as usual" in ASEAN countries; and
- A new framework is proposed: – Area BCM (Area BCP) –

Private sector, government and local government are responding. The response of public sector is: by global efforts (HFA), good progress is being made in early warning, preparedness and response; on the other hand, governments have difficulty in regulating investment and development in a way that reduces disaster risk; governments began to play an active role as promoter and facilitator of private investment; and through promoting the advantage of low labor cost, access to export markets and low taxes, governments may encourage investment in high-risk areas.

The response of private sector is: most businesses are currently addressing disaster risk through business continuity planning; building resilient business to disasters; strengthening disaster risk management capacity in small and medium enterprises (SMEs) is very important due to there area many SMEs in ASEAN countries.

The most important area for private sector engagement may be around hazard and risk information. Accessibility to information and scientific and technical methods that are

understandable and usable. This is particularly important for SMEs that lack the capacity to undertake their own risk analysis. It is an action to narrow gaps between scientific community and organizations responsible for risk information and risk assessment.

This new framework is necessary. And this is the challenge for JICA and AHA Center. So JICA and AHA Center conduct this project since February 2013 to September 2014. Target countries are 10 countries in ASEAN and three pilot countries, Indonesia, Phillipine, and Vietnam has been selected to develop the framework and prepare the plan for the pilot area in those three countries.

He shows the pilot area in Indonesia. It is industrial agglomerated area near to Jakarta. And also shows the pilot area in Phillipine and Vietnam.

He explains the natural hazard considered in the three case studies. Phillipine is concentrated in earthquake, Vietnam in Flood and Storm Surge, and Indonesia in Flood.

During this project, we have proposed a new framework, Area Business Continuity Management (Area BCM); formulated Area Business Continuity Plan (Area BCP) for Industrial Agglomerated Areas; conducted natural disaster risk assessments necessary to develop Area BCP; prepared a guidebook for Area BCM and natural disaster risk assessment; prepared information kits; and disseminated and Promoted Area BCM / Area BCP, which is very important.

He shows the steps in new framework, i.e. understanding the area, determining Area BC< strategi, developing area BCP (including the plan), exercising and reviewing, maintaining and improving. It is necessary to improve the business in the area.

He explains the definition of area uses in this study, i.e. an industrial agglomerated area is a location where industrial parks and/or enterprises are agglomerated; and an area covers the industrial agglomerated area and also places where transport infrastructure and lifeline utilities, which are essential for business continuity, are located.

He explains the stakeholders of Area BCM: industrial park, individual industry transport infrastructure operator, such as road, railway, and also utility companies, local government, disaster responder, and community, research institution, and university. They are divided into three, the leader, member and supporter.

The consideration in this project is during the implementation:

- Horizontal cooperation at local level;
- Public and Private Partnerships (PPPs);
- From global enterprises to SMEs;
- infrastructure and utilities are key for businesses;
- Support of national government; and
- Support of scientific community and organizations.

He xplains about the tools for Area BCM, i.e. summary of the reports (ASEAN report), country report and risk assessment report for three case study areas, and also the guidebook. These documents are important for visible disaster risk information for investment decision and it should be improved by national authorities, and scientific society and organizations, as basic information for implementing Area BCM, can be used for BCM and DRR of stakeholders; and prepared by local authorities.

He explains the process to develop the ABCP especially through workshop 1, 2, and 3. In workshop 1 it discuss about definition of fundamental terms, critical hazard to consider, and critical problems. In workshop 2 it discuss about impacts on local community and industry, critical problems (bottlenecks) for business continuity of the area, and measures for business continuity of the area. In workshop 3, it discuss about draft Area BCP (plan) and next steps. He also explains the total number of stakeholders participate in the formulation of ABCP. And He also explains the dissemination and promotion, which is the very important thing in ABCP formulation. At the last presentation, he presents the mechanism of today seminar.

Dr. Krishna – National Coordinator of Indonesia
Activities in Indonesia

He explains the pilot area in Indonesia, it is industrial agglomeration area, which belong to three area, i.e. Karawang Regency, Bekasi Regency, and Bekasi City in West Java Province. There is infrastructure used for the industrial area, i.e. toll road to Jakarta and one harbor, i.e. Tanjung Priok harbor.

In 2007, there is flood and the impact to the industry is the access and the utility provision, such as electricity. For example, as no preparation, in provide method to getting to industrial park is provided by industry, but there is traffic jam. Some of the electrical power plant belongs to the private sector and responding to this by raising the power plant.

He explains the main activities in formulating the ABCP, such as meetings, workshop, and seminar.

He explains the ABCP formulation working group. There are working group coordinator, i.e. West Java Province Planning Agency, working group member from local government of Bekasi and Karawang Regency and Bekasi City, Infrastructure and Lifeline Operator, industrial park, and individual industry. Working Group members consists of government organizations, infrastructure operators and private sector from the administrative regions where industrial agglomerated areas are selected as pilot project area. Working Group members discuss issues related to business continuity in the industrial agglomerated areas where industrial parks are located, and formulate the Area Business Continuity Plan, facilitated by the Study Team, in the series of Workshops. Observers are government organizations, companies, and other organizations from the national and local level which are not from the administrative areas in the pilot area. Observers were involved in the discussion to provide input as well as observing the process.

He explains the implementation of the workshop 1, 2, and 3. In WS 1, there is less participants because it was the end of fiscal year, but in March more participants because during this month many working group members have more time. And he explains each workshop.

He explains the summary of discussion result for each workshop. For critical hazards, all stakeholders agree that flood is the most threaten hazard and infrastructure is the critical problems when disaster happens. For mitigation measures, one thing is to build dormitory in the industrial park. Even industrial park is not flooded, but the employees are located in the flooded area and there is obstacle for them to reach the work place. Therefore, to solve this problem, the stakeholders propose to build a dormitory in the industrial park. In the WS 3, the usefulness of ABCP is discussed and also the improvement of the plan. Things to be improved is implementation of schedule, coordination, etc. The important thing is regarding the management. The Local Planning and Development Agency and Local Disaster Management Agency of West Java should be the owner. Some stakeholders suggest the involvement of central government.

He explains the inputs regarding the implementation of the workshop, especially the homework method. Homework method seems not effective for the stakeholders.

He explains regarding the final seminar in Bandung. It is to introduce Area BCM and Area BCP V.1 to larger stakeholders in the West Java Province and to discuss input for improving ABCP V.1 and next steps to ensure sustainable implementation of Area BCM and Area BCP in the industrial agglomerated areas in Indonesia. There are 60 participants from 35 government organizations (national and local level), 3 NGOs, 3 consulting companies, 7 from industry, 7 from universities. And there are some inputs for the seminar.

Last seminar was held few days ago in Jakarta and the participants are 86 people for total. And there are some inputs for the seminar. This is one of the important issues raised by the participants, i.e. the needs to integrate the ABCM and ABCP into national and local development plan. ABCP is considered as formal regulation and also integrated the stakeholders into existing forum. The participants agreed that stakeholder forum is important and should be sustain. So we plan to establish stakeholder forum based on the established working group. They will working together and match with the DRR forum. In Indonesia we have various existing DRR forum at ocal and national level, local and national platform for DRR.

Question and Answer:

No	Question	Response/Answer
1	Ms. Nurul Fatien Binti Rusly – Malaysia For the pilot project, what are using for the selecting area? Beside the Bekasi area, do you have any other areas in mind before?	Dr. Takahashi Before starting the project, we have variety natural hazard country by country. Phillipine, Vietnam and Indonesia are the three highest risk prone countries. So, we have selected these three countries. And we also have studied different part of these countries, so we selected important industrial agglomerated areas in each country. We consider this pilot study need to be applied to other area of ASEAN, so we need to cover different natural hazard.
2	Mr. Adrian Chong Soon Heng –Singapore Do you have any problem when demanding ABCP, especially from the government and private sector? As well as, I think you mentioned funding scheme for the activity, maybe it is related.	Dr. Takahashi The most challenging issue was there are so many stakeholders from the public and private sector, and also academic. They try to make interest of Area BCM. And also bring them together into working group and compile and implement this trial. That is the most challenging issue. Dr. Krishna Suryanto: Issue challenging las seminar in jakarta, regarding the implementation of ABCP and ABCM, sustainable way to keep it moving. What of the suggestion is how to work with ABCP as a part of government planning? Therefore, the role of government becomes important and the ownership of government is very important.

Session 3 Developing Area BCM

Mr. Shukyo Segawa – Leader of Natural Disaster Risk Assessment *Understanding the Area*

He explains the definition of BCM/BCP and area BCM/BCP. BCM/BCP is one continuity plan for individual company. Target of Area BCM is industrial agglomerated area including several companies and organizations.

He explains the target areas that are industrial park or industrial agglomerated area where same transport infrastructure and lifeline facilities are used and places where essential transport infrastructure and lifeline facilities are located. Target area is scalable, affected area varies depending on the type of hazard and scale of hazard and it can be expanded during the course of Area BCM process.

He explains the information needed to understanding the area, i.e. basic information of the area, including information of economy and local government. Second information is natural hazard of the area. Other information is business and industry to protect, i.e. characteristic of the industrial parks, for example contact information, major industry, lifeline facilities used in the park, traffic infrastructures used by the companies in the park, experiences of business interruption, and BCP of tenant companies.

In Bekasi and Karawang, there are many industrial parks located along the Jakarta–Cikampek toll road. Most of industry is automotive. The cargo is transported through Jakarta–Cikampek toll road to Tanjung Priok. Local economy is largely depended on this industrial park, because the employment in this industrial park is large scale.

The fourth necessary information is transport infrastructure and lifeline facilities for business, such as traffic infrastructure, i.e. roads, railways, ports, and airports, and lifeline facilities, i.e. electricity, gas, telecommunication, water supply, sewage. The necessary information is description and location of major facilities, contact information and disaster management system. These informations are necessary to make disaster scenario.

He shows the example of infrastructure information in Bekasi and Karawang area, such as road, port, airport, substation, dam, and channel.

He explains how to identify hazards and risk of the area to develop the ABCP. There are two options, i.e. use the experience in the past, such as flood that happen in Thailand and hazard scientific method to simulate the hazard and risk. He shows the figure of steps to develop the hazard scenario: 1. Identify the natural hazard that threaten business, 2. Assess the threatened hazard, 3. Assess the risk considering the vulnerable infrastructure and lifeline, 4. Create the disaster scenario for counter measure the disaster risk. Disaster scenario is used as input for business impact analysis.

The first step is to identify the Natural Hazard that Threaten Business, i.e. collect the existing disaster records from international and national databases. All the natural hazards including earthquake, tsunami, volcanic eruption, flood, typhoon, storm surge and landslide, etc. are considered. And identify the predominant hazards to be considered. It is desirable to compare the multi hazards for same probability. Too rare hazards are not considered for business continuity. The indicator to compare the disaster may be number of casualties or the amount of loss.

He shows the example of data used for Bekasi and Karawang. In this area, flood is predominant area. Next one is earthquake. Tsunami and volcanic eruption is less dominant than the first hazards.

Second step is hazard assessment. Hazard assessment gives information regarding the intensity, magnitude, etc. There are several methods to develop hazard assessment, i.e. 1) use existing hazard map. In many countries, Governmental research institutes and universities may study the hazards and prepare the hazard maps of the area including the historical disaster. If the maps cover the necessary area and are appropriate as the prior condition for planning, the existing maps can be used. Second option is Hazard simulation based on the existing information or surveyed data. He shows the example of flood hazard map in pilot study that includes information regarding probability of flood hazard and maximum inundation depth.

The third scenario is risk assessment. Risk assessment means estimate the damage based on hazard situation and considering the vulnerability and facilities. The damage occurs to the building, transportation and lifeline facilities. Not only the direct damage but the suspended period of services is assessed. The risks are assessed based on the experiences by the disaster in the world. He shows the example of risks by flood, storm surge, earthquake, tsunami, volcanic eruption, and landslide (see slide).

The last step is disaster scenario creation. Disaster scenario is the document that describes the damage to the facilities if hazard occur and the change of the situation over time after disaster occur. The suspension of services and the recovery time of the facilities are included. He shows the example of disaster scenario for electric power supply in case of earthquake.

Mr. Yoshiki Kinehara – Team Member, Area BCP
Determining Area BCM Strategy and Developing Area BCP

Strategy is key process. The WS members of this pilot study discussed and determined Area BCP strategy of the pilot area of Indonesia, Bekasi and Karawang under the cooperation of JICA Study Team.

Area bcm strategy is developed by four questions:

- How impacts will the assumed disaster make on the society and industry of the area?
- What will be the bottlenecks (weak points) for industry continuity at the disaster?
- What objectives should we agree with for industry continuity?
- What activities should we plan and do to improve the capability of industry continuity

But the question for the strategy is how it will impact the society and the area in Bekasi and Karawang.

He explains the impact on Bekasi and Karawang that was discussed in the workshop:

- A wide range of the city would be inundated for two weeks.
- Many people would be casualties and evacuees. Many facilities would be damaged.
- The security would be worse. The shutdown of production, loss of employment and bankruptcy of companies would be caused.
- The local economy would be led to decline.
- By the flood in Bekasi and Karawang, the employees and the toll road will be damaged severely and will delay the recovery of industries.

He shows the damages of industry resources. The building of industrial park is not inundated. The electric power is still continue. But the toll road is closed for two weeks. And the employee cannot work. We estimate the industry will stop operating for more than two weeks and the recovery is very slow.

He explains the bottlenecks for industry, i.e. transportation is depended on toll road, toll road will be inundated for two weeks and traffic jam will be happen; employee cannot work due to inundation; reduction of communication due to outage electricity power.

Transportation from industrial area is depended on toll road to Tanjung Priok. And Tanjung Priok will not be available when Jakarta is flooded.

Objective of industry continuity:

- In the assumed flood, the production activities in the industrial agglomerations could be continued or recovered at an early stage, and the scale of production and employment would be kept as large as before the disaster.
- To achieve the above, the living condition of people and the service of infrastructure and lifeline would be recovered at an early stage with a big effort.
- For other residual risks, the risk shall be estimated accurately and some practical activities will be operated to reduce the risk.

He explains the roles of the stakeholders for industry continuity (slide 8) and the activities to improve the capability of industry continuity.

He explains the mitigation measures for each stakeholders proposed by the working group during workshop to overcome the bottlenecks as presented by Dr. Krishna in previous session. Through Area BCP, these measures should be step up to achieve into implementation.

Develop Area BCP is another key process or Area BCM. Area BCP shows the important information to be share among stakeholders for industry continuity. The WS members and JICA study team described the results of their discussion and develop Area BCP (1st version) of Bekasi and Karawang. This plan is promoted by BAPEDDA of West Java.

Purpose of the plan:

- To sustain the development of the area: continuity or quick recovery of industrial function in emergency
- To assist the activity of stakeholders with their cooperation: their own BCM or disaster reduction measures
- To share the important information among stakeholders: roles of stakeholders, strategy and contents of their activities, and continual operation of this plan

He explains the contents of Area BCP. The stakeholders in pilot area will be expected to continue the activities of Area BCM, and implement this plan.

Dr. Masakazu Takahashi – Team Leader of the Study Team

Exercising and Reviewing, Maintaining and Improving and Next Steps

He explains the current of understanding of exercising and reviewing the Area BCM, and also maintaining and improving the Area BCM and go to the next step.

This is current understanding of exercising. This is the drill during the earthquake. He shows the picture of the exercising of Area BCM (slide 3-6).

Exercising is very important for Area BCM. Area BCM arrangements cannot be considered reliable until they are exercised and have proved to be workable. Exercising should involve: validating plans; rehearsing key staff of stakeholders, because only few stakeholders involve in the working group; integrating the plans with those of the stakeholders; promoting activities of the stakeholders; and awareness raising. Frequency of exercises will depend on the area, but should take into account the rate of change (to the stakeholders and risk profile), and outcomes of previous exercises.

This is the methods of exercising:

- * Testing
 - ✓ Important components such as contact list and status of activities of members.
 - ✓ The members should test activities of their own plan and/or BCP.
- * A discussion based exercise
 - ✓ Bring staff of a stakeholder together and inform them of the plan.
 - ✓ Discussion of the plan to identify problems and solutions.
- * A table-top exercise
 - ✓ Scenario based exercise.
 - ✓ The most efficient method of validating plans and rehearsing key staff of a stakeholder.
- * A training and a seminar
- * A live exercise
 - ✓ Suitable for activities of individual stakeholders.
 - ✓ Can be integrated into a large scale exercise covering an area.

He explains the proposed activities for exercising:

- Studying Conformity and Integrity of Area BCP with Disaster Management Plan and/or BCP of Members
- Study Lessons from Natural Disasters Occurred in the Area and Surroundings, during the project we have done for Vietnam and Indonesia
- Promotion and Awareness Raising

The review should verify that:

- ✓ all key stakeholders, and their plans, activities and internal resources have been identified;
- ✓ all risks, and important external resources of the area such as industries, infrastructure, lifelines and others have been identified;
- ✓ bottlenecks and measures of the area are fit for the purpose, and appropriate to the level of the risk; and
- ✓ Area BCM maintenance and exercising programs have been effectively implemented.

Who should review, validate and approve the Area BCM?

- * The Area BCM arrangements are reviewed either through experts (or auditors) or self assessment.
- * The leader validates and approves the review. Bappeda in Indonesia, Hai-Phong People Committee HPPC (DARD) in Vietnam and PEZA, OCD, DILG, NEDA (Region IV-A) in Phillipine
- * The review should be documented.

We have to keep updating, for example the stakeholders may change, the if the target area of the plan is changed; natural disaster risk is emerged; lessons from exercising and reviewing; lessons from natural disasters in the area and other locations; and other necessary occasions.

Outputs from exercising and reviewing, and maintaining and improving are summarized in the reports and plans, such as Activity report; Lesson learned report; Updated plan; Plan for new risk; Review report of Area BCM; and Maintenance program.

After this project we need to continue this Area BCM approach. He shows the photo that analog the Area BCM as little girl in pedestrian among the people who are doing exercise. Through this workshop and another approach, we expect to bring this approach to the Asean country.

He shows the cycle and explains that currently, we have conducted three steps and have produced the Area BCP version 1 and guidebook. We have not completed the whole cycle of Area BCM. We have to think about how to hand over the Area BCM to the local sides? And also how to sustain Area BCM in those Areas?

Next step in pilot countries:

- ① Review the Area BCP by the stakeholders
 - ✓ Localize the Area BCP, and make the plan specific and workable;
 - ✓ Raise awareness on Area BCM within organizations of the stakeholders through discussion for reviewing.
- ② Implement Area BCM by the stakeholders
 - ✓ Authorize Area BCP;
 - ✓ Receive support from the top management of the stakeholders;
 - ✓ Insure sustainability of Area BCM;
 - ✓ Receive support from key organizations of the countries.

He explains the idea of reviewing the plans, the schedule and the implementation of the plan by stakeholder. The leader, members, supporters of the pilot area implement the second cycle of Area BCM; Improve the plan or newly form a plan for emerging risk; Involvement of JICA is minimum (advisors); Improve the guidebook; Next project.

Question and Answer:

No	Question	Response/Answer
1	<p>Mr. Norith Ma - Cambodia</p> <ol style="list-style-type: none"> 1. Regarding the formulation of working group in the pilot project. In the case of Indonesia, is it temporary working group, or permanent, or based on project? 2. This working group is under the government act or decision or direction? 3. Does the government have the budget package to functioning, implementing the project 	<p>Dr. Krishna Suryanto:</p> <p>This very practical question. At the beginning the working group consists of related government agencies at local and central level, private sector and other institution related to the project. We try to identify organization to be invited into to working group, and we discuss it with West Java Provincial Planning Agency. But actually the process is quite long to discuss with the three districts and city whether they available. At the beginning we want to estbalish official definition of working group by the governor, some letter of assignment of West Java Province Governor. But during the process, the official from Provincial Planning Agency agreed or considers that it is not necessary. The working group</p>

No	Question	Response/Answer
		<p>can be established from the fluid group. It is not very official understanding we have contacted all members to participate. This is more like participative process. And of course we discuss with them this is ad-hoc working group, not permanent, but at the end of the day, we start this is a very important working group to keep sustain in ABCM/ABCP, then in the next seminar, there is suggestion from the participants to establish more permanen working group. Maybe by inviting more stakeholders and need official letter. Maybe will be done in the next step. Basically all participants feel comfortable in fluid discussion</p> <p>Dr. Takahashi: This project is pilot project and counterpart of JICA is AHA Center in 10 Asean 10 countries. So, this is not bilateral project. As Dr. Krishna said that this is not permanent. During the project and workshop, this is found important This is the first step, we cannot make any promise. For Next step this will be bilateral, so there will be legal basis for counterpart and also for working group and also budget should become from government from Asean countries.</p>
2	<p>Ms. Nugyen Thi Thu Ha - Vietnam Related to the next step, I have comment. In the review of Area BCP by stakeholder and make it more specific, who will responsible for the implementation in different area? And also who will responsible in the Area BCP version 2. For example in Vietnam, we have Area BCP and guidebook, who will assign or train by government to responsible for that?</p>	<p>Dr. Takahashi: We are hoping duing this two steps, the objectives will be achieved in the 10 countries.</p>
3	<p>Mr. Elvis Cruz - Phillipine I would like to ask about financing as Prof. Watanbe presented. In Phillipine, it is difficult for financial institution to give us financing since we are devastated by disaster. That's why SME is difficult to get financing, what isDi Filipina sulit bagi kami memberikan kepada institu your suggestion on this?</p>	<p>Prof. Watanabe: SME no response like this, but in Japan, there is association of SME. So the bank did the credit analysis to the community business, not to the individual SME. So, once single SME is less credit, they can cooperate and support each other with support with the local government, then the financial institution as well as insurance company will be happy to lend finance to the community business</p>

LUNCH BREAK

Session 4 Tools for Area BCM

Mr. Yoshiki Kinehara – Team Member, Area BCP *Guidebook*

He explains about the guidebook. The guidebook's name is Planning Guide for Area Business Continuity (Area BCM Toolkit). JICA Study Team is preparing to publish the guidebook of Area BCM in ASEAN by using experiences from pilot studies. This guidebook is a reference document for organizations of public sector, private sector and civil society wishing to introduce Area BCM.

Aim of the guidebook is that Area BCM will be expanded from the pilot areas to other areas in ASEAN. It will make the industry in Asean have capacity against disaster.

The guidebook shows the explanation:

- Why is Area BCM necessary?
 - Natural disasters in ASEAN will stop many industry operations and cause a severe impact on the local and national economy.
 - For industry operations, the business continuity of many stakeholders are required, such as individual companies and employees, supply chains, transportation, power and water supply, ICT, government.
 - Area BCM will promote cooperation of the stakeholders and to improve the industry continuity.
- What is Area BCM?
 - Holistic management process that identifies potential threats to an organization and the impacts to area business operations those threats, if realized, might cause,
 - and which provides a framework for building area resilience with the capability of an effective response that safeguards the interests of its key stakeholders, reputation, brand and value-creating activities.
- Who promote and join in Area BCM?
 - Leader (example: Local government)
 - Members promote the area BCM and provide necessary information (example: Local Offices of National Government, Operators of Transportation and Lifeline, Industrial Parks, Private Enterprises)
 - Supporters (example: National Government, Governmental Research Institutions, Universities and Others)
- How is Area BCM utilized?
 - The management system is required to ensure the sustainability of Area BCM by stakeholders. Area BCM is depended on management cycle, which consists of 5 steps.
 - Understanding the Area
 - Determining Area BCM Strategy
 - Formulate Area BCP
 - Exercising and Reviewing
 - Maintaining and Improving

This guidebook consists of 7 chapters, appendix, and supplements.

1. Introduction
 2. Area Business Continuity Management
 3. Understanding the Area
 4. Determining Area BCM Strategy
 5. Developing Area BCP
 6. Exercising and Reviewing
 7. Maintaining and Improving
- Appendix Procedures for Developing Area BCP:

- Procedures for developing Area BCP used for the pilot studies are shown.
- At the pilot Studies, Work Shops were held at 3 times in each area.
- At WS, some templates were used to guide the group discussion.

Supplement-1 Area BCPs Prepared for the Pilot Areas

Supplement-2 Methodologies of Hazard Assessment

Please read the guidebook and send it to JICA

Please use this guidebook to develop Area BCM in your country.

**Mr. Shukyo Segawa – Leader of Natural Disaster Risk Assessment
*Country Reports and Risk Assessment Reports***

Tools for Area BCM:

1. Guide book
2. Risk assessment report fro 3 countries
3. Country report fro 10 Asean countries

Risk assessment report is provided for 3 pilot countries. For 3 Pilot Areas: Hai Phong (Vietnam), Cavite, Laguna (Philippines), Bekasi, Karawang (Indonesia). The Contents are: Profile of Pilot Area and Natural Hazard Assessments. Supposed Readers will be Stakeholders of the pilot area and Enterprises planning to expand into the areas.

The content of the risk assessment report is profile of pilot areas, i.e. basic information, outline of local authority, economic situation, natural hazards, transport infrastructure, lifeline facilities.

Questionnaire is used to conduct infrastructure and lifeline survey. He shows the study on infrastructure and lifeline facilities.

He shows the figure of natural hazard map of pilot areas, i.e. Flood simulation in Bekasi-Karawang, Storm surge simulation in Hai Phong, earthquake simulation in Cavite, Laguna, Tsunami simulation in Cavite, Laguna.

Country report is provided for 10 ASEAN Countries and it is based on national level data book on natural disaster risk, for example national distribution risk map in Myanmar, Thailand, Malaysia. The contents of country report are:

- Natural Disaster Risk
- Industrial Agglomerated Areas and Investment Risk
- Relevant Infrastructure and Natural Disaster
- Economy, Industry and Trade
- Physical Distribution Network
- Legislative Systems
- Implementation of BCP

Supposed Readers are enterprises considering to expand into ASEAN countries.

Question and Answer:

No	Question	Response/Answer
1	<p>Mr. Norith Ma - Cambodia</p> <p>1. The project will be expanded from the pilot countries to other countries in Asean because it is inline what I intend. After the pilot project, at least we in Cambodia can promote public awareness and promote</p> <p>2. Related to guidebook and it will be released in September. But based on presentation from Mr. Segawa that the country report, natural disaster, risk assessment, please approach us for validation data and information, so we can update, validate, before printing and publish the guidebook in September.</p>	<p>Dr. Takahashi:</p> <p>1. Pilot study is focused in the 3 Asean countries. During this project, we try to develop the methodology for Area BCM and it is summarized in a guidebook. We hope, this guidebook can be used by Asean member countries. Each country needs to start initiative for introducing Area BCM. And also need support for this.</p> <p>2. Second question regarding the guidebook, country book and risk assessment report of 3 countries. This is preliminary version and we are revising this document by team of JICA. Our version will be available in January next year. During next phase which I introduced, step 2, each country develops the country report. Risk assessment report should be developed by pilot countries.</p>
2	<p>Mr. Cruz Elvis - Phillipine</p> <p>My question is about the version 2 that will be issued in December. Version 1 is released in September, and version 2 is in December. Do you need some input from the pilot countries to get the 2nd version?</p>	<p>Dr. Takahashi:</p> <p>Version 1 has already provided to the working group member during the 3rd workshop. The content of the plan includes the distribution of the plan is a bit general, need more input from working group member.</p> <p>We send the plan to the working group member. In Phillipine, they have started to distribute the plan, and also going to improve and promote report of exercising. We are expecting this is provided when Workshop in November for revising into version 2.</p>
3	<p>Mr. Khamphao Homphangna - Lao PDR</p> <p>I would like to know about the natural disaster insurance to protect property from natural disaster. Is there any possibility to publish the insurance related to natural disaster? Because in Asean member countries, some countries are prone to disaster, but I don't know the law about the law of insurance for business continuity.</p>	<p>Dr. Takahashi:</p> <p>This is first approach, and also during workshop we have discussed major things including insurance. We have corrected things for business, we have not completed the content of document, but the approach will include all stakeholders, government and business, so during this awareness raising process, this issue will be raised by many stakeholders. So I hope it will be input for revision regarding the insurance during disaster.</p>

Session 5
Approaches for Promoting Area BCM in ASEAN

Mr. Sigit Padmono – Head of Sub-division Role of Organizational Social and Community, Indonesian National Agency for Disaster Management (BNPB)
Area BCM; Expectations, Contribution and Related Activities by Indonesia

Indonesia has many disaster prone areas because of earthquake, Tsunami, Volcanoes, Flood and hidrometeorologic hazard. Industrial supported for Indonesia economic GDP more than 60% although 99% is small and medium enterprises and all of them has high risk to collapse when disaster happen. Indonesia has more than 147 Agglomerated Industrial Area and there is no A-BCP has formulated

A-BCP is the new concept that evaluated the impact of agglomerated industrial area with soround aspect, so we hope continuesly untuil we have a final study. Technical guideline A-BCP should beformulated and can be applied because Indonesia that has 147 agglomerated industrial areas, From this seminar, there is a concept of bussiness federation that can certificate all A-BCP in each country

Private sector has contribution all disaster that happen in Indonesia, especially in emergency phase. BNPB will support all activities programme of Disaster Risk Reduction by study or implementation. BNPB will make more coordination with ministry of Cooperation and SME's, Ministry of Industry and Chamber of to formulation of BCP in the Agglomerated area and SME's

BNPB has start inniciation of private sector involvement in the preparedness phase of disaster, we hope they can survive for their own bussiness and think about supply chain, employee and related supported. BNPB involved in the APEC Commission to prepared of BCP SMEs, so in the future all of SMEs can formulate BCP before get government or Bank credit facility

Mr. Elvis S. Cruz – Planning Officer III, Office of Civil Defence (OCD) Region IV-A
Area BCM; Expectations, Contribution and Related Activities by the Philippines

He explains the workshop in Manila, especially 3rd workshop, the participants of workshop, and the structure of workshop. The workshop is facilitated by pivo and/or students from university. He also explains about the topic of discussion.

He explains the result of discussion and the consideration of disaster risk in Cavite and Laguna, Metro Manilla, where many industries are located. The disaster considered is earthquake, which the once in 100 to 200 years probability.

He also explains the next workshop including the topic and result of workshop 2. They describe the assessment of the impact of disaster.

He explains regarding the discussion and topic in 3rd workshop and also the result. Additional regulation needs to be done. The contents of ABCP is explained in this presentation, including specific measures and how to be planned.

He explains the proposed measures for ABCP sustainability and the implementation of ABCM through the process cycle.

He explains the milestone and also the next steps, as well as the view and hope of the country, i.e. ABCM is very important, timely and significant to develop resiliency and sustain economies in the region in view of global disaster trends, the Philippines support ABCM for asean and will help in disseminating concept of abcm locally, ABCM is scalable and should be promoted, knowledge gained through abcm is helpful among communities, government and private sector in undertaking proactive measures against natural hazards as well as ensuring quick recovery from impact of large-scale disasters, and more ABCM continuing activities and cooperation across many sectors and levels.

Ms. Nguyen Thi Thu Ha – Head of Training and Technology Transfer Division, Ministry of Agriculture and Rural Development (MARD)

Area BCM; Expectations, Contribution and Related Activities by Viet Nam

She explains the main activity of the project in Vietnam and stakeholders that are related to the ABCP, i.e.:

- Mapping of industrial agglomerated areas, infrastructure and others;
- Assessment of hazards and disaster risks;
- Preparation of risk assessment reports;
- Formulation of Area BCPs;
- Preparation of guidebook;
- Workshops
- Seminars
- Panel of Experts

She explains about the workshop that held in Vietnam and also the outcome. The outcome of 1st workshop is Proposed Policy Statement generally acceptable with minor correction (Keywords: *Information-sharing and cooperation, mitigation, hazards understanding*), Storm and storm surge as hazard of primary concern, and Critical concerns identified. The outcome of 2nd workshop is Anticipation of impact of disasters to the industrial agglomerated area and community, Understanding of BCP and Weaknesses, and Formulation of proposed mitigation measures that will involve various organizations from government, private sector, and communities. The outcome of 3rd workshop is Draft is generally acceptable – requires additional inputs to improve contents (more detailed actions and protocols, organizational responsibilities, resources, etc.), Action Process Model proposed by JICA Team is acceptable and was understood, Next steps would include information (ABC Plan) dissemination to raise awareness and actions by stakeholders, and Pilot Implementation to test.

She also explains the involvement of stakeholder, including private sector and government.

She explains the discussion conducted in the final seminar. Some of them are considering other potential hazard. It needs to conduct more detail hazard map and also scenario. It is more appropriate to focus on raising awareness and communication. Involving private sector is an important part. But as long as they realize that ABCP is important. They can increase their profit by ABCM and how they can recovery in short time when the disaster happens.

In Vietnam, there are many SMEs, how to increase their participation. Because we thought that ABCP can apply to work and disaster. We need to implement the public private partnership.

She explains the next steps. After version 1, after updating, there will be version 2. We also need in assessing and reviewing, and how to maintain and improve?

Question and Answers:

No	Question	Response/Answer
1	<p>Ms. Nurul Fatien Binti Rusly – Malaysia</p> <ol style="list-style-type: none"> 1. The engagement with private sector is not easy because most of them is profit oriented, how to engage them, how is the cooperation between them? For JICA, is there any strategy to get their involvement? 2. How to ensure it is workable by the private sector?, whether it is by punishment, etc? 	<p>Mr. Elvis Cruz: In Phillipine, there is regulation, such as Phillipine Zone Authority. We ask the economic authority zone to ask the cooperation to get involve. And for local government, such as in Laguna, they have regulation for business that leaving having their operation in the area, we can have their commitment.</p> <p>Ms. Nguyen Thi Thu Ha It is difficult to take participation from private sector. In Vietnam, there is activity in Vietnam city, and involve large companies, so they care about disaster a lot. We try to work with Vietnam government city and ty to make framework before activity, so private sector and government can cooperation together. Bsed on this, we have the benefit from enterpirses as well as government. We also work with industrial association, and through this, the awareness can be raised and participation from larger companies can be done.</p> <p>Dr. Krishna Suryanto: Indonesia has more or less similar way. We work with local government and local government approach the industry, they have good communication. They will able to conveys them of the benefit of this initiative.</p> <p>Dr. Takahashi: For three pilot countries, we have tried similar approach. WWe have key organizations, and key persons. And by head of those key organizations we try to include promoting this project and try to invite private sector to working group. For Phillipine, EZA, OCB, and local government including MMDA. For Vietnam together with key organization, Hai-Phong people committee and also economic authority zone. Ask Vietnam Chamber Industry to bring other stakeholders to working group. We also have selected industrial park, like KIIC, in Indonesia, and through them we ask more industry.</p>

Grup Discussion

Introduction:

Dr. Krishna S. Pribadi

Objective: to discuss how to introduce and promote Area BCM in ASEAN

3 sub-groups:

1. Indonesia (leader), *Brunei Darussalam (presenter)*, Myanmar, Prof. Watanabe, Mr. Kinehara
2. Phillipines (leader), Cambodia, *Malaysia (presenter)*, Mr. Matsumoto, Mr. Shanty, Mr. Segawa
3. Vietnam (leader), Lao PDR, *Singapore (presenter)*, Thailand, Mr. Saiful Anwar, BNPB (Mr. Agung)

Questions to be discussed:

1. Current situation of approaches related to business in coping with disaster
2. Comments and areas to improve on Area BCM
3. Approaches to introduce and promote Area BCM in your countries and issues to consider

Discussion process:

- Determine rapporteur of each Sub-group, discuss and agree rule of the game of the discussion (5 min.)
- Discuss each of the topic for 15 min (total 45 min)
- Presentation by each rapporteurs (3 x 5 min)
- 10 minutes for general discussion

Group presentation:

Group 1:

1. Current practice is actually, we agreed on that it has been practices. Members of the government and private sector. For example Indonesia, industrial park, local government, and area surrounding of industrial park will be taken action by local government. In Brunei we have natural disaster committee, disaster management, we also TDMC at district level. And the government provide support for the business if they need support in reconstruction after disaster.
2. there are three things to improve on Area BCM, i.e.:
 - a. Keep the professional thing the area. Most of our problem ini management is to manage this thing. For example in Brunei, head of disaster management committee, the time is for three years, but mostly they transfer to another department.
 - b. Provide professional certification for natural disaster management
 - c. Provide awareness of stakeholder
3. 1) To integrate ABCM into regulation, for example regulation government to support Area BCM. And economic incentive by the government, such as procurement. 2) take responsibility by private swasta including the impact of disaster. For example in Brunei, when disaster it can manage by industry.

Group 2:

1. As we know that Indonesia and Phillipine is the target area for the project. And for the Phillipine, the BCP plan on the earthquake. From Cambodia and Malaysia, they are more focusing on public awareness, in non-structural and structural measurement. For structural, for example in Cambodia, private sector provides the structure for evacuation. For Malaysia, together with government to build embankment. For non-structural measures more like awareness program, for example in Indonesia there are many exercise with the private sector, such as exercise for oil and gas company.
2. 1) Time frame of implementation the Area BCM 2) the possibility organization to implement the Area BCM 3) should conduct risk assessment on the BCM and well established supply chain companies or agencies 4) establish public private partnership through CSO 5) establish public awareness platform
3. Top-down approach, from national level, provincial level to the community. We agree to determine the focal point and agency who responsible for Area BCM to ensure the sustainability of the plan. The leader of the community should recommend the Area BCM and link it to the activity. And also raising the public awareness and integrating the Area BCM into their activity.

Group 3:

1. The awareness raising is very national driven, for example there is government committee in Vietnam, called PCCI to implement disaster management and risk assessment and also have memorandum that encourage private sector. Thailand has disaster management law, disaster management plan, such as flood incident Thailand. It also has business continuity plan for large company, but also for SME. So it has ABCP for SME. For Lao PDR, there is also national disaster contingency plan that is similar with the Vietnam. In Singapore, it is similarly, i.e. national government driven, the different is Singapore is small country, so ABCM is not really applicable, because disaster is not really exist in the whole country. But we still try to have certain ABCM, certain industrial financial area, but it more focus on the financial for disaster management. So, if there is national disaster like flood hit the country, there will be a national plan. In Indonesia, it is very different, since Indonesia has a lot of islands, it also has provincial government. Disaster management is difficult to implement at national government level. But there is certain agency at local level to count loss and report to the government, and also certain key, for example during Merapi Volcano eruption in Jogjakarta, there is community involvement and also in Aceh, when tsunami, there is special agency to help people there.
2. The area to be improved is the involvement of more community. Since disaster will impact to the community more than industry. If the business bankrupt, so the community will lose their job. ABCP will help community to keep their job.
3. Coordination between different agencies in the government and private sector. One issue is lack of human resources, so it is need to consider. Idea of knowledge of ABCM, since it is new concept, and in several Asean countries, it is quite difficult to do training for private and public. That is also one of issues to consider, and also regarding funding. For Indonesia, the government need to have relationship with the central bank to help in the financial matter.

Comment:

Mr. Elviz Cruz:

Can we use that video to promote and introduce the Area BCP?

Dr. Takahashi:

It is difficult to give it. But if there is seminar, JICA will play it for you.

Dr. Krishna S. Pribadi:

It is good ide to produce the material in the form of video to be distributed.

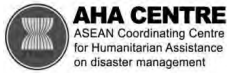
Closing the Seminar by Mr. Koki Yoshida.

A6 Record of Progress Seminar

A6-1 Record of Progress Seminar (Jakarta)

A6-2 Record of Progress Seminar (Manila)

A6-3 Record of Progress Seminar (Hanoi)



**Progress Seminar
for**



**“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formulation for Industrial Agglomerated Areas in the ASEAN Region”**

December 20, 2013, Sari Pan Pacific Hotel, Jakarta-Indonesia

*Under a Joint Project of Japan International Cooperation Agency (JICA) and ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

Participants

No	Name	Organization	Position
1	Adityawarman	Kementerian Pertahanan	KSBD GUNKUATKmcadda Ditkom Ditjen Kemhan
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4	A. Haris	BASARNAS	Kabag. KTLN
5	Sigit Padmono	BNPB	N/A
6	Agung Wicaksono	BNPB	N/A
7	Yulianto	BNPB	PM
8	Firza G.	BNPB	N/A
9	Anny Isgiati	BNPB	Dir. PM BNPB
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11	M. Adil Wanadi	Kementrian Perhubungan	Kasubid Pel. Udara
12	Sukirno DS.	Kemenhub Ditjen Hubla	Kasi Penanggulangan Musibah
13	Dedi Priyanto	Kemenhub Ditjen Hubla	Pelaksana Subdit Penanggulangan Musibah
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18	Erwin	BMKG	N/A
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21	Kuswiyanto	Bappenas	N/A
22	Agus Widodo	Kemenperin	Kabag. Administrasi Kemenperin
23	Bambang M.	BPPT	Kabid Fisik
24	Pariatmono	KEMENRISTEK	ASDEP IPTEK Pemerintah
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31	Revalin Herdianto	Andalas University	PSB Unand
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40	Andy	HM. Sampoerna	Manager ComDev
41	Aryo	PT.Limtaro	N/A
42	Susilaningsih	AMEC BERCA Indonesia	HRD Manager
43	Noviandhi	PT. GIA	Manager ERP
44	Tri Atmojo Purnomo	PT. GIA	N/A
45	Sri Suryanti	PT. MMID	SPV Environment
46	Farid	PT. Tarkindo	SHC
47	Julia K.	PT. BBSI-CCM Group	BusDev
48	M. Wahid	PT. Telkomsel	Officer
49	Purwoko Deni R.	PT. TMMIN	External Affairs Div.
50	Samuel F. Silaen	HIPMI Peduli (Himpunan Pengusaha Muda Indonesia, Indonesian Young Entrepreneurs Association)	N/A
51	Nemi Marlina	Asean Secretariat	Officer
52	Ruby Mangunsong	World Bank	N/A
53	Haidi MM. Din Syah	Muslim AID	N/A
54	Asep Beny	Humanitarian Forum Indonesia	Staff/anggota
55	Faisal Djalal	PLANAS/ MPBI	PLANAS/ MPBI
56	Anggiet	AIFDR	AIFDR
57	Tini Astuti	AIFDR	AIFDR
58	Victor Rembeth	Indonesian National Network on Disaster Resource Partnership (DRP)	NPM
59	Muhammad Sabeth	Dompet Dhuafa	GM SocDev

**Progress Seminar
for**

**“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formulation for Industrial Agglomerated Areas in the ASEAN Region”**

December 20, 2013, Sari Pan Pacific Hotel, Jakarta-Indonesia

*Under a Joint Project of Japan International Cooperation Agency (JICA) and ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

JICA and JICA Study Team

No	Name	Organization	Position
60	Said Faisal	AHA Center	Executive Director
61	Janggam Adhityawarma	AHA Center	Senior Disaster Monitoring and Analysis Officer
62	Yoko Yamoto	JICA Indonesia Office	Representative for ASEAN Coordination
63	Katayama Hideki	JICA Indonesia Office	Disaster Management Advisor
64	Masakazu Takahashi	AHA Center -Jica Study Team	Team Leader
65	Yoshiki Kinehara	AHA Center -Jica Study Team	Team Member
66	Shukyo Segawa	AHA Center -Jica Study Team	Leader of Disaster Risk Assessment
67	Kouichi Hasegawa	AHA Center -Jica Study Team	Team Member
68	Kotaro Fukuhara	AHA Center -Jica Study Team	Team Member
69	Krishna S. Pribadi	AHA Center -Jica Study Team	Coordinator, MC
70	Aria Mariany	AHA Center -Jica Study Team	Staff
71	Bayu Novianto	AHA Center -Jica Study Team	Staff
72	Lusiana Rumintang	AHA Center -Jica Study Team	Intepreter

Progress Seminar, Jakarta

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

December 20, 2013, Istana Ballroom, Sari Pan Pacific Hotel, Jakarta, Indonesia

Under a Joint Program of Japan International Cooperation Agency (JICA) and ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)

Agenda

December 20, 2013, Friday

Agenda	
8:00-8:30	Registration
8:30-9:00	<p>Welcome Address Mr. Said Faisal Executive Director ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)</p> <p>Ms. Takako Ito Deputy Chief of Mission Mission of Japan to ASEAN</p> <p>Ir. Dody Ruswandi Deputy Chief for Prevention and Preparedness National Agency for Disaster Management (BNPB)</p>
9:00-9:40	<p>Introduction and Area Business Continuity Management</p> <p>Introduction of the Project Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Concept, Methodology and Benefits of Area BCM Mr. Yoshiki Kinehara Team Member, Area BCP</p> <p>Q & A / Discussion</p>

9:40-9:50	Coffee Break
9:50-10:50	<p>Natural Hazard and Risk Assessment</p> <p>Current Status of Natural Hazard and Risk Assessment of Indonesia Dr. H. Pariatmono Sukamdo Head of Information Center for Research on Natural Disaster, Ministry of Research and Technology (RISTEK)</p> <p>GIS Database for Formulating Area BCM Dr. Kouichi Hasegawa Team Member, GIS and Database</p> <p>The Results of Natural Hazard and Risk Assessment for Indonesia Mr. Shukyo Segawa Team Member, Leader of Disaster Risk Assessment</p> <p>Q&A / Discussion</p>
10:50-11:30	<p>Pilot Study for Indonesia</p> <p>Pilot Study for Indonesia Mr. Yoshiki Kinehara</p> <p>Results of the First Workshop Ms. Linda Al Amin Head of Physical Division Regional Development Planning Board (BAPPEDA), West Java Province</p> <p>Q&A / Discussion</p>
11:30-11:40	<p>Closing of the Seminar</p> <p>Ms. Yoko Yamoto Representative for ASEAN Coordination Japan International Cooperation Agency (JICA)</p>
11:40	Adjournment
11:40-13:15	Lunch

MC: Dr. Krishna S. Pribadi and Mr. Janggam Adhityawarma

Minutes of Meeting

Progress Seminar “Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

Sari Pan Pacific Hotel, Jakarta, 20 December 2013

08.30-09.17 Welcome Address

Mr. Janggam (MC):

Good morning and thank you for coming to the seminar for the Area BCP. Ladies and gentlemen welcome to the event of half day seminar on disaster risk assessment and the formulation of area business continuity plan for agglomerated industrial areas.

This event is held with the collaboration between JICA and ASEAN dan didukung penuh oleh BNPB dan AHA Center. Untuk mempersingkat waktu, acara akan dimulai dengan pembukaan. Yg pertama, said fasal dari AHA Center untuk memberikan sambutan.

1. **Mr. Said Faisal (Executive Director – ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Center))**

Good morning ladies and gentlemen. I would like to thank to the government of Japan, Oyo International, Mitsubishi, and the engineeri to support us ini this project.

This project is based on several disasters that occurred in ASEAN, especially the flood disaster that occurred in Thailand. We can see the tight connectivity between disaster and industry. Flood disaster in Thailand caused economic lost at the most. If the industrial area is stricken by disaster, it will affect the global chain. For example, if the sparepart industry in the disaster prone area is stricken by disaster, it will also affect the industry that uses the sparepart. Besides, export problem will arise, it can be seen from the industry in Thailand that produce chip. They were not concerned about the immediately recovery after disaster, but they were more concerned about the trust from the costumers. If the consumer could not get the good supply, it will affect the compacy credibility in supplying goods to the consumers in the whole world. Disaster has significant impact for economic and global economy when disaster stricken.

The government of Japan has been helping AHA Center. This is one of the projects that we think is very important.

This project is implemented by JICA. It started with the BCP, business contrinuity plan. If the problem can be solved, there will be disturbing production capacity, and the problem is not solved. The important thing is the consumer trust, when industry is not capable to deliver the promised products.

In the bigger context, it can influence the investment planner. The country should capable to become resilience in overcoming the future disaster, and it will become one factor that is considered by investor or businessman in implementing the business in one country.

We have three pilot projects in this project, i.e. Indonesia, Philipine, and Vietnam. These pilot projects are chosen as step to acknowledge the problem, what are the similarity, what inputs can be given to the ASEAN and the government.

I also acknowledge BNPB that support the implementation of pilot project in Indonesia. It will benefit Indonesia and the whole country.

Thank you to the Asean Secretariat and AHA Center, BNPB, JICA, and also ladies and gentlemen who provide positive and constructive input and can be additional value for the government and ASEAN

Thank you for all your support. Today we hope we have a productive and fruitful discussion. Thank you.

2. **Ms. Takako Ito (Deputy Chief of Mission – Mission of Japan to ASEAN)**

Good morning everyone. It is my pleasure to be here on behalf of the Japanese Government for having workshop on business continuity plan. Last Saturday, we have a special community summit for Japan-ASEAN 40 anniversary of participant cooperation. Leader from ASEAN team member state and represented by prime minister get together in Tokyo. They adapted disaster management in long term cooperation and its implementation plan. Impacted element included there is the cooperation in the field of disaster management. Japan has been cooperating for establishment and operational institution of AHA Center. Our cooperation does not stop here, we will continue to support first Japanese AHA Center and further institutionalizing AHA Center as a half of disaster management cooperation, but also empower each country in term of infrastructure of local such as business continuity plan.

She explains the disaster experience in Hokaido. She also explains the earthquake disaster experience in Japan and Flood disaster in Thailand has stopped the industrial activities. And from these experiences, it could be realized that the business continuity after disaster is important.

Area BCP is new concept for Asia, but BCP can help industry in recovery from disaster and ABCP can ensure the business continuity of industry.

She is welcoming the participants for seminar today and is wishing them to have a productive discussion in seminar.

3. **Ir. Dody Ruswandi (Deputy Chief for Prevention and Preparedness – National Agency for Disaster Management (BNPB))**

Bismillahirrohmanirrohim. Assalamualaikum Wr.Wb.

He shows what the government of Indonesia and international partner has conducted. They conducted assessment and the result was that productive private sector was damaged due to disaster, for example 100 SMEs of the city of padang were disrupted by earthquake and more than 70% hotels were damaged and destroyed.

The assessment team came out with the recommendation:

1. Effort rebuilding the province preparedness since it is prone to earthquake disaster, disaster mitigation will reduce community vulnerability.
2. Incorporated disaster mitigation effort. Scientist shows that West Sumatera will be stricken by 8 richter scale earthquake.

The law of DM already mandates that industry should be contributed in DM in Indonesia.

In term of industrial agglomerated areas. Where many industries operate there.

Industry in Indonesia is market connected. As mentioned by Pak Faisal, one area is affected by disaster, so other area will also be affected.

The fact above and knowing more than 50% area of Indonesia are prone to disaster, we need to build disaster risk reduction effort. The government, private and community need to work together. Markets of Indonesia are interconnected. If we do not manage properly. For your information, the government of Indonesia is enhancing cooperation with private sector.

Next five year BNPB is going to focus to private sector. Private sector have more resources. Now they prepare to support all the activities regarding private sector related disaster mitigation and disaster preparedness.

4 weeks I have attended seminar for private sector. The interested of private sector is growing and growing, we will see what will happen in next 5 years.

He mentions how private sector can contribute in disaster management. In the establishment

of *Desa Tangguh Bencana* (Disaster Resilience Village), private sector facilitates the village to develop community preparedness, such as drill, planting the trees, etc.

The integration of development plan from government, community and private sector is also important. BNPB develop contingency plan, industry has developed BCP, but it is not integrated yet. BCP cannot be separated from the area contingency plan.

Simulation is also important to recognize the probability disaster impact in the future.

BCP is important to acknowledge how far industry will have damage and losses due to disaster.

Thank you for your attention and participation.

Hopefully, there will be cooperation among government, community and private sector in the future.

~ *Photo Session* ~

09.23-09.57 Introduction and Area Business Continuity Management

1. Introduction of the Project by Dr. Masakazu Takahashi (Team leader of the Study Team)

He introduces the project, why this project is important, and why ABCP is also important.

He also explains the economical impact of natural disaster. For example, the Kobe earthquake. Many people were died due to earthquake. Building collapsed killed people. Fire also killed people and destroy Kobe City.

Infrastructure such as road was destroyed due to earthquake. Kobe Port was also not be functioned for several months due to earthquake.

How the economic condition of Kobe?

The business of Kobe was port. What happened to the business in Kobe? For example the economical impact of Kobe City?

One thing that becomes background of this activity is the earthquake in Tohoku which caused economical impact at local, regional and global level.

The simple explanation why ABCP is needed is that the agglomerated industrial area is supported by electricity, transportation infrastructure (road, harbor port, airport). When disaster occurs, all stakeholder needs to be involved.

Why ABCP is important? The competitors in same area share risk each other.

It needs to recover post natural disaster, beside considering the competition. The stakeholders need to discuss how businessman can recover after stricken by natural disaster.

He explains the activity.

This activity is done in 10 ASEAN countries, and 3 countries were selected as pilot project.

Natural disaster risk assessment is conducted in 10 Asean countries

The development of concept of ABCP is done in 3 pilot project countries.

He explains the project schedule. It was started from Februari and will be completed in 2014.

Seminar progress will be done in the capital of pilot project countries (Hanoi, Jakarta, Manila)

He explains the current agenda.

- Introduction of the project
- Natural hazard and disaster risk assessment (practice in Indonesia and its outcome)
- Case study in Indonesia → the result of workshop in Bandung on 17 December 2013

2 **Concept, Methodology and Benefits of Area BCM by Mr. Yoshiki Kinehara (Team Member of Area BCP)**

Good morning. Industry in Indonesia is fast growing.

He shows the picture regarding the post disaster recovery. The company without BCP cannot recover after the disaster occurs. With BCP, the company can recover but only 50%.

He also explains the business resources, i.e.: employee, cash, property. Industry needs those resources to continue their business.

BCP will save the resources from disaster, how much damage can be accepted for industry?

He presents the picture regarding recovery process from disaster for industry with and without ABCP.

He explains the benefit of ABCP for industry, for government and for other related stakeholders.

The main informations that will be shared through this activity are:

1. Hazard in the area
2. The impact to the business

Business recovery from disaster needs about 1 month. First reason is that industry has already had the BCP. Second reason is that, the electricity power has been fixed at the beginning, and local government recover the inhabitant community at early stage.

ABCP will strengthen the area to face the disaster, and it requires the harmonious cooperation among government, infrastructure operator, and community.

Discussion:

1. **Susilaningsih (private sector)**

What global strategic steps to fast recovery of industrial area, and what stakeholders be involved for the BCP?

Response:

1. **Dr. Takahashi:**

ABCP includes industrial park, and also transportation infrastructure operators, which includes road, train, harbor, airport, and utilities, such as electricity, etc, as well as government and research institution. They are all stakeholders of area BCP.

The strategy is sharing information including information regarding hazard, disaster risk and also bottle neck, how they can have common understanding regarding the problems issue in the bottle neck.

Question:

2. **Ahmad wahyudi (Kementrian Perhubungan-Ministry of Transportation)**

The increasing of community preparedness who are impacted directly needs to be discussed in each working group, both public facilities and private, as well as the first rescue team

3. **Taruli aritonang (HM sampoerna)**

PT. HM Sampoerna was operated in the KIIC. How can business sector be participated specifically in the industrial area, such as KIIC?

Response:

2. **Takahashi:**

ABCP is sharing common information, sharing program in the area. Many stakeholders participated in the Area BCP. KIIC and other industrial areas are key stakeholders in implementing the ABCP. Program of private sector in industrial area is a main aspect to recover the business. We would like the industry and industrial area have program to overcome natural disaster. Private sector that is joined in the ABCP in order to share its

current program.

Small medium enterprise is weak toward natural disaster. The result of this project is expected to be conveyed to the small medium enterprise in the future.

~ *Coffee Break* ~

10.14 -11.07 Natural Hazard and Risk Assessment

1. **Current Status of Natural Hazard and Risk Assessment of Indonesia by Dr. H. Pariatmono Sukamdo (head of Information Center for Research on Natural Disaster, Ministry of Research and Technology (RISTEK))**

He presents the mapping of disaster institution which is seen from the side of Knowledge and Technology. From knowledge and technology side, there are three groups of disaster institution in Indonesia:

1. The institution that gives information (LAPAN, BIG, BMKG, BPPT)
2. The institution that is joined: ESDM (Energy and Mineral Resources), transportation, Natural Environment (LH), universities, public work, etc
3. The institution that uses the information

He presents the general description of disaster from point of view knowledge and technology.

He explains one by one the job description of each institution.

LAPAN. It has information system regarding disaster, i.e. SIMBA LAPAN. It gives daily information regarding the cloud and estimation of rain fall, fire level system, hot spot, and flood. Monthly information, such as climate, hazard level system, hotspot. Ministry of Research and Technology was given the monthly information periodically.

BIG (Geographic Information Agency). There is one map policy. Other institutions are not allowed to publish map. BIG give basic map that can be developed into thematic map by each institution. There is also one reference policy. Development of map in Indonesia is bonded reference that is stipulated by BIG. He explains the product that is published by BIG, i.e. basic map with small scale (1:1.000.000 to 1:2.000.000), it intends to produce map with big scale (1:25.000), but it requires large budget. Small scale map cannot be used for further analysis. He explains type of maps that are published by BIG. All products produced by BIG is funded by country. So, if community wants this map, they have to change the printed fee. There is one unit in BIG that provide service to the community who needs maps from BIG.

BMKG (Meteorological, Climatological, and Geophysical Agency). The scope of work of BMKG is to facilitate the activity in the field of meteorology for government and private sector and to undertake the cooperation. He explains the product of BMKG, such as hypocenter, automatic delivery of earthquake data through email. BMKG also produces bulletin, current update of earthquake, map that is related to geophysics, public consultation, seminar, etc. BMKG is under the authority of Ministry of Transportation (Kemenhub), because its main task is to provide service for aviation service.

BPS (Statistic Agency). Its work is more in economic sector currently. This institution should be used as an institution that can provide information for disaster statistic. Nowadays, disaster statistic is still under BNPB's work. In the future, BPS should be able to provide statistic data regarding disaster.

Ministry of Energy and Mineral Resources. Under its authority, there is Geology Agency. Its task is to provide the geological policy formulation, research plan and program, the implementation of research and service, and conducting survey of geology, geological disaster and environmental geology. It also provides the survey result. There are also several centers under its authority, such as PSG (Center for Geological Survey), PSDG (Center for Geological Survey and Data), sub-center for environmental geology, and PVMBG (Center for Volcanology and Geological Disaster Mitigation). He explains each center.

Department of Forestry. It is much related to the forest fire, the environment conservation,

forest protection, the use of natural resources, institutionalization and partnership.

Ministry of Transportation (Kemenhub). Under its authority, there is BASARNAS (National Search and Rescue Agency), which is more important in emergency issues.

Ministry of Public Work. So far, the disaster-related activities that are managed by public work agency are earthquake, flood, landslide, etc. Guideline on building engineering is published by Ministry of Public Work.

Ministry of Environment. All environmental issues are undertaken by this ministry.

Universities. There are some universities works in disaster field, such as ITB, UG, and nowadays, the number of universities that involve in disaster field are quite a lot, and they are incorporated in university forum for disaster risk reduction.

BPPT (Agency of Technological Application and Assessment). By law, its tasks are observation, guidance, and service. But there are many units under its authority. AHA center is in corporate with the BPPT. BPPT also has engineered the disaster mitigation equipment, such as television as tool to spread the disaster information.

There are some institutions that are not presented yet here, such as LIPI (Indonesian Institute of Sciences). There is geotechnological center, under LIPI's authority, that provide information regarding palae-tsunami.

BNPB (National Disaster Management Agency). It has network at local level, i.e. BPBD (local Disaster Management Agency). It is based on Indonesia Law Number 24/2007 concerning Disaster Management that mandates each province establish BPBD.

While this can be delivered because the study is not completed yet.

2. **GIS Database for Formulating Area BCM by Dr. Kuichi Hasegawa (Team Member, GIS and Database)**

He presents the objective of the activity.

He explains the basic methodology of GIS. Satellite map was used as basic map. Additional data such as administrative boundary is gained from downloaded map.

Natural hazard information is collected from open source, such as EM-DAT. Data was also collected by local consultant.

The methodology to plot the map:

1. Enter data (excel format) for each country.
2. Import excel to microsoft access and merged it into one datasheet
3. Export to GIS

GIS layer is extracted. Geodatabase is used.

He explains the basic structure of data base.

The explanation of component 1, i.e. the explanation of developed natural hazard map for each hazard. He also presents the data format for each natural hazard map development, the examples of map that are resulted by GIS. Arclite is used to summarize the location of natural hazard.

There are 2 data base, infrastructure and social economic. The examples of infrastructure database are road and railway, industrial area, and power station. The examples of social economic database are LPI, the location of port, import and export based on the size of container, annual GDP per capita for big cities.

Land use plan is used in preparing the BCP. The source can be from academic paper, such as conducted in Manila, which the ground condition data in Metro Manila is gathered from academic paper.

He explains the road network map in Bekasi and Karawang.

He presents the further steps, i.e. component 2. He is compiling collected data in industrial area. Next February will be completed for component 2.

3. **The Results of Natural Hazard and Risk Assessment for Indonesia by Mr. Shukyo Segawa (Team Member, Leader of Disaster Risk Assessment)**

My presentation about natural hazard and data risk assessment for industrial karawang area. For Area BCP, natural disaster risk assessment is a trial of condition disaster management plan and transportation is the key. While two assessments are needed, first what natural hazard will occur into the industrial area. and the second, imagine that, what will happen to industrial area due to that hazard and whether the business will continue or not.

For example bridge may be damaged due to earthquake, imagine what will happen to the industrial area and whether it can be continue or not, is the important issue.

if the natural disaster risk assessment for Area BCP compare to disaster management plan, for example manage the earthquake disaster, we do not consider the direct impact to building only but also impact to the lifeline. And the third, predominant hazard of the area will be identified.

The activities of natural hazard and risk assessment, first is hazard assesment map, and the second one is risk the assessment including direct damage and indirect damage. He shows the flow of natural disaster risk assessment in the slide. First is predominat hazard, second is the risk caused by predominant hazard, the third is the conitnutiy businiss plan. and the last is to create disaster scenario.

For predominant hazard in the industrial area, using disaster database. Based on statistic, hazard in Karawang is this is not show the inundation for 100 to 200 years probability, it means to experience this inundation is 100 to 200 years.

He explains the colour gradation of inundation, and in Karawang area the inundation is 2-3 meters.

Most inundation is more than 2 weeks. Most industrial area is located in hill and is not inundated, but the jakarta toll and highway is inundated.

For risk assessment of lifeline for industrial area, he shows those important lifelines that are related to Bekasi and Karawang in the map, such as the sea port and the airport.

The final scenario will based on the 200 years period of natural hazard, which shows the probability and the impact. Based on the analysis on impact, the study concludes the predominant hazard and the scenario based on such hazard, and for this study, flood is dominant study and the scenario is developed based on the predominant study.

For disaster scenario map, the industrial agglomeration area is not inundated because it is located in the hill, but jakarta toll road and highway is inundated for two weeks. Karawang city and its surrounding area are inundated for 2 meters, and the sub-station in Karawang City is inundated. Cellphne and telecommunication is stopped because there is no electricity power. The employee of factory is absence because their hous is inundated, or they are late because there is traffic jam

This scenario gives input analysis for ABCP scenario.

Discussion:

Question:

1. **Ahmad wahyudi (Kementrian Perhubungan-Ministry of Transportation):**

- 1) What policy needs to be developed for speeding up recovery at the national, provincial and national level in term of infrastructure and facilities both
- 2) Our weakness generally is in the continuity, so what is the next step of this activity, and

- then the result of the study can be useful for the transportation plan in Indonesia
- 3) Is the study be the part of development planning stage, or is it only initial background study?

Response:

1. Dr. Takahashi:

During the study, we found that the bottle neck of infrastructure is very common when disaster occurred and in normal situation without any natural disaster. Therefore, the strategy and policy of infrastructure development such as road, airport, and harbor port should be a national strategy. It is important to conventional strategy during normal situation.

During the implementation of the project, we found similar problem. For example, Manila is using Manila Port. But they try to move the port function to the island. Because Manila will be destroyed by earthquake, and Manila Port will also be destroyed, industry cannot use the port, but they can use batangga port. In Indonesia, the port in Jakarta may be destroyed and industry cannot use this port, therefore it needs to develop port in Karawang and Bekasi.

Analysis ABCP based on current development of Indonesia, whether it is sharing information among stakeholder including infrastructure operator or not. The infrastructure operator should think the alternative road to avoid the bottle neck of infrastructure during emergency situation, but it also can be used in normal situation.

Question:

2. Usep arilukito (garuda)

What would be the outline of the document of the BCP that will be produced later?

Response:

3. Dr. Takahashi:

Area BCP is a very conceptual; we cannot define what the area BCP is. Area BCP consists of the components of stakeholder, description of the area, description of natural hazard and its risk. Based on basic information, we could find the weakness for industrial area to continue their business during natural disaster. And what best efforts that can be done during the disaster. That is the idea of Area BCP.

4. Dr. Krishna:

So, the main point of the area BCP is assessment, the impact of disaster, the weaknesses of the industry to recover from disaster, and the steps to overcome the weaknesses.

Question (reading by moderator)

5. Bambang Markondo (BPPT)

Is there any technical committee for formulating the Indonesian National Standard (SNI) for disaster management with the adaptation of ISO 22301 regarding business continuity.

11.07-11.34 Pilot Study for Indonesia

1. Pilot Study for Indonesia by Mr. Yoshiki Kinehara

He presents the aim of pilot study. He also explains the involvement of many stakeholders. The participants are from infrastructure and lifeline operator, private sector, and local government. The location of pilot study is in Karawang Bekasi

JICA supported the pilot study. The working group is developed. It will be held three workshops, first workshop was held on 17 December in Bandung. He explains the agenda of workshop in Bandung, which the participants are divided into three sub-groups and each group consists of leader, rapporteur, and time keeper. The discussion was assisted by facilitator. The sub-group discussion was fruitful. He shows the picture of first workshop in Bandung and mentioned that first workshop was successful.

Second workshop will be implemented on March 2014 and third workshop will be implemented in May 2014.

2. **Results of First Workshop by Ms. Linda Al Amin (Head of Physical Division – Regional Development Planning Board (BAPPEDA) of West Java Province)**

She presents the result of first workshop of working group member. The workshop was attended by government and non-government representatives. She also presents the sub-group in the workshop and what resulted from the workshop. There were three questions to be answered by working group member.

First is basic policy of the ABCP. For the basic policy (homework from JICA), the main point is that the participants accepted the policy developed by JICA, but there were some additional key words, i.e. anticipation, observation, and disaster management unit.

Second is the dominant hazard to be considered in the pilot area. For first sub-group, i.e. sub-group of observer, the dominant hazard was flood, because there is Citarum river, where the upstream is located in Bandung City. There are also three big dams. They want the simulation of flood disaster caused by the leakage of dams.

The important issue is electricity. The electricity system of Java-Bali. The demand is high, so if there is a little disturbance, it will affect the electricity system.

This sub-group also considers earthquake as dominant hazard, the earthquake that occurred in West Java is tectonic earthquake.

The important issue is transportation infrastructure problem. It may be solved by the construction of Cilamaya Port and airport that is planned to be developed in Karawang. Other issue is the employees who become victims. They have to prioritize the family and also the damage of their property.

For the sub-group of infrastructure, generally has similar opinion regarding dominant hazard, except for the working accident and labor rally. The important issue based on this sub-group is community health around the industrial area. Not only the industry, in Karawang Bekasi area, the poverty enclaves are present in the surrounding of industrial area. The information that is required, belong to this sub-group, is the recovery time and evacuation during emergency situation and community strengthening in the area around industrial zone.

Karawang is agricultural area, how to synergize this with the industrial activities and ABCP, so the community is willing to support the existence of industry.

The sub-group of private sector has also similar opinion. But the point of the main issue is the raw water and clean water. It still becomes government problem. West Java has three big dams, but it lack of clean water. The dams are not only for service Jakarta area, but also for Karawang and Bekasi. This sub-group also considers the early warning system. They also concern regarding the increasing of criminal case, because there are some people who does not support the industry. Therefore, this sub-group wants to elaborate the further information regarding the ways to handle the crime issues. They want to encourage community to support the industry through formal and informal education, so they are ready to work. Waste pollution was also need to be considered.

West Java province be grateful for selecting the West Java area as pilot study.

At the end of presentation, she presents the schedule of the project.

Discussion:

1. **Mr. Sumarono from Badan Informasi Geografi (Geographic Information System)**

From the study, the flood map used big scale. I wonder what methodology used to develop flood hazard model. With the scale of 1:50.000 map, we also have developed such map from PU (Public work), BMKG (Meteorological, Climatological, and Geophysical Agency). Since there is policy of one map, not only for base map, but also in the methodology to develop the map. Related to flood hazard map, PU has published the methodology to develop flood hazard map.

Second question is, how much the damage and losses in Karawang and Bekasi due to flood

disaster that still can be accepted?

Response:

1. Dr. Segawa:

The methodology is developed by flood expert, unfortunately, he is not here, so I am not sure. This map was developed based on existing information from satellite. This simulation is one of pilot study areas in 10 countries. We use the open source program and open source model. They use....

2. Mr. Sumarono

I mean what is the general methodology?

Based on the regulation, thematic map should refer to the methodology. If we develop a map for Indonesia, it is important for Indonesian planner, to recognize the methodology of map development, so it will not make the user confuse.

3. Dr. Takahashi:

Abcp project is planning to expand to 10 asean countries. If the country has the existing hazard map, we will use that map. Second alternative is that we will ask to research institution to develop the hazard map. It is more complicated to use different methodology. For example is flood hazard, there are many alternatives, and this methodology that is used is one alternative. My reason asking Mr. Pariatmono to present the current situation regarding institution in disaster management is that we will ask the institution based on its capacity to develop the methodology of hazard map development.

11.34-11.38 Closing of the Seminar

1. Ms. Yoko Yamoto (Representative for ASEAN Coordination – JICA)

Through this seminar, I hope you could be able to understand the Area Business Continuity Plan and its progress. The ABCP is new concept and it is still in progress. Therefore, this seminar needs to be implemented to gather input from the participants.

This concept is different with the traditional disaster mitigation plan. If we have continuity plan, we can recover faster.

This activity is not easy, because it is involving many stakeholders, such as government, private sectors, etc. We hope that Indonesia can be pioneer for such activity

Thank you for your attendance and participation to the seminar

11.40 Adjournment



Progress Seminar, Manila
for
**“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formulation For Industrial Agglomerated Areas In The ASEAN Region”**

January 21 2014, Mandarin Oriental, Manila, Philippines

*A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

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Progress Seminar, Manila

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

January 21 2014, Mandarin Oriental, Manila, Philippines

Under a Joint Program of Japan International Cooperation Agency (JICA) and ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)

Agenda

January 21 2014, Tuesday

Agenda	
13:00 - 13:30	Registration
13:30 – 14:00	<p>Welcome Address</p> <p>Mr. Hayato Nakamura Project Formulation Advisor (Disaster Management) JICA Philippines</p> <p>Undersecretary Corazon T. Jimenez General Manager Metro Manila Development Agency (MMDA)</p> <p>Opening Address</p> <p>Ms. Susana M. Cruz Regional Director Office of Civil Defense (OCD)-NCR</p>
14:00 – 15:20	<p>Introduction and Area Business Continuity Management</p> <p>Introduction of the Project Dr. Masakazu Takahashi Team Leader of the Study Team</p>

	<p>Concept, Methodology and Benefits of Area BCM Mr. Yoshiyuki Tsuji Deputy Team Leader of the Study Team</p> <p>GIS Database for Formulating Area BCM Dr. Koichi Hasegawa Team Member, GIS and Database</p> <p>Q & A / Discussion</p>
15:30 – 15:50	Coffee Break
15:50-16:50	<p>Pilot Study for Area Business Continuity Plan Formulation</p> <p>Natural Disaster Risk Assessment and Disaster Scenario for the Pilot Industrial Agglomerated Area of the Philippines Mr. Shukyo Segawa Team Member, Leader of Disaster Risk Assessment</p> <p>Planning of Workshops for the Pilot Industrial Agglomerated Area of the Philippines Mr. Yoshiyuki Tsuji</p> <p>Results of the First Workshop Mr. Ramon SANTIAGO National Coordinator of the Philippines</p> <p>Q&A / Discussion</p>
16:50-17:00	<p>Closing of the Seminar</p> <p>Mr. Justo Porfirio LL. Yusingco Deputy Dir Gen for Finance & administration Philippines Economic Zone Authority (PEZA)</p>
17:00	Adjournment

MC: Ramon Santiago

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

(A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Proceedings of the Progress Seminar

21 January 2014, Mandarin Oriental Hotel, Paseo de Roxas, Makati City
Metro Manila, Philippines

Highlights of Progress Seminar

The first progress seminar held started at 13:40. It was hosted by Director Ramon J. Santiago, the National Coordinator for the Philippines of OYO International. Words from Mr. Hayato Makamura of JICA-Philippines were delivered. The participants heard a welcoming remark from Usec. Corazon Jimenez- the General Manager of MMDA and an opening address rendered by Director Susan Cruz from the Office of the Civil Defense-NCR in behalf of MGen. Romeo F. Fajardo- the Deputy Administrator of the Office of the Civil Defense who unfortunately, could not grace the event.

By 14:05, the first session started headed by Dr. Masakazu Takahashi, Team Leader of the JICA-AHA Study Team for which he discussed the Introduction of the Project and it's Project. Mr. Yoshikuji Tsuji came next with a brief discussion on Concepts, Methodology and Benefits of the ABCM. He is the Deputy Team Leader of the JICA-AHA Study Team. The last part of the discussion for the first session was then rendered by Dr. Koichi Hasegawa, JICA-AHA Study Team Member, GIS and Database about the GIS Database for Formulating Area BCM.

As Dir. Santiago opened the floor for exchange of ideas ad queries, this part of the Progress seminar proved to be very interesting especially not only questions were raised but also some helpful insights for the further success of the Study.

Mr. Jun Pereira, PDRRMO of Laguna asked if the idea from the JICA-AHA Study be applicable to the present study that they are conducting. Mr. Takahashi graciously answered the query briefly stating that they wanted the study to be integral to the Pilot areas stating also that the idea is very interesting.

Mr. Roger Dimmel, from Cardno Emerging Markets stressed on the importance of practical plans on how grouping stakeholders together make the Study more feasible and beneficial especially in facing powers and water supply shortage, as well as medical emergencies.

Ms. Liezl Lim of Smart Communications, also representing the Croporate Network for Disaster Response (CNDR) asked about the definition of areas most especially that it is critical in defining the economic zone of interest, whether what is used in the study is the political boundaries.

Madame Corazon Jimenez, the General Manager of MMDA stressed the importance of being actively participative of the whole process of the study so that the participants will be able to come up with a feasible BCM and BCP.

Dr. Renato Solidum, Director of the PHILVOCS suggested that all the materials from the JICA-AHA Study be properly labeled because these materials can be of reference for many for future use.

Snacks, coffee and refreshments were served after the open forum.

Second session started on the dot at 15:40. This part of the Seminar was the presentation of the Pilot Study for ABCP formulation by Dr. Masakazu Takahashi. It was then followed by the presentation of Mr. Yoshikuji Tsuji on Planning for Workshops for the Pilot industrial Agglomerated Area of the Philippines. Dir. Ramon J. Santiago presented the Results of the First workshop.

Another open forum was held. Different ideas were raised and queries were addressed. Among the active participants are: Mr. Rommel Periera, NDRRMO-Carmona, Cavite; Mr. Yujiro Miro from HRD Group; Mr. Justo Porfirio Yusingco, Deputy Director General for Finance and Administration- PEZA; and Mr. Roger Dimmel from CARDno Emerging Markets.

The seminar ended with a closing address from Mr. Yusingco of PEZA. The seminar adjourned at exactly 17:00. There were a total of 73 participants.

There was a final announcement that the 2nd ABCP Formulation Workshop in the Philippines will be held on 20 February, 2014.

Opening Session Speeches Key Points

Brief Welcome and Introductory remarks by Mr. Santiago: For this project, rather, the seminar which will be explained more in details later on by the Study Team.

For the first part we'll be having the opening ceremonies with a few remarks coming from JICA-Manila also to welcome you will be the General Manager of the MMDA, and later on, in behalf of General Fajardo, a message from the Office of the Civil Defense.

We'd like to assure everybody that we will stick to the time frame that by five o'clock this room will be lid already of the participants, so without further ado I'd like to call on Mr. Nakamura from JICA-Manila to give his remarks.

Mr. Hayato Nakamura: Usec. Corazon Jimenez, General Manager of MMDA, expert for the project, Dr. Solidum, Director of the PHILVOCS, and also expert for the project.

Project Team headed by team leader, Dr. Masakazu Takahashi; OYO-International, and Coordinator, Mr. Ramon Santiago also, various agencies of Government the representative of other Utility Companies invited, Ladies and Gentlemen, Magandang Hapon sa Inyong Lahat!

As of JICA-Philippines, it is a great honor to experience this seminar in Manila for Natural Disaster Risk Assessment and the Area Business Contingency Plan Agglomerated. I understand that the experience of Habagat monsoon disaster in the

Southern part of the Philippines named particularly Typhoon Yolanda of last year illustrated the important element we'd accompany, and now the impact of the first tropical depression of Typhoon Agaton taking up the recent parts of the Mindanao.

We understand that many people are currently in the preparation for the Chinese New Year; therefore I appreciate your time and effort for attending today's gathering. As everyone's participation is highly important for the success of this project.

The project for formation of ABCP is quite unique opportunity to get together for government officers and industrial managers although for now it should only be generalized and everyone must participate.

Welcome Address by Usec. Corazon T. Jimenez, General Manager, MMDA

- Acknowledged the AHA-JICA Study Team from Japan and the Philippines, Madam Susan Cruz- OCD-NCR Director, and Dr. Renato Solidum, PHILVOCS Director.
- Stated that it is a Pride that Metro Manila was chosen to be one of the Pilot Areas for the AHA-JICA Study Venue.
- It is a common knowledge that Metro Manila has been a victim to destructive floods of Ondoy and Habagat.
- And recently, Philippines (Leyte and Samar) suffered the wrath of Super Typhoon Yolanda (international name of Haiyan).
- Miraculous that Metro Manila has been spared from wrath of the Super Typhoon.
- Metro Manila is braising from the major impacts of natural disaster such as the Great Eastern earthquake in Japan, such that as what happened in Bohol and Cebu.
- Unpredictable event/ impact in the Lives of the people living in Metro Manila.
- It is important to act hand in hand with the whole country.
- We should be prepared.
- These natural disasters that happened in the past are providential in the Philippines.
- We will not know how Metro Manila will look like if the earthquake that hit Bohol and Cebu, and the Super Typhoon Yolanda (Haiyan) will hit the Metropolis.
- Prepare Metro Manila for Disasters like the great earth quake that happened in Japan in 2011 and for the Tsunami.
- We need plans and mechanisms to buffer our preparation for Natural Disasters.
- Gratitude to AHA Centre and JICA Study Team for this Seminar.
- Metro Manila as host for the 1st progress seminar.
- Welcomes guests from the Private Sector, and also the Government officers from the LGU's.
- Thanks the participants for their attendance and encourages them to enjoy.

Welcome Address by Dir. Susan Cruz, OCD-NCR in behalf of MGen. Romeo F. Fajardo AFP (Ret), Deputy Administrator, OCD- NCR

- Acknowledges participants: Study team leader: Dr. Masakazu Takahash, JICA- Manila: Mr. Hayato Nakamura, GM Corazon Jimenez, MMDA , Dr. Renato Solidum PHILVOCS, Colleagues and friends.

- Recent types of natural disasters have positive and negative aspects
- It showed how Filipino people survive through the “BAYANIHAN” spirit. [cooperation].
- Stated that this ‘Bayanihan’ provides glimpse of hope to survivors
- Amount and extent of damage shows the lack of understanding [short-sightedness].
- We need to PLAN, IMPLEMENT, and RESPONSE MECHANISMS to natural disasters.
- Stated that Philippines ranked TOP among ASEAN countries as disaster prone.
- Stated that this should be viewed as an opportunity for more resilient country.
- Philippines needs IT facilitating access.
- As country goes beyond the 100 million population mark, fear that more disaster would be harder to survive.
- We should gear up for positive trends toward recovery.
- We should not lose sight of what should be done.
- BUSINESS SECTOR: Backbone of our economy.
- Stated that the AHA-JICA study is a promising approach.
- Stake holders should bundle resources and expertise.
- Encouraged the following to actively participate in the study: PEZA, OCD, Chambers of Commerce, Inc.

First Session Q&A/ Discussion:

Mr. Ramon Santiago (National Coordinator for the Philippines and MC): I would like to open the floor for question, please state your name and organization so we can capture that for documentation. We have the microphones by the aisle.

Mr. Jun Guidote, PDRRMO: Sir I am Jun Guidote, the Provincial Planning Officer of Laguna and the PDRRMO of Laguna. My first question is: what if we have a similar activity as this with the UPLB and we have some available data and we would like to pursue the BC Plan and the BCM with your group, how do we coordinate with your group to be able to finish the project that we have started with the UPLB it’s called: The Economic impact of Climate Change and Disaster on the Province of Laguna.

And secondly, is your concentration only on the industrial areas for BCP and BCM or does it includes also the other core areas (because in Laguna we have small and medium enterprise businesses sprawling all over the areas of the province). And what if we have started already the effort to capture the economic opportunity lost during disasters on the small and medium enterprise?

Mr. Masazaku Takahashi, (Team Leader of the AHA-JICA ABCP Study Team): Okay, thank you very much! The first question, we like to integrate as much as possible from other study, your mention of UPLB is also very interesting information. Now, we are doing the first cycle of ABCM System, so probably the next cycle we like to put more information from various organizations; and for the second question, now we are targeting Laguna, Cavite and Southern part of MM, we like to expand this approach in the future, and this area can be one industrial park can be liken to nation such as Singapore, and Brunei. So we can expand the area as well, and also we can apply this approach to the other area in the Philippines as well. For this project we are concentrating on the areas of Laguna, Cavite and Southern part of MM but the information of the infrastructure we have studied from the North to Batangas. The manila port, and also some water supply dam in the North because they are usually to be considered even small area of industrial area.

Mr. Santiago: If I can add, Dr. Takahashi, in the near future, after the development of the template for the area business formulation, it can be scaleable that could be applicable to some areas in the Provinces, or say the Provincial level or even the City level. What's important is for us to be able to determine the process and the components that are essential for developing the ABCP preparation formulation. I'm sure that eventually for Cavite, you may find the output of the study useful also for other areas. And while we are talking about industrial generated areas, we have also invited the joint Chambers of Commerce, the Philippine Chambers of Commerce, and Local Chambers, so that they could also either contribute or take on something from the project especially on the processes involved.

More questions, please? In the interest of time by the way, we will have your merienda served so that we can devote more time to the Question and Answer in this session. Any questions, or do you have some ideas?

Mr. Roger Dimell, Cardno Emerging Markets: My name is Roger Dimell, and I work for Cardno Emerging Market. I was just wondering if you can give me some examples of some of the practical plans that have come out of some of your workshop. For example, how can grouping industries together solve power issues or fire issues or a medical emergency. Can you give some practical examples as to how does this come out?

Dr. Takahashi: So, regarding the workshop, first workshop we have run from the stake holder including office of road, port, airport, and also life line company and so on. At this moment we are just hearing what is the bottleneck of each organizations. Then next workshop we will discuss about how to solve those bottleneck with discussion with other coordinators. This ABCP will give a chance to meet different stake holder in the same room, and discuss their common problem. Probably at the end of the second workshop, we will have individual or practical aspect of the discussion such as, for industry on how to prepare if the powers supply system. And also, including drainage system and preparation of another highway system for export and import, and so on. This is discussed in the ABCP project.

Mr. Dimmel: So, if I understood correctly, you're discussing the potential damages and how it will impact the industry and there'll be subsequent workshop that will come out with a concrete suggestion that would mitigate those dangers. I have a follow-up question, how closely are you discussing this with the local government, are they an active stake holder involved in this discussion?

Dr. Takahashi: The stake holder, for example Vietnam, the lading stake holder, in the working group. In Indonesia, we have two developed local government. So we have attendance from the Local Government. And here we have Cavite, Laguna and MMDA, and they are active stake holders in this project.

Mr. Santiago: For today' seminar, we have already extended the level of the LGU's to the Cities or the Towns. So little by little we are trying to bring in additional stake holders from the part of the Local Government Unit, so we will not be taking in isolation the role of the municipal and the city level in this project.

Ms. Liesl Lim, Smart Communications and CNDR: Good afternoon, I'm Liesl Lim from Smart Communications. Based on my understanding of the presentation, the definition of the areas may be critical. Right now, for the Philippines, the pilot is the Southern part of Metro Manila, and Cavite in Luzon. Which part when you talk about the Southern part of Metro Manila,

what would this cover? Will this be based on political boundaries or are there other elements that you considered?

Dr. Takahashi: In the ABCP, there are several ways to define a boundary. For example, Vietnam is defined the boundary of high quantity. In Indonesia we have 2 local governments, so we need to set the area covered by each local government. So for this case, we don't use political administrative boundary for the ABCP. And for the Philippines, we have 3 local governments. We don't set administrative boundaries for the Industrial Agglomerated Areas. As shown in the picture [pertains to the slide presentation: that rough area covered, that we defined for this project the industrial agglomerated area]. I think the best way is by using the political administrative boundaries. This is for understanding the study the best way to define the areas.

Mr. Santiago: In the case of Metro Manila, Dr. Takahashi, considering that the focus would be the industrial agglomerated area, some may be special economic zones within each city. In the case of Metro Manila it's more of the economic zone. We have representatives from PEZA, who has taken a great deal of interest in to this project so that they may find it useful to promote not only within this areas for the different economic zones in the entire country.

Any additional questions? So for this afternoon we have also brought in a lot of locators from the economic zone so that apart from those who attended the first workshop that was conducted at least we can already bring in a lot of other locators so they can have an idea on what the project is all about and what is going on in to the area, and also, so that in the near future if ever we go into the stage of promoting the idea, at least they already have a fore knowledge about the project and what is already going on in this region. So, additional questions? Question? While the speakers are here?

Usec. Corazon Jimenez, General Manager, MMDA: You particularly chose the participants here, right? You said some are coming from the government, from the private sector, and maybe from the NGO's. What is expected from these participants after today because this is just the "1st Progress Seminar", and I'm sure all of us can be called again for the workshop if there's any. So what is expected for the ext activity so that as I've said in my speech earlier, I said; we have learned lessons here that we will bring back to our offices because you see, we also have to discuss this one with your superiors for the acceptance of the concept. Because at one point we have already introduced business continuity plan per se, but I know that some of these Utility Companies have already adhered to this. But is so important because we just had one simple exercise at MMDA, what happens if the whole MMDA is cordoned off because something happened inside the building? Nobody could answer. So what happens to the traffic management, what happens to what we normally do at the MMDA. So we were caught flat there because we didn't know what to answer right away. That means to say that we have no management plan after a disaster.

Mr. Santiago: Maybe GM, that can be answered after the second session but nevertheless Dr. Takahashi may respond.

Dr. Takahashi: So far, in many countries, we have some arrangements, mainly forecast on the harm on human beings, and also damage on the infrastructure and so on. So this project can forecast on business. So during this project and after this project, we like to show that approach for business is also very important for other part of disaster management. For this time we will show the importance of business continuity management of individual companies and also individual organizations such as the MMDA. We like to stress the importance of incorporating the stake holders in the area to reduce the impact of disaster in the economy of that area. So this BCP is a new idea, the attendance from Local and National government, we like to show the

importance of the promotion of the BCP and area BCM for multimillion enterprise in the country and also area BCM is also very important to keep the business after a disaster. So this is the step of the National government, and also local government, we like to have the invitation from the local government important for the BCP and BCM of the multimillion company, and also area-wide management of disaster risk of industry. For infrastructure, from the workshop, they have already BCP for their business, and they are also in the same goal in the area so we like to expect from those organization coordinate with local government and also private sector to develop area-wide BCM of the business area. For the private company, and multimillion company, we are expecting the importance of BCP and BCM to the project and also for big company, they are also connecting with other companies. We like to expect for the big company to extend the approach of BCP and BCM small to medium company of the area. Those who are expecting from this project, we like to ask all of you to discuss this matter when you go back to your organizations and come up with some ideas of what would be the next step for ABCM and ABCP.

Mr. Santiago: Thank you, Dr. Takahashi, any more questions?

Dr. Renato Solidum, Director, PHIVOLCS: If you go to the appropriate ABCP measures or the solutions would be to lay appropriate hazards in risk assessment, and my suggestion is not critical to the process but to make sure that the locators in the export zone authority would not be confused between the product of this project like the maps and the products put out by other groups like mandated organizations because there might be misinterpretations in the economic scenario and I would suggest that the study team to produce properly labeled maps before public distribution or presentation. And if you produce your own map should be labeled under your study. Because later on what you handed to us will be a reference to many and they should not get confused between scenarios produced by the study and the other study.

Dr. Takahashi: So this is exactly what we are thinking however these assessment of this project is just one example and we are also studying information of each country so we like to include those information maybe in the country report where the company and organization can get existing information from the old country and also who can conduct the risk assessment for their properties. So this is what we are planning. So of course we will include something like this.

Mr. Santiago: Thank you, so perhaps we can give Dr. Takahashi a round of applause for responding. So we'll go on a break for 5-10 minutes. You may assist yourselves for refreshments at the back. Thank you very much.

Second Session Q&A/ Discussion:

Mr. Santiago: If you have any question, you can now start raising them.

Mr. Rommel Pereira, NDRRMO-Carmona, Cavite: Good afternoon Sir, I'm Rommel Pereira, NDRRMO of Carmona, Cavite. My question is with regards with the target [pertaining to recovery time], I think with the previous presentation, something was stated for South Luzon Expressway, and Cavite Express way with 1 week [pertaining to recovery time]. I would like to know because this is very crucial information especially for us if these are in fact the actual target of these operators or this is just more or less an indicative scenario, then perhaps maybe, not of this project because that would be more meaningful to everyone to have this target [pertaining to the recovery time] even for the airport and the seaport. Case in point Super Typhoon Yolanda, we know for a fact how long did it take before the airport can be open for business because the first few weeks were just for relief operations. If we would develop a business continuity plan, we intend to do so for Carmona, Cavite even for the industrial estates that we have, what are the

baseline information that I should give them wherein they can anchor their own BCP; how long will it take for the airport to be functional, how for the seaport will it take to be open for business, and I even withheld the business permit of the South Luzon toll way Corporation, primarily because I am looking for their disaster risk reduction management plan and perhaps I would be also looking for the business continuity plan and I have doubts if they even have one. So, are these targets [pertaining to recovery time] in fact are attainable or if these operators have their own BCP where we can anchor our own business continuity plan? Thank you.

Mr. Santiago: Primarily the question is whether in your [Mr. Segawa] presentation if those recovery time is an achievable target, because I was also asking the same question to Mr. Hayato Nakamura. What Mr. Segawa was presenting is a one week time frame for the recovery or the restoration of the service but if you have taken notice of the parenthesis [pertaining to the presentation] it is based on the Kobe experience so, is just that a scenario or it could be worst than that?

Mr. Shukyo Segawa, AHA-JICA Study Team: This scenario is the scenario for the ABCP consideration. The risk assessment is conducted based on the available information now. We didn't conduct it so, we must be discouraged for the information but for ABCP the risk scenario is an important matter, not to take for much time for granted for the risk assessment. Risk assessment is the support of the ABCP formation so that we conduct the study based from the available information. The scenario is only for ABCP.

Mr. Santiago: So, basically what they showed us is just the process but if you really want to find out for the CAVITEX, we will ask everybody, especially in the Lifeline sector. Whether that is a very realistic estimate just in case we get hit. But of course, we don't know the extent of the damage yet as for the information that will give us an idea as to how long would be the stretch that could be affected. So basically, it's just the process that Mr. Segawa has made. We have to take into account these particular scenarios and these are just some of the things that we have to take a closer look into.

Mr. Pereira: So, I would recommend for the stakeholders to just bring them in especially the CAVITEX and the South Luzon toll way corporation. Maybe we are working on a business continuity plan that they are not even aware that they are expected to be open for business within one week.

Mr. Santiago: Actually, the idea would really be that every body must be brought in the same table to discuss highlights and in the previous presentation, is that it is important for everybody to share information and be more transparent and candid about these things so that everybody is discussing the concern and what to do along the same context in the same perspective.

Mr. Yujiro Miro, HRD Group: Good afternoon I'm Yujiro Mori from HRD Group located in Cavite Economic Zone. I have a question regarding the presentation on Concept, Methodology, and Benefits of Area BCM. So in the slide [pertaining to the presentation], it is mentioned that the difference between traditional mitigation plan and BCP, then the critical difference is the recovery time objective. So, I was wondering what the definition of recovery is. I am from Japan, so when I learned about the great earthquake in Eastern Japan, most Eastern part of Japan, there industry actually changed after the disaster. They are never the same as before then for example because of the Tsunami, the people in the area needed to change their lifestyle then they could not do the same lifestyle as before. So I was wondering, how much time we need to recover with respect to the recovery time objective. Is the recovery the same? For example for the private sector, the production amount goes back to previous or the number of employees?

Mr. Yoshiyuki Tsuji, AHA-JICA Study Team: Thank you for your question. Recovery time of the sector is term defined in the ISO is a very definite term. Recovery time objective should be considered in ABCP and before and after the earthquake. After the earthquake, recovery time can be modified or can be changed according to the extent of damage. It can be changed. The recovery time is level agreement. The recovery time objective depends on the extent of damage caused by the disaster.

Mr. Miro: So the concept of recovery in this project is go back to the level of production?

Mr. Tsuji: It depends on the company and it depends on the administration.

Mr. Miro: So, is there any underlying background or contingency plan to survive these disasters so the company would not change their contingency plan?

Mr. Tsuji: The recovery time can be changed after the disaster. But if the company doesn't want to change their plan, most important is first to survive the disaster.

Mr. Miro: So if like, my company is going to test the recovery, to estimate the recovery time, what do you expect if my company is a production company so the production amount, is that what you expect from us?

Mr. Tsuji: We changed the recovery time to one week and 50% of the recovery within 1 week, and 100% within a month. If the disaster is much more than what is expected then they can change the recovery time longer. It all depends to the extent of damage that was experienced by the company. It depends on the situation. If they want to adhere according to the business contingency plan it depends upon them.

Mr. Santiago: Was Mr. Tsuji able to respond or clarify? I could understand from your question that what recovery in one week, but as explained by Mr. Tsuji, it depends on the target per se, or what is the realistic target. Both in terms of preparation or restoration of the service or operations level over a certain time.

Mr. Justo Porfirio Yusingco, Director General for Finance&Administration-PEZA: JP Yusingco from PEZA. With regards to recovery time, is it not possible for some company to set that, to set their own target, but in one of the slides that was shown, the aim or the objective for recovery time is for you not to lose your competitiveness. So probably, you set your target, you have to recover production level, production schedule, at a certain time that you don't lose your market. Is that how it should apply?

Mr. Tsuji: Thank you very much for your question, recovery time objective should be considered. Based on the market and their competition. Recovery time should be based on the condition of the company and the market, as well as the extent of damage after the disaster struck.

Mr. Santiago: Is Mr. Tsuji's response, okay, Mr. Yusingco? Actually it could be taken within the company perspective. If you're a local company and you have let's say the ASEAN region, then definitely you would go for a shorter recovery time period. However, if you look at the external factor from the works of your premises, from the plant premises, if there would be more hazard and there will also be more difficulty in what they manufacture for your raw materials, then definitely that particular target would change no matter how you wish to remain competitive. But the good thing here is that if there's a collective effort from both, let's say in the case of PEZA

Locators, wherein they bond together LGU's and National Government and the community there, perhaps the recovery time period may differ, and could therefore be achieved.

Mr. Dimmel: Just a quick comment on the last presentation. I mean, I would assume that the recovery is dependent what the damage is. So, I mean you could have scenario if something happening, Earthquake of a mega magnitude, you could say that well if that happens, we hope to be running and operating within a certain time period. If however the actual earthquake that happened will be much larger, the obviously, that scenario no longer applies. The other thing is that. What I'm thinking, when I first came to this, when I read a bit about you know what you were doing, the purpose was to make the group stronger than the individual part. You know, okay you can look at your own business and you can look at what you can do, to mitigate damage and etc etc, but I thought the more important one was the reason why you are grouping together so that you can be stronger as a group than you can be than the individual part. And maybe go back to what I asked before, I haven't seen much of the way of ideas how that could be accomplished and maybe that's something you're going to be talking about in the subsequent workshops.

Mr. Santiago: Thank you for the thoughts, Roger. We guarantee that we will take these ideas to subsequent workshops. Questions? More questions? Everybody's thinking of what to ask?

Usec. Corazon Jimenez, General Manager, MMDA: I was thinking about the insurance, there's one in Japan? And are you able to benefit from it that much?

Mr. Santiago: The reason why we were laughing because I was trying to push him [pertaining to Mr. Tsuji] to relate what was the experience with respect to the great Northeastern earthquake but that's simply putting it to the devastation is so large that even those who would like to claim insurance may not be alive to recover from the incident because it is very devastating. So that, well I think in some other case where it is of smaller magnitude in Japan, they have risk transfer mechanism that whether what was the benefit of those who have availed of this particular service.

Usec. Jimenez: The reports that we had heard earlier, from Senator Loren Legarda, what if Tacloban and the rest of the other municipalities were insured of government agencies, private companies, our recovery will be faster because we are able to have the funds available and ready. Asking if Japan has this kind of risk insurance that's big enough that they are able to recover right away. I did not even notice any damage when we went there in 2011, and that was 1995, so this year, it will be 19 years now. January 17, 1995. Can you imagine that was last week. Thank you very much, but maybe a research can do for me, thank you.

Mr. Santiago: Perhaps, let me also relate some information on the Kobe earthquake. The impact of Kobe earthquake, they were wondering how Japan coped with the magnitude of the devastation. Because at that time, there were low-level of uptake on risk transfer mechanism so the recovery in Kobe was basically born out of Japanese money. Unlike in the case of the United States during the San Bernardino earthquake at that time, with the same amount the Americans were able to draw more from the risk transfer benefits from risk transfer mechanisms. So the only question here is that if we have that much money from the Kobe earthquake. But I think the uptake for risk transfer mechanism in Japan nowadays has improved also. In the Philippines after the Maersk Study, the World Bank also came up with a follow up study, basically focusing on the uptake of the risk transfer mechanism in the Philippines. And we were quite surprised with the number of policies at that time. 50,000 so, very low, very small amount. But I think that it is already being addressed in terms of promoting the idea of risk transfer mechanism as part of the early recovery study.

There being no other discussions, Mr. Yusingco of the Philippine Economic Zone Authority (PEZA) gave the Closing Remarks. Essentially, he expressed his gratitude to the Study Team for the involvement of PEZA to the Pilot Project. He also manifested the eagerness of the participants to move on and continue with the remaining component of the Project in the Philippines. He mentioned the interest of the participants to the second workshop in February.

The assembly adjourned at around 5:00 p.m.



**“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”**



A Joint Project of Japan International Cooperation Agency (JICA) and
the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Attendees list for Progress Seminar on Area BCP Formulation, Vietnam

Sofitel Hotel, Ha Noi City, Vietnam, December 13, 2013

Participants

No	Country	Name	Organization	Position
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3	Vietnam	Ms Thai Thi Khanh Chi	Disaster Management Center, Water Resources Department	Expert
4	Vietnam	Bui Minh Tang	Hydro-Meteorological Forecasting Centre of Northern Region	Director
5	Vietnam	Mr. Nguyen Huu Phuc	Disaster Management Centre - Water Resources General Department, Ministry of Agriculture and Rural Development	Director
6	Vietnam	Dang Thanh Mai	NCHMF	Deputy director
7	Vietnam	Nguyen Van Hieu	NCHMF, Hydrogy Forecast	Expert
8	Vietnam	Nguyen Tien Kien	NCHMF	Deputy Chief of Division
9	Vietnam	Mr Le Van Duc	Department of Meteorology, Hydrology and Climate Change, Division of Natural Disaster Warning Forecasting	Head of Division
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17	Vietnam	Nguyen Son Tung	Hanoi Dept of Natural Resources and Environment	Officer
18	Vietnam	Nguyen Duy Duc	Hanoi dept of labor	Deputy. Director
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29	Vietnam	Vu Thi Cuc	Geoenvironment and Territorial Institution Center	Officer
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33	Vietnam	Mr Nguyen Hong Phuong	Earthquake Information and Tsunam Worning Cnetre Institute of Geophysics	Deputy Director
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35	Vietnam	Ms. Nguyen Phuong Nhung	VNU University of Science, Centre for Environmental Fluid Dynamics	Researcher
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No	Country	Name	Organization	Position
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39	Japan	Hirota Matsuki	Private Company	JICA Expert
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41	Vietnam	Ms. Toan Duyen	Private Company	-
42	Vietnam	Mr. Pham Thanh	Private Company	-
43	Vietnam	Mr. Tran Hai Nam	Private Company	-
44	Vietnam	Mr Dau Anh Tuan	Vietnam Chamber of Commerce and Industry (VCCI)	Acting General
45	Vietnam	Ms Pham Thi Ngoc Bich	Ha Long Aquaculture Services Joint Stock Company	Officer
46	Vietnam	Mr Le Quang Duc	Hanoi pharmacognosy joint stock company	Director
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48	Vietnam	Ha Nhu Son	Petro Vietnam Group	Officer
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50	Japan	Toru koike	Ess earth system science	Deputy Director
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53	Japan	Huioru Sato	PASCO	
54	Japan	Norishi SHUTOH	SOJITZ	
55	Vietnam	Bui Quang Minh	19/5 Textile Government one member limited Company	Officer
56	Japan	Daisaku Kyoto	CTII	
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58	Vietnam	Mr Vu Quang Hieu	WHO	TBA
59	Vietnam	Alex Zvinkis	USAID	Officer
60	Vietnam	Mr Paul Van derlaan	Red Cross of the Netherland	Officer
61	Vietnam	Mr Provash Chandra mondal	Oxfarm	Communication officer
62	Vietnam	Ms Tran Huong Giang	Help Age	Officer
63	Vietnam	Ms Duong Thi Dieu Linh	Hel page	Officer
64	Vietnam	Nguyen thi thanh truc	Ha noi television	Deputy Director
65	Vietnam	Ms Nguyen Thi Minh Duc	Investment Newspaper	Reporter
66	Vietnam	Ms Thuy Lien	Investment Newspaper	Reporter
67	Vietnam	Mr Nguyen Viet Trung	Vietnam News Agency	Reporter
68	Vietnam	Ms Nguyen Thi Ngoc Anh	VTC media - VTV 10	Reporter
69	Vietnam	Mr Nguyen Hai Dang	VTC media- VTV 14	Reporter
70	Vietnam	Ms Nguyen Lan Huong	Dan tri Newspaper	Reporter
71	Vietnam	Ms Tran Thi Nga	Natural Resources and Environment Newspaper	Repoter
72	Vietnam	Nguyen Diem Huong	VTC10	Editor
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74	Vietnam	Hoang Tuyen	Ha noi VTV	Reporer
75	Vietnam	Tran Quang Tung	Present Day Rural Area Newspaper	Reporter
76	Vietnam	Phan The Van	Ha noi VTV	Reporer
77	Vietnam	Ngoc Anh	VCC 14	Reporter
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No	Country	Name	Organization	Position
86	Japan	Mr. Masakazu Takahashi	AHA Center -Jica Study Team	Team Leader
87	Japan	Mr. Yoshiyuki Tsuji	AHA Center -Jica Study Team	Deputy Team Leader
88	Japan	Mr. Shukyo Segawa	AHA Center -Jica Study Team	Leader of Natural Disaster Risk
89	Japan	Ms. Akira Watanabe	AHA Center -Jica Study Team	Coordinator
90	Vietnam	Ms. Hoang Minh Nguyet	AHA Center -Jica Study Team	MC/Facilitator
91	Vietnam	Mr. Nguyen Thanh Ha	AHA Center -Jica Study Team	National Coordinator
92	Vietnam	Ms. Nguyen Van Anh	AHA Center -Jica Study Team	National Coordinator
93	Vietnam	Ms. Ngo Thi Minh	AHA Center -Jica Study Team	National Coordinator
94	Vietnam	Ms. Bui Bich Ngoc	AHA Center -Jica Study Team	Intepreter
95	Vietnam	Ms. Tran Ha My	AHA Center -Jica Study Team	Intepreter

**Progress Seminar
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

December 13, 2013, Sofitel Hotel, Ha Noi, Viet Nam

AGENDA

December 13, 2013, Friday

Agenda	
13:30-14:00	Registration
14:00-14:10	<p>Welcome Address</p> <p>Mr. Nguyen Huu Phuc, Director Disaster Management Centre - Water Resources General Department Ministry of Agriculture and Rural Development</p>
14:10-15:00	<p>Introduction and Business Continuity Management in Viet Nam</p> <ul style="list-style-type: none"> • Introduction of the Project Dr. Masakazu Takahashi, Leader of the Study Team • Concept, Methodology and Benefits of Area BCM Mr. Yoshiyuki Tsuji, Deputy Team Leader • Disaster Risk Management of SMEs in Viet Nam Mr. Dau Anh Tuan, General Director, Legal Department, Vietnam Chamber of Commerce and Industry • Q & A / Discussion
15:00-15:10	Coffee Break
15:10-16:00	<p>Natural Hazard and Risk Assessment</p> <ul style="list-style-type: none"> • National Disaster in Vietnam Dr. Dang ThanhMai, Deputy Director National Center for Hydro-Meteorological Forecasting • The Results of Natural Hazard and Risk Assessment for Hai Phong Mr. ShukyoSegawa, Leader of natural disaster risk assessment • Q&A / Discussion

16:00-16:50	<p>Pilot Study in Hai Phong</p> <ul style="list-style-type: none"> • Pilot Study in Hai Phong Mr. Yoshiyuki Tsuji, Deputy Leader of the Study Team • Results of the First Workshop Mr. Nguyen Ba Tien, Director Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department (Working Group Member) <p>Q&A / Discussion</p>
16:50-17:00	<p>Closing of the Seminar</p> <p>Mr. Minoru Miyasaka Senior Advisor to the Director General Global Environment Department JICA Headquarters</p>
17:00	<p>Adjournment</p>

MC: Hoang Minh Nguyet

“NATURAL DISASTER RISK ASSESSMENT AND AREA BUSINESS CONTINUITY PLAN FORMULATION FOR INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”

December 13th, 2013, Sofitel Plaza Hanoi, Hanoi, Vietnam

Under a Joint Program of Japan International Cooperation Agency (JICA) and ASEAN Coordinating Center for Humanitarian on Disaster Management (AHA Center)

MC: Ms. Hoang Minh Nguyet

14:00 pm: MC Hoang Minh Nguyet started Seminar. At first, MC gave overview on severity of natural disasters in recent years in all over the world, especially the Great East Japan Earthquake and Flood of the Chao Phraya River in Thailand in 2011. These disasters caused serious damages to the economy of such countries when the business activities were stopped. Therefore, the project “Natural Disaster Risk Management and Area Business Continuity Plan Formulation for Industrial Agglomerated Areas in the ASEAN Region” by the cooperation of ASEAN Coordinating Center for Humanitarian on Disaster Management (AHA Center) and Japan International Cooperation Agency (JICA) was implemented. This project aims to minimize economic damages and/or losses of industrial agglomerated areas when large scale natural disasters strike. This project is implemented in 10 ASEAN countries, in which 03 industrial agglomerated areas in Indonesia, the Philippines and Vietnam are selected for Pilot Studies.

Next, Ms. Nguyet introduced the participants attend the seminar, including members from Ministry of Agriculture and Rural Development, representative from JICA, related Departments, Agencies from Hanoi and Haiphong, research centers, NGOs, associations, private companies, infrastructure operators in Hanoi and experts from JICA. Furthermore, the seminar also welcomed the attendance of many members from media agents and newspapers.

On behalf of program organizers, Ms. Nguyet warmly welcomed all of participant taking part in the Seminar and invited Mr. Nguyen Huu Phuc, Director of Disaster Management Center- Water Resources General Department, Ministry of Agriculture and Rural Development of Vietnam to have welcome speech.

14:05 pm: Greeting speech- Mr. Nguyen Huu Phuc, Director of Disaster Management Center- Water Resources General Department, Ministry of Agriculture and Rural Development of Vietnam

Mr. Phuc gave an overview of the importance of the project, highlighted the serious damages caused by the natural disasters to all the countries in the world in general and Vietnam in particular. Then he also gave warnings and recommendations about the incurred economic damages. Besides that, he raised the importance of Areas Business Continuity Plan (ABCP) and its advantages if it is applied in Hai Phong City, Vietnam. Also MARD in the role of focal Agent for the project from Government side. Mr. Phuc thanked the help of JICA to Vietnam in the past years and hoped the seminar a great success.

Introduction and Business Continuity Management in Vietnam

14:10 pm: Introduction of the Project- Dr. Masakazu Takahashi, Leader of the Study Team

Dr. Takahashi has emphasized the importance of BCP in business activities of enterprises in order to provide the methodology of the project. He also pointed out the basic information about the project by indicating the impacts of natural disasters on the economy of each country and showed the necessity of this project.

He mentioned the example of the great earthquake in Kobe and Osaka, Japan in 1995. This earthquake caused huge damage to people, wealth, infrastructure, transportation, ports, infrastructure systems ... After 5 years, Kobe recovered significantly; however, the consequences of this earthquake still left as serious decline in economic activity in the port of Kobe until now.

Dr. Takahashi indicated the necessity of the project by showing the two disasters occurred in 2011 in Japan and Thailand. Two disasters caused stagnation in business activities of the countries. Thereby, he also mentioned to the importance of the industrial parks in each country with the infrastructure needed to protect and recover when disaster strikes. It can see that the natural disasters affect the competitiveness of an industrial zone, a region and even a country. It takes a lot of time, efforts and money to recover from severe damage and loss. Thus, in comparison to other areas which do not suffer from the disasters, the area suffering from the disaster will bear a major negative impact on business efficiency. That is the reason why plans to response to natural disasters must be prepared.

He emphasizes the participants of this plan; this is not the tasks of one or some departments, companies or organizations but it requires the cooperation of all parties, of all components in the society. So, there could be a plan to build ABCP completely and effectively. This is the first project to be studied and applied in the world and in Vietnam. The project consists of two components, in order to each object: 10 countries in ASEAN Region and pilot industrial agglomerated areas in the 3 countries.

Dr Takahashi then stated the program of the seminar today.

Concept, Methodology and Benefits of Area BCM- Mr. Yoshiyuki Tsuji, Deputy Team Leader

First of all, Mr. Tsuji introduced the objectives of BCP in order to ensure the continuity/early recovery of core business in the case of emergency and to prevent corporate bankruptcy and enhance corporate value. He analyzed the enterprises with BCP and enterprises without BCP and showed the differences among them. Mr. Tsuji also highlighted the difficulties in maintaining business continuity during disasters. With the business resources, he pointed out 04 groups including human resources, assets, cash and information. Enterprises could only control their internal resources, but it is very difficult for them to maintain external resources such as road, airport, port ... so when disaster strikes, the lack of these resources becomes a bottleneck to business continuity. By business impact analysis (BIA) , he presented the damage to business resources and its impact on core business via a figure, of which showed the resources that were affected but able to recover within Recovery Time Objective (RTO), resources that were affected but unable to recover within RTO...

In addition, he referred to the estimated influence through ABCP, benefits of ABCP in disaster prevention and development of all stakeholders, the importance of ABCP. He summarized and put forward the concept of ABCP, the relation between ABCP and BCP when the disaster information will be shared for each other. Moreover, Mr. Tsuji stated that the methodology of ABCP Formulation, based on ISO22301

standards to set up ABCP, to build up the information system need to be shared between the industrial parks when a disaster occurs. Finally, Mr. Tsuji summarized the topics to be discussed at 03 workshops in Vietnam.

Disaster Risk Management of SMEs in Vietnam- Mr. Dau Anh Tuan, General Director of Legal Department, Vietnam Chamber of Commerce and Industry (VCCI)

Mr. Dau Anh Tuan first thanked to the contributions from JICA to Vietnam. In his presentation, Mr. Tuan mentioned one other aspect, disaster risk management of Small and Medium Enterprises (SMEs) in Vietnam. According to Mr. Tuan, from 2011, VCCI in cooperation with The Asia Foundation (TAF) conducted a research on this issue and a pilot project for 5 provinces in central Vietnam, considering how SMEs responded to disasters in Vietnam. The study received positive feedback from Vietnam enterprises. Accordingly, for SMEs in Vietnam, there are about 550 thousand enterprises (based on statistics of General Department of Tax), in addition to approximately 3 million household active in business, which account for over 50 % labor force in Vietnam, contribute more than 60 % of GDP, provide more than 1 million new jobs per year in remote areas and underdeveloped areas ... This is a very important area in poverty alleviation and social security; however the majority of SMEs in Vietnam are young, small, weak, easily influenced by the risks of change in economic policies or the effects external impacts such as natural disasters ... they are easy to face with crisis or bankruptcy.

Meanwhile, Vietnam is considered as one of five nations with highest level of disaster risk in the world with the more severe and complex movements. It affects foreign investment in Vietnam: very difficult to attract investment in areas with frequent natural disasters. It indicates the urgency of the project. Research conducted on the three regions of Vietnam, focusing in some provinces such as Da Nang, Nghe An, Khanh Hoa, gives some conclusions: most of the small and medium enterprises are dependent on the State facilities such as transport systems, water supply systems ... and this is the reason why Mr. Tuan highly appreciates the new approach of JICA to this project.

Regarding the extent of damages caused by natural disasters, and also based on study of VCCI and TAF in 2011 with questionnaires over 200 enterprises via email and deeper direct interviews of 50 enterprises, it showed the high risk level: 85% enterprises were attacked by storms and 60% of them suffered damages. The major damages are on buildings, equipments, stocks...

However, the response to the disaster in Vietnam now is a different story. 6 % of enterprises are not interested in disaster prevention, 46 % of them have interests but no prevention plan, 33% of enterprises have plan but under insufficient capacity and resources to implement, 43 % of them have no task assignments for emergencies and 55 % of enterprises have no disaster recovery plan... Enterprises are still lack of the necessary and effective preparation to prevent and mitigate the impact of natural disasters. By the survey statistics of VCCI & TAF in 2011, SMEs in Vietnam are lack of the knowledge and skills of disaster risk management, no evaluation of each probable risks, no training program on disaster risk management.

Mr. Tuan also made suggestions and recommendations to improve the situation as broad approach to cope with natural disasters, more consultants on disaster risk management, increase the number of business insurance providers on disaster risks with higher capacity, develop a master plan as ABCP.... However, according to Mr. Tuan, positive signals on disaster risk management from the stakeholders are recorded,

and that's the overview of the situation of disaster risk management in SMEs in Vietnam, he is looking forward to receiving comments from the participants.

After the presentation of Mr. Tuan, a number of questions and comments were raised.

1. **Question 1:** Mr. Nguyen Huu Phuc, Director of Disaster Management Center- Water Resources General Department, Ministry of Agriculture and Rural Development of Vietnam raised a question as follows: in the program of APEC, Center of Disaster prevention and mitigation reported to the Ministry of Agriculture and Rural Development together with APEC to hold 02 meetings, the first meeting was to identify the barriers to ASEAN countries in Singapore last year. The 02nd meeting was held in Hanoi on May this year on the measures for the countries and the mutual cooperation to response to the disasters. To maintain business continuity and areas business continuity by the JICA study is a new one. As Mr Phuc knew that between VCCI and the Ministry of Agriculture and Rural Development signed a memorandum of understanding to work together, so with a new concept like ABCP, what does suggestions may Mr. Tuan give, what steps do both parties need to work together to support the pilot project and to expand mutual cooperation in training on disasters, raising awareness of business community.

Answer 1: Mr. Tuan answered as follows: about 02 years ago, he and Vietnam enterprises had no concept of natural disaster risk management. However, because of the awareness of the importance of the issue, it can be seen the impact of natural disasters affecting the industry, Mr. Tuan agreed with Mr. Phuc's statement that VCCI and the Ministry of Agriculture & Rural Development and the State agencies and other stakeholders need to cooperate to promote more activities in this field. For enterprises, it requires to enhance the operation of the business association. VCCI has recently been aware of the big importance of the business associations. Business Association is the soul of local enterprise; they can share with enterprises in the industry the importance of disaster management, experience of how to deal with disaster in the future. In the upcoming time, they will try to raise awareness of the business association. VCCI used to train 20 lecturers on disaster risk management in order to explain to the enterprises. The lecturers are from the very enterprises with knowledge of both business and natural disasters. It is better to select the right people and the right enterprises to share knowledge, to the people who directly manage such activities, or enterprises directly benefit from this project. Besides that, VCCI will coordinate with the Ministry of Agriculture and Rural Development to train more lecturers and trainers.

Mr. Phuc added comments that they should absorb research results from this project of JICA, and will request the assistance of JICA experts to advise more about ABCP in order to carry out with risk management.

Mr. Tuan agreed with such opinion and supplemented that he also talked to Dr. Takahashi that the master research program of JICA should penetrate to the local authorities, to review approaches to local authorities. He also suggested that, it should be better to advise the local authorities to implement ABCP in the aim to attract more foreign investment capital. It will be easier to convince the local authorities to participate in this project.

2. **Question 2:** Next, Mr. Thanh from The Asia Foundation- one of organizations holding the disaster prevention and mitigation program in SMEs in Vietnam in cooperation with VCCI, highly appreciated the approach methodology of JICA study team. According to reports from

JICA, they identified risk region, progress to help enterprise to maintain business continuity, so do JICA expert evaluate coordination mechanism of Vietnam with the actors of this progress or not? How is about coordination mechanism? In evaluation criteria, JICA does not rank human factor, so do JICA experts rank this factor in the top priority or not? If so, why the human factors rank in 5th or 6th in their list?

Answer 2: On behalf of JICA Study Team, Dr. Takahashi replied as follows: human resource is a very important factor, but this is another aspect of this study. In our project, approach in ABCP is a new approach, first need to build the methodology. To determine the methodology, the study team have identified what is BCP of a region, and then pointed out the methodology and plan to perform. Therefore, at this time, the scope of the project just stops here. Based on these studies, they will discuss with the governments of ASEAN and the ASEAN businesses for better understanding and applying the new approach. In this process, the human factor is very important, but it's the next step of the research process.

3. **Question 3:** Mr. Hieu from WHO mentioned in regards of human safety. In ABCP, do JICA have any integration plans to ensure health and safety for human or not? Because if they do not ensure this factor in business, the enterprise can not continue. In addition to risk assessment for enterprises, do they have any evaluation on safety issues for humans, rather than just disaster assessment in emergencies, only related to the business continuity alone? Do they have any integration plans to protect people? Related to VCCI, Mr. Hieu asked that whether the assessment in Mr. Tuan's presentation represent all businesses in Vietnam or not? At all levels, regions? Or just regional assessment? In this study, any assessment on damage to people, property, or time?

Answer 3: Dr. Takahashi replied that employee safety was the highest priority, indispensable criteria in planning. In this research, they simulated disaster risks and considered other impacts on local communities, the people living around. However, they do not evaluate the direct impact on human. The information used by the research team is related to human safety, and the more in-depth study is under industry research.

Regarding to VCCI, Mr. Tuan answered that the survey was conducted by mail at 191 SMEs in three provinces, and then 53 in-depth interviews to get more opinions were carried out. So with such number of enterprises implemented on a predetermined geographical areas, this study did not represent the whole of enterprise in Vietnam. However, VCCI also intentionally chose a province with many natural disaster as Nghe An and province with a few disaster as the Khanh Hoa and a major urban center in Da Nang. Central coastal region is prone to natural disasters than other regions of the country, because of the different characteristics of each region, so VCCI did not recognize that survey represent for the whole, but he hoped that in the near future, they can implement the study in a large scale and full terms. Besides that, in the questionnaire, it was not deep investigation of the human damage. In direct interviews with more than 50 companies, they only asked to focus on the citizen. And this survey focused on the needs of the enterprises on disaster risk management training, investigation of reality of damages was just one part of the study. Once again, Mr. Tuan affirmed this survey was not complete and comprehensive.

Mr. Phuc from MARD then added some comments here. He said that Ministry of Agriculture and Rural Development recently organized more surveys in the Mekong delta region and the Southern part of Vietnam. The results showed a different reaction of enterprises in such regions to disaster. Most of them were not worried about the disaster risk. In the Central, the study team was unable to collect information

on human losses because of the enterprises' information on such loss was very poor. They do not save such information. If the team wanted to have further information on human losses, it is better to collect from Provincial level Steering Committee for Storm Prevention and Mitigation, not from the industrial parks or enterprises.

Tea Break

Natural Hazard and Risk Management

National Disaster in Vietnam- Dr. Dang Thanh Mai- Deputy Director of National Center for Hydro-Meteorological Forecasting

After tea break, the seminar continued with a presentation presented by Dr. Dang Thanh Mai on the situation of natural disasters and disaster risk assessment in Vietnam. Vietnam is considered as one of the most natural disaster-prone countries in the world. The most common natural disasters in Vietnam are flood, typhoon, inundation and flash floods. In the past year, Vietnam recorded a lot of natural disasters, which caused severe consequences for both people and materials. In the past 30 years, on average, 500 people died or missing, thousands of people were injured, economic losses of about 1-1.5% of GDP. Only in 2013, estimated total value of material damage was about 25,021 billion VND.

Typhoon and tropical storms usually affect to Vietnam. During the past 50 years, over 500 typhoons and tropical depressions came to Vietnam. The frequency and strength of storm are more and more increasing. From 1999 to now, on average our country suffers from about 8 to 10 storms each year, mainly to the Central Region and the North. In addition, the rainfall after storms is very high (>500 mm/day) causing the floods. Ms. Mai also gave some prevention and mitigation measures such as upgrading forecasting and warning systems. Strengthening infrastructure in coastal areas and resettling the residential areas. About floods, due to river systems in Vietnam, the floods come fast, large and in a long time which cause serious damages. It is required to construct dykes, reservoirs,... for flood prevention. Flash flood and mud flood are found in mountainous and hilly areas where are characterized by steep slopes and heavy rains. In recent years, flash flood appears more frequently. Landslide and erosion are the common types of disaster in Vietnam due to external factors (water) or human activities (unplanned mineral exploitation or construction). However the warning system is not good, it is require upgrading this system, plant the forest...Drought is a common type of disaster. In recent years, drought continuously occurs throughout the country, especially in the Central and the South.

Due to the complicated situation, it requires the cooperation from all governmental departments, local communities, all social organizations to work together for the prevention of natural disasters in Vietnam.

The Results of Natural Hazard and Risk Assessment for Hai Phong- Mr. Shukyo Segawa, Leader of Natural disaster risk assessment

Mr. Segawa stated the purpose of disaster risk assessment in order to establish ABCP to estimate the situations that may occur. He also analyzed the features of the natural disaster risk assessment for ABCP, gave a chart of natural disaster risk assessment, which identified the predominant of hazard, hazard simulation, disaster risk assessment to build disaster scenario, then analyzed the business impact for Hai Phong. According to the study, in Hai Phong, typhoon and storm surges are the major natural disasters. Based on this information, along with analysis of the infrastructure in Hai Phong, he gave judgments

about risk assessment of natural disasters due to floods and storm surge in Hai Phong. With the assumption that the possibility of disaster may be once in 100-200 years, he and the team came up with a disaster scenario by storm surge and inundation to industrial agglomerated areas in Hai Phong relating to infrastructure (electricity, telecommunication), Dinh Vu port, transportation network and the workers.

Pilot Study in Hai Phong

16:15 pm: Pilot Study in Hai Phong- Mr. Yoshiyuki Tsuji- Deputy Leader of the Study Team

Mr. Tsuji reminded the steps in plan to formulate ABCP, analyzed the topics of each workshop and stated the content of 1st workshop to be held on Dec. 11, 2013 at Hai Phong. Mr. Tsuji summed up the results of 1st homework, relating to policies on disaster mitigation and prevention in enterprises, hazards to be considered in enterprises and expectations for the workshop. In addition, he also mentioned to the content of 2nd homework concerning to the expected date of business recovery, weakness on business continuity and impact on the company management.

Furthermore, principles and content discussed in working groups at 1st workshop were also mentioned: fundamental policies of Area Business Continuity, the critical hazards to be considered in ABCP and critical problems for Business continuity.

Results of the first workshop- Mr. Nguyen Ba Tien, Director of Dyke and Flood & Storm Control Department, Agricultural and Rural Development Department (Working group member)

Mr. Nguyen Ba Tien informed the results of the first workshop in Haiphong. This workshop included 05 groups: Advisory, Infrastructure, Lifeline & Media, Private Sector and Observer with total participants at 43 people. There were 03 issues to be discussed in this workshop. Regarding to fundamental policy of ABCP, all groups accepted policies proposed by JICA team, however it should be improved by raising awareness, sharing information, clearly identifying the coordination roles of local authority with infrastructure and others... the processes of ABCP formulation should be legalized. Regarding to critical hazards need to be considered in ABCP, the first priority is storm, storm surge and flood. Other disasters such as shortage of electricity, water supply, epidemics, labor dispute... are serious hazards. Critical problems in ABCP are transportation stop, lifeline utilities disruption, losses of human and properties, low awareness of BCP/BCM concept and lack of reliable information.

After these speeches, some questions are raised as follows:

4. **Question 4:** Reporter: Ask to Dr. Dang Thanh Mai, at the moment in Vietnam, do we have ability to forecast flash flood and landslide or not? We can give any comment on the reason why the storms and floods in recent 10-15 years have tendency to increase: due to of climate changes or other reasons?

Answer 4: Dr. Thanh Mai answered: Regarding to disaster forecast, especially flash flood and landslide, it depends on many factors because these hazards usually occur in mountainous and hilly areas, therefore it is very difficult to forecast. Some locations can be forecasted, other can't. Many factors need to be considered such as slope, rainfall, forest cover...it can be said that it is impossible to forecast flash flood at this moment, just only can make warning. To improve the forecast, it requires building early alarming system at the areas with high rainfalls, large slope... At the moment, they are implementing pilot early

alarming system in the North. But it is just a pilot project, not official to apply throughout the country due to the lack of resources. However, she committed that they would try their best to apply early alarming system in the society for prevention measures.

Regarding the increase in flood frequency and intensity, direction and geographical influence to Vietnam, Dr. Mai identified as follows: the frequency of storms, there are more or less in each year such as there are many storms in 2013 by just some storms in 2012. As statistics, storm frequency has tendency to increase little but the intensity increases much. The complexity and changes of the storms cause the difficulty in forecasting activities. The damages caused by storms are very huge. The impact of climate change leads to the earth warmth which makes the sea level increase. It is a result of the trend to rise of the storm. In addition, human factor is very big cause. The very people are the reason leading to the higher storm frequency and intensity. For example, in comparison with the flood in 1999, flood in 2013 is much lower in term of rainfall, but the damages are much higher due to forest destruction, construction buildings...

5. **Question 5:** Mr. Trung, from The Central Department of Floods and Storm prevention and mitigation, Department of Dyke and storm prevention & mitigation-MARD: he said that he had a chance to participate in this project in very early time; therefore he gave some comments for JICA experts to complete the project. Firstly, the Prime Minister has just approved 17 new industrial parks in Hai Phong, together with existing IPs. Most of IPs do not pay attention to natural disasters. The presentation of Mr. Segawa just provide only very general information, so in the next 02 workshops, JICA team should pay more attention to 17 new IPs and existing IPs to have detailed assessment on disaster prevention and mitigation at such IPs. Hai Phong is selected as pilot site because Hai Phong is influenced by mountains, rivers and sea. Storms from sea, landslide from mountain and flood from rivers, three of disaster directly impact on Hai Phong, therefore, what policies need to protect IPs, such as building dykes to protect IPs, pumping stations for IPs in emergency cases...all of these problems have to consider. In addition, according to VCCI, all enterprises need to ensure business continuity, so it requires measures on electricity or transportation system, how the Government support enterprise to maintain business continuity? In the presentation, JICA study team only mentioned to 03 disaster scenarios to Haiphong, Mr. Trung suggested the study team to give more scenarios for responding. For example, if Haiyan typhoon comes to Haiphong directly, what is the depth of inundation? What is the situation of new and existing IPs?

Answer 5: Dr. Takahashi replied for all above questions as follows:

Low awareness of IPs on the issue of natural disasters. So in the process of building project, one of the objectives set out is to raise awareness for the private sector and for local government agencies as well as stakeholders. Therefore, JICA Study Team will coordinate closely with the VCCI, Ministry of Agriculture and Rural Development, The Asia Foundation and other organizations to carry out this problem. This is a long-term task; need more time while the project is just beginning. In addition, JICA will also coordinate with other government departments in Vietnam to conduct raising awareness to people about disaster risk issues.

The policy making is also important. The project is only at the starting point, there should be coordination between the organizations of Vietnam, ASEAN... it can be said that a policy is in the

focus of this project. Therefore, JICA will combine with other agencies to manage the experience of these agencies and enterprises. He also stressed that JICA's approach is very new and get the attention of many stakeholders.

Disaster Scenario: Because this is the first step of the JICA project so they only choose one scenario for each country with the most typical hazard for example to select Philippine as a location affected by the earthquake, Indonesia as a location affected by volcano and Vietnam as a location influenced by storm surges and inundation. Just because there is not much time to cover all possible scenarios, so they only mention the most serious problems of the country then to draw lessons to apply to other instances.

6. **Question 6:** Other question from a Reporter relating to coordination mechanism: It can be said that coordination mechanism is very important in emergency. If we have good coordination mechanism, it can reduce a lot of damages. So the study team is advised to add coordination mechanism in emergency in Vietnam into their study. More over, any evaluation on supply chain?

Answer 6: In coordination mechanism: Study team understands the importance of coordination mechanisms before, during and after a disaster. JICA AHA Center project will try to develop a proposal to coordinate all stakeholders to raise awareness, promote cooperation.

Regarding to supply chain: this is a very important issue with many factors in the supply chains. This supply chain is very complex and difficult to analyze all in detail. However, with the industrial parks, the impact from roads, ports, airport... is the most important issue in the supply chain so it is mentioned. But detailed analysis of all factors is not within the scope of the study.

7. **Question 7:** Another question is from Dr. Ngoc Anh, National University of Science. He asks Mr. Segawa about the difference between risk and hazard. From such hazards, the output of study is just only the scenarios or estimates on damages in details? What is the base to identify the frequency of disaster in ABCP? How to collect and any suggestion when using ABCP?

Answer 7: Mr. Segawa answered the questions as follows: he analyzed period of disasters in 100-200 year that is consistent with the existence for enterprises. Normally, enterprises do not have long term plans up to several hundred years; therefore the period of 100-200 years is a reasonable time for research. Hazard is natural disasters, but if it is no impact on human or property, it will have no risk.

On the output of the study, Dr. Takahashi has said that through the information that the team received, the group will discuss, evaluate to get the most basic form of risks that can occur, progress and damages of disaster also, but no specific evaluation in number for the damages. They only analyse the possible damages, not calculate amount of money for such damages. However, when the stakeholders mentioned to this issues, they also talked about detailed economic damages of the disasters.

Besides that, Mr. Tsuji gave his opinion to explain that when formulating a specific ABCP, they need a lot of different scenarios to build the best plan. However, the study is just at starting point, so they only

gave 01 scenario to discuss first. Other scenarios can be considered after the first ABCP is formulated in the study.

17:05 pm: Closing Remark

Mr. Minoru Miyasaka- Senior Advisor to the Director General, Global Environment Department, JICA Headquarter summarized the seminar. He expressed his sincere gratitude to the delegates attended the seminar today. He also recalled the complicated situation of the natural disasters around the world in recent years that left serious damage both to people and to the country. He stressed that ASEAN region is a high risk area for natural disasters, therefore it requires research activities and mutual coordination to prevent disasters. Through 1st workshop, it may show some differences in planning between Japan and Vietnam by different context and various natural disasters, but both countries are confronted with the increasingly complex and intense disaster situation. He also emphasized the purpose of JICA project this time. JICA aims to provide the infrastructure system to help people to cope with the disasters. He also reiterated that the disaster scenario needed to be a closer review and when 17 new IPs formed in Haiphong, the team also needed to analyze and study more carefully when building ABCP. However, JICA would try their best to provide a suitable ABCP while the appliance and extension of the plan are entirely dependent on Vietnam government and enterprises. Once again, Mr. Miyasaka emphasized that all stakeholders, especially enterprises need to raise awareness about the disaster as well as learn about this approach to maintain business continuity plan.

17:20 pm: The Seminar ended, MC. Hoang Minh Nguyet said thank to the attendance and active participation of all delegates.

A7 Record of Final Seminar.

A7-1 Record of Final Seminar (Bandung)

A7-2 Record of Final Seminar (Jakarta)

A7-3 Record of Final Seminar (Philippines)

A7-4 Record of Final Seminar (Hai Phong)

A7-5 Record of Final Seminar (Ha Noi)



**Final Seminar
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation
for Industrial Agglomerated Areas in the ASEAN Region”**

August 26, 2014, Savoy Homann Bidakara Hotel, Bandung, West Java, Indonesia

*A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

Participants

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Indonesia	Rachamayadi Basar	BPBD Prov. Jabar	Kasi. Pencegahan
Indonesia	Husain Achmad	BAPPEDA Jabar	Sekretaris
Indonesia	Vidya Ayuningtyas	BAPPEDA DKI Jakarta	Staff Seksi Sistem Informasi
Indonesia	Ani Widiani	BAPPEDA Jabar	Kasubid TRLH
Indonesia	Lina Yulianty	BAPPEDA Jabar	Staff
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Indonesia	Wahyudi	DINSOS Karawang	

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Participants

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Indonesia	Eko R.	PT. TMMIN	Advisor

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Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

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Indonesia	Daryanta	PDAM Kab. Bogor	DirTek
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Indonesia	Andi Sata M.	PUSJATAN	Pesekayasa
Indonesia	Haliema Armila	PUSJATAN PU	Sie Litbang BBTJ
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Indonesia	R. Yayat Hidayat	PT. Jasa Marga	Pelaksana
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Indonesia	Shavitri Kurnia D.	BBWS Citarum	Staff PP
Other Group			
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Indonesia	Dadang S.	Forum PRB Jabar	Ketua I
Indonesia	Nandang Noor	Saudara Sejiwa Foundation Japan National Council of Social Welfare	Executive Director
Indonesia	Dadang	KODAM III/SLW	Pabandya Kodam III/slw
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August 26, 2014, Savoy Homann Bidakara Hotel, Bandung, West Java, Indonesia

*A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

JICA and JICA Study Team

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Japan	Nami Kasahara	JICA Indonesia Office	Project Formulation Advisor (ASEAN Partnership)
Japan	Masakazu Takahashi	JICA - AHA Centre Study Team	Team Leader
Japan	Shukyo Segawa	JICA - AHA Centre Study Team	Expert on Risk Assessment
Japan	Yoshiki Kinehara	JICA - AHA Centre Study Team	Area BCP
Japan	Kotaro Fukuhara	JICA - AHA Centre Study Team	Coordinator
Indonesia	Krishna S. Pribadi	JICA - AHA Centre Study Team	National Coordinator
Indonesia	Aria Mariany	JICA - AHA Centre Study Team	Facilitator
Indonesia	Bayu Novianto	JICA - AHA Centre Study Team	Project Staff
Indonesia	Lusiana Rumintang	JICA - AHA Centre Study Team	Interpreter
Indonesia	Nimas Maninggar	JICA - AHA Centre Study Team	Note Taker

**Final Seminar
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

August 26, 2014, Embassy Room, Savoy Homann Bidakara Hotel, Bandung,
West Java, Indonesia

*Under a Joint Program of Japan International Cooperation Agency (JICA) and ASEAN
Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

Agenda

Opening Session	
9:00-9:40	Registration
9:40-10:00 (20 min)	Opening Address Prof. Dr. Ir. Deny Juanda Puradimadja Head of Bappeda West Java Province
Session 1 Project and Area BCM	
10:00-10:50 (50 min)	Project and Area BCM Dr. Masakazu Takahashi Team Leader of the Study Team Activities in Indonesia Dr. Krishna Suryanto Pribadi National Coordinator of Indonesia Q & A / Discussion
10:50-11:10	Coffee Break
Session 2 Developing Area BCM	
11:10-12:20 (70 min)	Understanding the Area Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment



	<p>Determining Area BCM Strategy and Developing Area BCP</p> <p>Mr. Yoshiki Kinehara Team Member, Area BCP</p> <p>Exercising and Reviewing, Maintaining and Improving, and Tools for Area BCM</p> <p>Dr. Masakazu Takahashi</p> <p>Q& A / Discussion</p>
12:20-13:20	Lunch
<p>Session 3 Panel Discussion Area BCM: Expectations, Contributions and Relevant Activities</p>	
13:20-14:30 (70 min)	<p>Moderator: Dr. Krishna Suryanto Pribadi</p> <p>Panellists:</p> <p>Dr. Kridanto Surendro Sekolah Tinggi Elektro dan Informatika (STEI) - ITB</p> <p>Mr. Irwansyah Karawang International Industrial City (KIIC)</p> <p>Ms. Agustien Nurisamunandar Bappeda Karawang Regency</p> <p>Ms.Linda Al-Amin, ST, MT/ Ms.Ani Widiyany, ST, MUT Bappeda West Java Province</p> <p>3 -5 Minutes Short Presentation by the Panellists, and Q/A and Discussion</p>
14:30-14:40 (10 min)	<p>Closing of the Seminar</p> <p>Mr. Hideaki Matsumoto Japan International Cooperation Agency (JICA)</p>
14:40	Adjournment

MC: Ms. Aria Mariany
(Junior Researcher of the Study Team, Bandung Institute of Technology)

Minutes of Meeting

Final Seminar For JICA Natural Disaster Risk Assessment and Area Business Continuity Plan Formulation for Industrial Agglomerated Area in the ASEAN Region

26 August 2014
Embassy Room, Savoy Homan Bidakara Hotel
Bandung -Indonesia.

Time : 09.00-14.40

09.40-10.00 Opening Speech by Mr. Ahmad Husein as secretary of Local Planning and Development Agency representing Mr. Deny Juanda Puradimadja as Head of Local Planning and Development Agency

He expressed his greetings to all participants who attended

Seminar of natural disaster risk assessment and area business continuity plan formulation is a follow up of a series of research activities initiated by Asean Coordination Centre For Humanitarian Assistance On Disaster Management (AHA Centre) and Japan Internasional Cooperation Agency (JICA) for risk assessment of natural disaster and formulation *Area Business Continuity Plan* (ABCP) for agglomeration area in ASEAN. These research is aims to minimize damage and economic losses in the industrial agglomeration area when a major disaster occurred, involving all stakeholders.

For Indonesia, industrial agglomeration area selected as pilot project in west java were industrial area in Karawang's region, Bekasi's region and The City of Bekasi. As we all know that manufacturing sector in west java contribute a great number of National Gross Domestic Product. This contribution of industrial sector shown by domestic investment (PMDN) and foreign investment (PMA). According to data, domestic investment on 2014 first quarter, West Java Province ranked second nationally with total investment of 8.1 trillion rupiah. While foreign investment of west java provice ranked first nationally with total investment of 1.8 billion US dollars.

The three regions/city are also included in the metropolitan bodebek karpur which will be developed into self-contained metropolis with manufacturing, trade and services as its leading sectors. Several industrial area in this metropolitan has been set as special economic zones (KEK) based on existing condition and future developments.

Currently, several activities has been done related to research on development of area business continuity plan such as form a working groups consisting of various actor who responsible for restoration of infrastructures and utilities in support industrial activities and risk assessment study in the study area. In parallel, workshops and seminars have been

done on 2013-2014. It discuss about risk assessment for determining type of disaster that have a great impact on industrial area, mapping of infrastructure and utilities that were prone to the impact of disasters and supporting continuity of industry. From all series of the activities has been developed a draft of area business continuity plan for industrial agglomerated area in Karawang's region, Bekasi's region and the city of Bekasi.

Seminar of natural disaster risk assessment and area business continuity plan formulation aims to present and disseminate the results of research that has been done in order to be useful to all stakeholder both of government, universities and private sector.

In the end of his speech he expressed the hope that this seminar can be useful to increase of institutional capacities in West Java Province so that each stakeholder can act according to the task and function.

Thus, the impact of natural disasters that affect the economy of West Java Province can be minimized.

SESSION 1 10.00-11.00

Presentation by Dr. Masakazu Takahashi, Team Leader of Team Study Project and Area BCM

Video

This video briefly explains about the importance of ABCP to the ASEAN economy resilience. ASEAN is one of the most disaster prone areas in the world. Disasters cause damage not only to buildings and people but also to the industries and economies both at the local and national levels. Each industries are connected by supply chains, so if there is any trouble in one side will influence the economic condition of ASEAN Countries. Therefore it is important to develop BCM for business sustainability by protecting company's assets both in information, equipment and employee. When major disaster occurs, it will cause damage to a number of important infrastructures such as roads, electricity, and water, individual companies' BCM will be not able to cope.

JICA offers concepts of ABCM for continuity of local economic activities in the times of disaster. This idea is intended to enhance the overall of regional economic resilience. In order to achieve the goal, cooperation between private sectors, government municipalities, operators of infrastructures and utilities and local communities in the area is necessary.

We will attempt to develop companies, area and countries that are resilient to disasters in the ASEAN. The first step to a resilient ASEAN starts now. JICA will continue to support ASEAN enhancing its economic resilience by Area BCM.

Presentation

In the beginning of his Presentation Dr. Masakazu Takahashi explained about the importance of BCM and how the stakeholder prepared BCM. Disasters directly affect business performance and undermine long-term competitiveness and sustainability. From 2 disasters that occurred, earthquake in Tohoku Japan and Flood in Thailand cause disruption of supply chain of industry. The disruption of supply chain will cause loss in business and industry. To fix industry and business conditions requires a certain times. Therefore it is important for industrial area to prepare area BCM to protect business.

Now JICA and AHA centre in collaboration to propose BCM plan in Indonesia. So far, government as public sector and private sector show the different response. Response of the public sector was done by improve in early warning, preparedness and response. On the other hand government have difficulty in regulating investment and development in a way that reduce disaster risk. In parallel, government began to play an active role as promoter and facilitator of private investment.

The response of private sector was done by planning BCM to cope disaster risk. The next important step is implementing disaster risk to the business process. Public and private sector must collaborate to create BCM. This BCM approach is still new and there are only few references available.

BCM Project begins on February 2013 and will be finished on September 2014. But this project will be extended until March 2015. There are 3 countries that used as a pilot project for BCM, Indonesia, Vietnam and Philippines.

For Indonesia the study locations are industrial area in Karawang and Bekasi, while in the Philippines the study locations are in southern Metromanila, Civite and Laguna. For Vietnam the study location will be targeted in industrial area Hai Pong near Hanoi.

So far, collaboration JICA and AHA centre has been producing these results for ABCM: (1) proposed a new framework, area business continuity management (Area BCM) (2) formulates area business continuity Plan (Area BCP) for industrial agglomerated areas (3) conducted natural disaster risk assessments necessary to develop area BCP (4) Prepares a Guidebook for Area BCM (5) prepared information kits and (6) promoted area BCM.

The Important concept to understand area concept of BCM is the term of agglomerated area that planned in the location where industry/enterprise collected. While the area BCM is area where agglomerated area is being included in this area and also equipped with essential infrastructure and lifeline for industry.

Many stakeholders involved in area BCM including central government and local administrative, private sector, operator of lifeline infrastructure such as water, electricity, telecommunication network, universities and also communities. To oversee this plan, Local Planning and Development Agency (Bappeda) are selected as a leader for Area BCP in Karawang and Bekasi. Central government and research institutes must support the

development of area BCP by information supply. Horizontal collaboration is necessary because there are many involved stakeholder. ABCM guidebook will provide basic information related infrastructure etc. more detailed information is needed from the stakeholders involved.

At the end of his presentation, he expects that these activities will be a great step for ASEAN.

Presentation by Dr. Krishna Suryanto Pribadi , National Coordinator for Indonesia Activities in Indonesia

In his presentation he will explain briefly about activities that have been performed to develop Area BCP in Indonesia. Study area for BCM and BCP in Indonesia are Karawang's region, Bekasi's region and the city of Bekasi. As we all know that these three areas have contributed greatly to the development in west java province. The gross domestic product's Karawang and Bekasi accounts for 70 billion dollars per year and about 40% of the population Karawang's region working as employee in industrial sector. One of the problems is that all of the industrial product from 12 industrial area in Karawang and Bekasi using toll roads and 55% of industrial products distributed through Tanjung Priok port. When disaster occurred cause disruption of toll roads function and affect industrial distribution.

In progress to develop area BCP has been done several meeting. First meeting is on 22 August 2013 to form working group. Then first workshop was held on 20 December 2013 to discuss about disasters that threaten industrial area. It was attended by 37 participants. On 6 March 2014, the second workshop was held to discuss about disaster impact on industrial area. It was attended by 57 participants and on 22 May 2014, the third workshop was held to formulate area BCP first version and to discuss about policy direction, action plan and business continuity. It was attended by 43 participants. At this opportunity the review of first version of ABCM will be done once again

The result of first workshop was produces an illustration for basic policy that can be generally accepted with a little correction. Then in relation with critical damage, flood becomes main concern. Critical problem from flood disaster is disruption important infrastructure. One of the greatest issues is the employee become victims and disrupts business.

The most important result of second workshop was effort to maintain the continuity of business done by normalisation and maintenance of the river, pump procurement, green area, maintenance of lifeline infrastructure. While the result of third workshop is related with person in charge of BCP plan such as local planning and development agency, national disaster management agency, local disaster management agency and supported by central government.

For action plan of 2014 the things that have to have to do is reviewing and up dating of the plan by stakeholder then it can be guide for second version.

11.00-11.15 Coffee Break

SESSION 2 11.15- 12.40

Presentation by Mr. Shukyo Segawa, Leader Of Natural Disaster Risk Assessment Understanding The Area

His presentation begins by explaining the difference between BCM/BCP and area BCM/BCP. BCM/BCP is an individual company plan to continue the operation in the time of disaster while BCM/BCP area is agglomerated area consisting of several industry or organisation.

In order to understanding the BCM area can be done in 4 ways:

1. Basic information of the area
2. Natural hazards of the area
3. Business and industry to protect
4. Transport infrastructure and lifeline facilities for business.

For basic information of the area, important things to know are local economy and local government. For local economy, the important information that is related with main category of business, regional GDP, foreign investment and employee's Housing place. While related information with local government are contact information, disaster management system, response in case of disaster and information of risk assessment. For the natural hazard of the area related with the experiences for the natural hazards that have affected to the area. The third point related with business and industry to protect, there are several information that has to take such as contact information, lifeline facilities used in the park, traffic infrastructure used by companies in the park, experiences of business interruption and BCP of tenant companies. While for transport's infrastructure and lifeline's facilities for business containing of traffic infrastructure such as roads, railroads, harbour, airport and also lifeline for business such as electricity, gas, telecommunication, water, and water pipe.

In formulating BCP area there are several steps that must be performed:

1. Identify the natural hazard that threaten business
2. Hazard assessment
3. Risk assessment
4. Disaster Scenario creation

For identifying natural hazard that threaten business is done by collecting the existing disaster records from international and national database, identifying the predominant hazards to be considered.

For hazards assessment and disaster assessment are done by using the existing hazard maps, hazards simulation based on the existing information or surveyed data. These assessments can also use the records of the government research institute.

The next is risk assessment. Risk assessment is assessment to the matter that contributes to occurrence of disaster and risk. The risk is not only the direct damage but the suspended periods of services are assessed. The risks are assessed based on the experiences by the disaster in the world.

For disaster scenario creation are done by describing the damage to the facilities if hazard occur and the change of situation over time after disaster occur, the suspension of services and the recovery time of the facilities.

For the smooth implementation of area BCM, it is recommended to form a steering committee and a working group.

Presentation by Mr. Yoshiki Kinehara, Team member , Area ABCP Determining Area BCM Strategy and Developing Area BCP

The understanding about area BCM Strategy is derived from the following 4 question:

1. How is the impacts that will the assumed disaster make on the society and industry of the area?
2. What will be the bottlenecks for industry continuity at the disaster?
3. What objectives should we agree with for industry continuity?
4. What activities should be planned and to do to improve the capability of industry continuity?

To determine BCM strategy on the location of the study : Karawang and Bekasi then those questions must be answered. Based on workshop discussion in the past has agree that the most profound impact disaster in Karawang and Bekasi is flood.

First question is How is the impacts will the assumed disaster make on the society and industry of the area? In the workshops have discussed about the impacts that arise due to floods: the city would be inundated for two weeks, many people would be casualties and evacuees, many facilities would be damaged, the security would be worse and the local economy would be led to decline.

The next question is about the bottlenecks for industry continuity. Bottleneck in Karawang and Bekasi are reduction of transport function of Jakarta-Cikampek Toll road, Tanjung Priok Port and Communication and also worsening of living condition of people.

To answer the third question which related with objectives of business continuity in Karawang and Bekasi is the production in the industrial agglomerations could be continued or recovered at an early stage. This goal will be achieved when stakeholders works together to cope and improve the condition for continuity of the area and infrastructure industry.

The fourth question is about countermeasure to improve business capability in Karawang and Bekasi can be answered with strengthening institutions and facilities that will cope the damage that occurred during disaster by preparing the necessary resources to continue business activities and the availability of emergency response to recovery.

To develop Area BCP, the ideas that have been agreed from those questions then must be implemented. In implementing BCP plan in Karawang and Bekasi stakeholder can be expected to continue the discussion and activities of Area BCM that the plan has been prepares and revise.

**Presentation by Dr. Masakazu Takahashi, Team Leader of Team Study
Exercising and Reviewing, Maintaining and Improving, and Next Step**

Currently Area BCP is still in the planning stage and it is not known how to implement it in accordance with location. Implementation of this area BCM needs to be done by giving the exercise for the employee, socialization and increase the awareness of the stakeholder. The exercising methods conducted for implementation area BCP are testing to the important component like contact person, a discussion based exercise, training and seminar also simulation included for UKM.

For reviewing will be done to make sure that all stakeholders, plans, activities and internal resources have been identified, all risk and external resources have been identified, bottlenecks of the area are fit for the purpose and appropriate on the level of the risk and area BCM maintenance and exercising programs have been effectively implemented. This review is made possible done by experts but now there is no ABCM expert then reviewer can be done by leaders of Local Planning and Development agency (Bappeda).

For improve and maintenance the quality of BCM then required to keep up date in order to follow the changing conditions. The stakeholders need to discuss for each plan that will be improved. For reporting, all of hanging conditions must be reported.

Area BCM Karawang and Bekasi have not reached the last step because not knowing how to transfer area BCM to the local government and how to implement the plan continuity.

Plan Area BCM for Karawang and Bekasi first version has done and the next will be planned for the second version which are strategy and plan. Actually, area BCM development program have finish on September 2014 but will be extended until November 2014 to design a second version. The second version may be different from the first version.

Question and Answers Sessions

Dadang Sudarya ,Disaster Risk Reduction Forum of West Java

In connection with the working group, what are the elements in it, how is the management model and because its importance, our organization is very interested in joining and to determine single document in the future to come. Next, how far will the Local Planning and Development Agency become the leading factor and how will its response, because it is of importance to have a single agreement specially in escorting local policies. In the future will this study become an official document in Bekasi area and will adapt itself with the already existing action plan form West Java and or Karawang-Bekasi area?

Waridi Hadi , Raya Consultant

The area of this study consist of Karawang-Bekasi and area in the proximity of Citarum river's flow. In the upstream area there are 3 dams of large water reservoir, I observe that there is a potency of destruction, yet this potency has not been being considered. Did it not being studied or Has it not been being studied at all?

Dr Masakazu Takahashi, Team Leader of Team Study

We think the continuity of this ABCP is very important and it depends on the coverage of Stakeholder. As for BCM, it will require, at least, a leader to escort the continuity of the program. So this workshop it is proposed that the Local Planning and Development Agency becomes its leading sector, because the area of BCM industry are being located in 3 areas, which are Karawang's region, Bekasi's region and the City of Bekasi. That is why, it will require a higher level of leadership, so the province's Local Planning and Development Agency are being proposed as the leader of this plan, but this is still not a formal agreement.

As for the destruction of dams, we didn't include it in our document. Along the discussion did appeared and became an important issue to be followed perhaps in the next phase if we have BCP that have already been managed by the local administrative, and then the proposal can be included in it. We hope that all interest holder can offer their ideas for ABCP.

Dr Krishna Suryanto Pribadi, Natinal Coordinator for Indonesia

I think Mr Takahashi has already answer this, but the leading sector is very important because I think all coordination and agreement will proceed if there exist a leadership mechanism, that is why the best step is to pull a responsibility from ABCM for this pilot project.

Sugeng Riyadi – Bekasi region's Local Disaster Management Agency (BPBD)

In this pilot project, there are many industrial area in Bekasi's Region, regarding this matter, has or has it not been technological failure being discussed, because technological failure is

also a form of disaster. If it has already been discussed, how to handle it and what is its form in this pilot project?

Dr Masakazu Takahashi, Team Leader of Team Study

In this project we are focusing on natural disaster such as drought, drain and so the technological failure is not being discussed here.

Dr Krishna Suryanto Pribadi, National Coordinator for Indonesia

At this opportunity we only discussing natural disaster, so maybe for the next opportunity if this project is already commencing, then we can make a study on technological failure. For the beginning, we are starting from natural disaster first.

12.40 Documentation of The Participants

12.40 – 13.30 Lunch Break

SESSION 3 13.30-14.40

Ms. Ani Widiani, Local Planning and Development Agency of The Province of West Java

She gives opening salutation to all participants that present in the room

Ms Ani present that there are 5 things to be explained in connection with ABCP, they are :

- The province of West Java has regional law number 2 year 2010 concerning conducting natural disaster mitigation
- Mitigation master plan on natural disaster
- Regional law on spatial layouts of the province of West Java for the year 2009-2029 in which it was made with including the principles of mitigation
- Infrastructure development which correlates with operation of industrial complex for transportation access
- The concept of BODEKBEKARPU (Bogor-Depok-Bekasi-Karawang-Purwakarta) has been institutionalized in the form of regional law, which is a concept of metropolitan's management in the province of West Java. The province of West Java has 3 metropolitan areas, which is BODEBEK then become BODEBEKARPUR by including Karawang and Purwakarta to support an ever developing region; the Bandung's metropolitan and lastly the Cirebon's metropolitan

For the discussion on the role of West Java's stakeholders correlate to regional law number 2 year 2010 about performing natural disaster mitigation which state that the role of Local Planning and Development Agency in the pre-natural disaster phase is through mitigation attempts, while BPDB has authorization on the pre-disaster, emergency response, recovery and post-disaster. The same law also states that the roles of Local Planning and

Development Agency are on the planning and executing levels and then managing development and also financing.

Next, Ms Ani also present the disaster prone area in the province of West Java. In the Spatial Layout Plan for the year 2009-2029 has been set the Conservatory Area in the province are 455 of total area. These areas are not only consists of protected forest but also disaster prone areas which consists of landslide prone areas, land movement prone areas, etc. Shown in the map (slide 4) that the northern part of West Java's province filled with blue color which indicates that those areas are flood prone areas. This is in accordance with JICA's study that, historically, the northern part of West Java's province which covers Karawang-Bekasi areas are flood prone areas. The study then has been become consideration material to constitute the Spatial Layout Plan

Next, Ms Ani explains about couple of transportation project to support industrial area. Such project as Cikarang (Cibitung) – Tanjung Priok Toll Highway which is 34,5 km long and which is the central government's program as the planner and the financier. Other infrastructure project which also central government's program is Cibitung-Bekasi flyover highway, sea transportation development by building the Cilamaya Seaport. For the development of seaports has been also included in the spatial layout plan, which is the construction of Cilamaya Seaport, Tarumajaya Seaport in the south, as for in the south are Ratu Seaport, Santollo and Pangandaran.

On the next slide Ms Ani mention the concept of twin metropolitans BODETABEKARPUR. West Java's Province has established regional law on metropolitan's management. All this time, Jakarta has become the prime area whilst West Java became Secondary Area. West Java wants on equal term with Jakarta as prime areas with its characteristics such as independent city activity, distinct traits, independent metropolitan's management and healthy economical-social competition. In BODEKARPUR will be developed clusters for company's head offices. Like it has been commonly known that the biggest industrial activity has been located in Bekasi and Karawang which are fall as part of West Java's Administration area, yet the flow of money, taxes and income taxes are towards Jakarta because the companies' head offices are being located in Jakarta. This is what West Java objects heavily, because if the factories were constructed in West Java and then regional earning from those factories and industries should become West Java's tax income. Through the twin metropolitans concept, both Jakarta and Bodekarpur are hoped to interact positively and supportively. West Java don't want to become "back" and "leftover" area anymore, they want to compete with Jakarta as equal.

Input for ABCP especially in connection with its role and responsibility are that Local Disaster Management Agency (BPBD) Manage should become prime stakeholder because it's linked with the many roles of Local Disaster Management Agency (BPBD) in handling natural disaster mitigation. As for policy's support for ABCP, West Java has been supporting many activities concerning ABCP. Among those support are being stated in RJPMD's 4th

mission statement which is elevating the quality of environment support and disaster mitigation. In connection with important infrastructure, especially in correlation with inward transportation are the central government's authorization. Therefore it is better to actively involve the central government in the ABCP activity.

As for disaster scenario, its impact, target and effort to mitigate disaster which is listed in the ABCP's document are felt adequate and precised. Yet, for further development, the role and implementation of each stakeholder involved, whether it was national's, regional's or local's, should be detailed so to clarify authorization in each field and also to realize a more effective and efficient mitigation effort and recovery.

Ms. Augustien Nurismunandar, Karawang's Local Planning and Development Agency

She gives opening salutation to all participants that present in the room

Before beginning her explanation, she address that of 8 points that are being asked for inputs in ABCP's plan which concerned organizational role and responsibility, important infrastructure, disaster scenario, obstacles, efforts on mitigation and disaster management activities that has been carried on by the Karawang's Local Planning and Development Agency, there are few things that should be added in the plan and also correction on misspelling. But, after further discussion it is established that Karawang's Local Planning and Development Agency can only gives inputs on 4 points only, of which are organizational role and responsibility, mitigation effort, disaster management activity that has been conducted by Karawang's Local Planning and Development Agency and lastly misspelling correction.

It is to be admitted that up to now, Karawang's region's Government doesn't have any mitigation plan. But, for the future plan, they will set regional action plan on reducing the risk of disaster in accordance with existing law and integrate ABCP into the plan to be set. The integration will be done because ABCP have a more sectoral nature which is aiming on industry. As for RAD (budget plan area) to be set has a global nature and not only focusing on industry.

As for the involvement of Regional Planning Institution is to be included in region's mitigation plan on disaster, for example, becoming member of TKPSDA Citarum's coordination team on water resource management. Further more, after the mitigation plan on disaster are set, then the plan will be integrated into RJPMD (medium-term development plan area) to avoid obstacles in its financing and implementation.

From the institution side, Karawang's Local Disaster Management Agency (BPBD) up to now has yet to be formed and as for disaster mitigations are still being handed by the social service office. So for these mitigations handling, they are different in section head echelon 3. The forming of BPBD has been part of the agenda of 2014 and it is expected that in 2015 BPBD will be formed.

Other input is about who is responsible for regional disaster mitigation in connection with emergency responses, which is why it would be better if it becomes the authorization of BPBD. As for the regional planning institution will be having more role on the making of policy and its planning.

Input on effort in facing disaster Table 6.3 (slide 8) is for road maintenance on mitigation level. Besides promoting the increase of toll highways, the construction of bypass highways and effort in handling water pooling by elevating road levels, they propose to build inter-area integrated road access.

There are 4 ideas and concepts in efforts to face flood disaster which are the dam's construction, Citarum and Cibet river's normalization in accordance with each river's capacity plan. As for concepts, they are the addition of green open areas in Karawang's region and the warrant to build polder (retention pool) for massive housing scale (10 Ha minimum).

In the future, the activity of disaster management which has been done by Local Planning and Development Agency as mentioned before will be setting up the region of Karawang RJPMD. Up until now, it is the 2011-2015 RJPMD that are still on effect and it will end its effect in end of 2015 and the region of Karawang will also face region head change, so this moment is perfect, after the completion of ABCP's document and in the same time Karawang will compose disaster RAD (budget plan area), then both can be integrated to the latest RPJMD (medium-term development plan area) for the 2016-2020 period.

Dr Kridanto Surendro, Electro and Information College (STEI) ITB

He gives opening salutation to all participants present in the room and convey deepest thanks for the opportunity given.

He is pleased that there are sides that put forward framework and mindset about how to handle disaster really which haven't been existed, and with reference to British standard, which later on become reference in ISO 22301 about Socio Town Security Requirement, which also means that Business Continuity Management is not only having business orientation, but also has to deal social issues thoroughly. Taking from explanation that has been presented from morning, he analogizes proposal being developed are similar to set up a large enough orchestra ensemble in which there are a couple of musical instruments being played with the main purpose of generating a well music concert.

Quite a few mitigation plans has been presented but he propose that it would be better if the methodology made with more detail. This correlates with the industry's condition which even they are being located in the same area, has their own characteristics. So, it is not appropriate to state that they are in the same condition. This details are needed so that each the characteristic's need of the industry can be handled better.

The final product of this plan is BCM area and handbook. Taking from the experience in developing plan, the most important thing to considerate, specially in Indonesia, is how to guide people to do something according to the plan. That is why, if BCM are being made without guidelines, SOP or corresponding rules, it seems that this activity can not be implemented as visioned.

The involvement of stakeholders has been defined is ISO 22313 standard. Things that needed to be done is to help mapping wheter the stake holder involved in area has been well defined.

As for small to middle bussiness from the observation and understanding, they haven't had a correct BCM. That is why Gilbert says that Bussiness Continuity is bussiness as usual, and generally said that disaster recovery for these small to middle bussiness is simply learning how to shout for help.

Purwoko Deni , Toyota Motor Manufactory

He gives opening salutation to all participants present in the room and give deepest thanks tothe opportunity given.

In his presentation, he will present 2 agendas in approval and effort to handle flood in protecting TMMIN employees in Karawang, which are :

1. Background of Flood Handling Project
2. Action to do in handling the flood

For the background on the flood, he tells the experience about the march 2010 flood in Karawang's region that caused many Toyota's and other company's employee house inundated. In is recorded that 810 employee's house are being inundated they were in Perumnas Teluk Jambe 441 houses, Karaba Indah 130 houses, Puri Teluk Jambe 95 houses, Bintang Alam 75 houses, Puri Pesona 37 houses, Bumi Karawang Permai 15 houses, Galuh 8 houses, Resinda 4 houses and other house complex 5 houses. The drowning of these employee's houses caused many employees absent from work. Toyota itself were forced to shut down its operation for 5 days because of it.

This where Toyota then try to coordinate those condition with the government through the Balai Besar Wilayah Sungai (BBWS) Citarum, which in that time is also cooperate with Raya Consultant with PT Brantas as its contractor. BBWS divide the area in 3 areas of flood handling. The first and second area are downstream, as for third area is in the employee's house area affected by the flood. The construction period began from November 2011 to December 2013, while the content of the construction on area 1,2 and 3 are dredging of sediments, construction of land embankment, the erection of concrete embankment, the implantation of pile sheets, "bronjong" (steel wired stones),etc.

A bigger flood happens again in January 2013 and it caused Toyota's production to shut down again because the employees that have to be absent from work again. The cause is the same as the one at March 2010 flood, their house inundated by the food. The house area impacted by the flood in January 2013 is the same area being inundated by the March 2010 flood.

The coordination between Toyota with BBWS Citarum, Raya Consultant and PT Brantas are being commenced once again. This coordination are undergone to handle the flood more effectively. Next Mr Purwoko shows the drawings of lobbying route between Toyota, BBWS, Raya Consultant and PT Brantas (slide 7).

The result of discussion on the cooperation between Toyota, BBWS, Raya Consultant and PT Brantas, it is being agreed ways to follow-up the flood is to (1) Dredgings mainly for the third area where many employee's house, whether it is KIIC's, Surya Cipta's or the county administrator's employee, are located. Dredging are done so the flood water level are saver and to reconstruct Citarum River so as to become deeper and wider. (2) The construction of embankment; in this case there will be 2 embankment to be constructed which is land embankment and concrete embankment. (3) Building Floodgate Equipment. The final purpose of this follow up activities are to create employee's housing area flood free.

Next, Mr Purwoko display the photo of dredging being done by BBWS Citarum in Karaba Indah and Bintang Alam housing complex and also the cleaning of trash and garbage under the Bojong and Tanjungpura bridge (slide 11 and 12).

As for the embankment's construction, due to the limited government's budget it was discussed which area it was that was crucial and urgent to be embankmented. Based on the experience of the flood that happens in 2007, 2010 and 2013, in which the water flood level is more than 1 meter and had the most impacted area on the employee's housing located in 2 area, which are in the Bintang Alam complex with inundated area 75% of total area and in the Karaba Indah complex with 64% inundated area of total area. With that experience Toyota then recommends to BBWS to prioritized 2 housing complex , Bintang Aam and Karaba Indah, for embankment and BBWS agrees to the recommendation. In the Bintang Alam, land embankment will be constructed, while in the Karaba Indah, concrete ones were to be built.

Mr Purwoko then shows the picture of concrete construction that had been built in the Karaba Indah and the Bintang Alam housing complex (slide 14).

During the construction of the embankment, Toyota and BBWS inspect the site together. At the time the concept of the embankment's construction is only 1 meter high, because with the sediment's dredging of the river should lowered the flood water level about 1 meter, so with 1 meter embankment it was thought to be safe up from the flood. But in reality, the flood that impact the area goes up to 1,8 meter high, that was why it was felt that a 1 meter

embankment is not enough and that it was needed to be built at least 2 meter high. BBWS then agreed to this proposal and built the embankment 2 meter high from the river's water level.

Next he explains the concept on the construction of floodgate equipment. The concept is that when in normal condition the rivulets will flow its water to Citarum River. When the flood occurs, the Citarum's water level will rise and it will push the water flow toward Citarum's rivulets. That made the rivulets' water to flow to the housing complex. Floodgate equipment was needed so as when the river's water level rise it will hold the water, and as for decreasing the flood on the rivulet it requires pumps to pump out the water from the rivulet.

As for input for BCM, the normalization of Citarum's rivulets are needed because according to Mr Purwoko the flood cases in Karawang didn't caused by the Citarum itself but by its rivulets. The structuring and maintenance of drains will also be needed.

Reviews on housing area spacial plan will also be needed, because most of the housing complex are being located in flood prone area and river bank, yet they get permission to be built from the local administrative. And the squatter housing along the Cibeet river bank will also need to be reorganized. As for the transportation issue in connection with the over crowded Jakarta-Cikampek's toll highway, Toyota had tried to propose to Jasamarga for new twin toll-exits. The southern part are industrial areas starting from Bekasi to Cikampek, as for the northern part are governmental offices and housing complexes. The twin toll highways (Jakarta-Cikampek toll highways) are built in the southern part to facilitate the industrial areas whilst the existing toll highways can be used for non-industrial needs. The construction of Cilamaya Seaport are also needed to split logistic distribution that up to now still 100% using Tnajung Priok Seaports. Other issue concern spacial layouts that still permits the construction of houses along the main highway. This will make road widening in the future difficult to do.

Question & Answers

Wahyudi, Karawang's Social Service Office on Mitigation

We had talked with the president's expert staff on mitigation and this topics had also been conveyed to West Java's Vice Governor, at that time still held by Dede Yusuf, and the General Directorate of Public Works, that the cause of floods in Bekasi and Karawang comes from Citarum and Cibeet River. The Citarum flows through Karawang from upstream to downstream and we recommend to normalize the Citarum due to the effect of sedimentation and industrial land use in its proximity that also increase its sedimentation. Every beginning and end of year, or in the month of November, December and January, our worry is that the flood will increase due to the high amount of rainfall, plus the river's water flow form Cianjur and Bogor that pass Cibeet, will increase the volume and discharge of

river that run through Karawang and Bekasi. Currently, the Citarum has been normalize by means of dredging, but we think it will also need filters along the river of Citarum and Cibee, because in both river there are no filter at all. The effect of the non existence oh those filters is that the water flow when it rain from Cianjur, Bogor and Bandung, that runs through Citarum, is very high. The situation won't be a probem for the industrial areas that are located in area that is safe from floods, but it is not the same for area of employee's housing complexes.

In this forum, we are also would like to convey aour deepest gratitude to Toyota that had facilitated the cooperation with the Citarum's BBWS, so that the Bintang Alam housing complex acquire refinements in handling the floods.

Karawang is the major source area for rice in regionaly in West Java as well as nationally, yet there are no agenda whatsoever to filter Cibee river whether in the form of dams nor reservoir. When we convey this fact to presidentia staff, they act immediately by visiting the site and upon observation it was found that the area of Cibee is a bowl area which reserve waters. But after that visit, there has been no action being done on that matters. We ask the West Java's Local Planning and Development Agency to make it as an agenda in 2015 and that we are prepare to share the budget needed.

Tatang Suheri, Urban and Regional Planning Department of Unikom

I appreciate these event and program very much, talking about Karawang-Bekasi and the area certainly not only linked with West Java's interest context but also the context of National interest, because in there are located global central of activity and supply-chain. The interesting part in the planning mechanism is that it uses the participatory planning approach that believes a problem can be approach collaboratively through cooperation. But up to here, i am still not clear on the substance being discussed in the BCP documents apart from the sharing of colaborative agenda that had been taken. Then how to advocate in formalizing this document to a policy, whether it is being correlated with strategic planning, detail plan on spacial layout or with the independent approach in the form of governor law, or any other form of law?

The third question is connected with the perspective of disaster, So according to BCP how to see the region perspective in a disaster area, are they just a group of deliniaged and managed to the scale? When the cause of the disaster are outside the area. Next, about he idea of Cilamaya and the airport that seem to be logical in the perspective of JICA to minimilize lgistics but the problem is, it will create growth pole for Bandung and West Java. That is my question and opinion, thank you.

Dadang Sudarya, Disaster Risk Reduction Forum of West Java

For the BCP document there should be a participative action plan which involves multi stakeholder in Karawang and Bekasi's region, and also the community. As for the substance

issue it will be better equipped with implementative modules that also being made participatively so it can be implemented in a couple of region and will become reference for other region too.

Answers

Ms Ani Widiani, West Java's Local Planning and Development Agency section physical

Responding the statement of Mr Daandg form the Karwang's Social Service and Disaster Office about normalizing Citarum and Cibeet river, also the question from Mr Tatang of Unikom concerning formalizing BCP document.

The West Java province has set 37 primary programs up to the year 2018, one of them is Citarum normalization which are going to implemented gradually. On the beginning phase 0-20 km to be normalize, and by the end of 2018 will reach 70 km. But she is thankful for the inputs that the problem don't ay on the Citarum only, but also in its rivulets.

As for the formalization to become policy, within 37 primary program that has been set, one of them is the rehabilitation of great DAS. These great DAS are not only Citarum but also Cimanuk that will become one of repair agenda up to 2018.

Purwoko Deni, Toyota Motor Manufacturing Indonesia

We are being gathered in this forum with the intermediaries of JICA, whether we came from the central government, regional government and private sectors. This has becom a great power to accomodate numerous problems and to find solution of those problems together. But to make this forum to happen it is because the JICA's initiative, in the future it is hoped that this group can become an official association or community so that it can push the government to have an active role in handling the probem, not only disaster problem, but also other problems.

Dr. Masakazu Takahashi, Team Leader of Study Team

Our deepest gratitude to all ladies and gentlemen for many useful comments and to all associates who gives many responses. At this moment JICA has became the leading actor that makes this discussion happens, but in the future, we hope that there will be sustainability on this responsibility. So similar forums after this meeting is very much expected. The plan that JICA do are still general and still needs understanding and participative role from many interests such as the central government, local administrative and private sector. Taking from today discussion, the result is that we still have to explain the role of each stakeholder, whether they are central's, local's or private sector's; also for the BCP's approach to the local should be more formalized and and outlined in an official document.

CLOSING

Mr. Hideaki Matsumoto, Japan International Cooperation Agency (JICA)

He expressed his gratitude to all the participants who attended.

This project was started with the lesson learned from 2 major disasters that occurred in 2011, earthquake in Japan and Flood in Chao Phraya Thailand. These disasters led to the disruption of supply chain industry. In this case BCM and BCP can help sustain the business despite the damage.

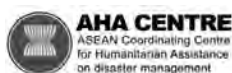
According to the lesson from the past disaster, in order to cope the disaster, especially major disaster, it cannot be fully done by individual companies and operator of service infrastructures. Cooperation between stakeholders to prepare framework with same understanding, to coordinate mechanism to cope the disaster for business continuity in BCM area is necessary.

In order to foster the establishment of those coordination and cooperation, it is important to all stakeholders to know about risk disaster, assessment and prepare the scenario based on disaster management plan for the area which will be coped.

In this BCM project we explained about risk assessment, made of disaster risk scenario, to analyse business impact and to discuss necessary countermeasures to cope the disaster. Nevertheless this study is still preliminary level and it is important to learn and discuss each of content with more depth. The other challenge is West Java province as the leader of BCM area initiative to continue and develop area BCM.

JICA will continue to support, even if it is small support to give this area a supportive push to make concrete plan with West Java as a leader.

From this project expected BCM area and discussion today become a big step to build the disaster resilient society in this area.



**Final Seminar
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation
for Industrial Agglomerated Areas in the ASEAN Region”**

August 28, 2014, Hotel Borobudur Jakarta, Indonesia

*A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

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Indonesia	Zulfikar M.	PT. Marsh Indonesia	MRC
Indonesia	Joyce Handijono	PT. Nagase Eks. Imp	Logistic Manager
Indonesia	Toto H.	PT. JIEP	Kasubdiv PAM
Indonesia	Benny Harto	PT. Marsh Indonesia	Manager
Indonesia	Bambang Sentot	PT. MCCI	Manager
Indonesia	Achmad M.	PT. JIEP	PR.
Indonesia	Yusuf Iman	PT. Mitsubishi Chemical Indonesia	Corporate Affairs
Indonesia	Rudi	PT. Bridgestone	HR-GA SM

**Final Seminar
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation
for Industrial Agglomerated Areas in the ASEAN Region”**

August 28, 2014, Hotel Borobudur Jakarta, Indonesia

*A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

Participants

Country	Name	Organization	Position
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Indonesia	Irwandi	PT. KBN Cakung	General Manager
Indonesia	Rusdi	PT. KBN Cakung	Spv.
Indonesia	Bambang Marwanto	PTLWB	Kabid Wilayah
Indonesia	Arif	NEC	
Japan	Ito	NEC	
Indonesia	Tias Parwono	PT.YKK Ap. Indonesia	
Japan	Kenichi Oki	MHI	Chief Rep. GM
Indonesia	Atik Widyastuti	UNICHARM	IT
Indonesia	Bambang Sukardi	PT. Bridgestone	Ass. Co. Tech. Director
Lifeline Group			
Indonesia	Misbah	PT. TELKOM	Officer
Indonesia	Jajang SN.	PT. Jasa Marga	JASA MARGA PEDULI
Indonesia	Rudy JL.	PT. Arga Pura	Admin
Indonesia	M. Agus Sunardi	PT. Jasa Marga Persero Tbk.	
Indonesia	Sukirno	PT. Jasa Marga Persero Tbk.	
Indonesia	Giovanni M.	PT. Arga Pura	Direktur KNKT
Infrastructure Group			
Indonesia	Ujang H.	PT. Jasa Marga	JASA MARGA PEDULI
Other Group			
Indonesia	Meilinaiti	OXFAM	EFSUL Officer
Indonesia	Nanang S.Dirja	OXFAM	Manager
Indonesia	Felisia	USAID	OFDA
Indonesia	Galuh R.	PLANAS Kom&info	Per. Skala/PLANAS
Indonesia	Sinta K.	PT.UNILEVER/PLANAS	PLANAS
Indonesia	Syafiria	Perk. Skala	Staff
Indonesia	Fajar	Berita Daerah (Media)	Editor

**Final Seminar
for
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August 28, 2014, Hotel Borobudur Jakarta, Indonesia

*A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

JICA and JICA Study Team

Country	Name	Organization	Position
Japan	Hideaki Matsumoto	JICA Headquarter Office	Deputy Director, Disaster Management Division
Japan	Hiroaki Nakagawa	JICA Indonesia Office	Principal Representative for ASEAN Coordination
Japan	Nami Kasahara	JICA Indonesia Office	Project Formulation Advisor (ASEAN Partnership)
Indonesia	Janggam Adhityawarma	AHA Centre	Senior Disaster Monitoring and Analysis Officer
Japan	Masakazu Takahashi	JICA - AHA Centre Study Team	Team Leader
Japan	Shukyo Segawa	JICA - AHA Centre Study Team	Expert on Risk Assessment
Japan	Yoshiki Kinehara	JICA - AHA Centre Study Team	Area BCP
Japan	Kotaro Fukuhara	JICA - AHA Centre Study Team	Coordinator
Japan	Akira Watanabe	JICA - AHA Centre Study Team	Coordinator
Indonesia	Krishna S. Pribadi	JICA - AHA Centre Study Team	National Coordinator
Indonesia	Aria Mariany	JICA - AHA Centre Study Team	Facilitator
Indonesia	Bayu Novianto	JICA - AHA Centre Study Team	Project Staff
Indonesia	Lusiana Rumintang	JICA - AHA Centre Study Team	Interpreter
Indonesia	Pribasari Damayanti	JICA - AHA Centre Study Team	Note Taker

**Final Seminar
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

August 28, 2014, Timor Room, Hotel Borobudur Jakarta, Indonesia

*Under a Joint Program of Japan International Cooperation Agency (JICA) and ASEAN
Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

Agenda

Opening Session	
9:00-9:40	Registration
9:40-10:00 (20 min)	Opening Address Ir. Dody Ruswandi Deputy Chief for Prevention and Preparedness Indonesian National Agency for Disaster Management (BNPB)
Session 1 Project and Area BCM	
10:00-10:50 (50 min)	Project and Area BCM Dr. Masakazu Takahashi Team Leader of the Study Team Activities in Indonesia Dr. Krishna Suryanto Pribadi National Coordinator of Indonesia Q & A / Discussion
10:50-11:10	Coffee Break
Session 2 Developing Area BCM	
11:10-12:20 (70 min)	Understanding the Area Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment

	<p>Determining Area BCM Strategy and Developing Area BCP</p> <p>Mr. Yoshiki Kinehara Team Member, Area BCP</p> <p>Exercising and Reviewing, Maintaining and Improving, and Tools for Area BCM</p> <p>Dr. Masakazu Takahashi</p> <p>Q & A / Discussion</p>
12:20-13:20	Lunch
<p>Session 3 Panel Discussion Area BCM: Expectations, Contributions and Relevant Activities</p>	
13:20-14:30 (70 min)	<p>Moderator: Dr. Krishna Suryanto Pribadi</p> <p>Panellists:</p> <p>Dr. Kridanto Surendro Sekolah Tinggi Elektro dan Informatika (STEI) – ITB</p> <p>Ir. Aryawan Soetiarso Poetro State Ministry of National Development Planning (BAPPENAS)</p> <p>Ms. Anny Isgiati Indonesian National Agency for Disaster Management (BNPB)</p> <p>Mr. Faisal Djalal Indonesian National Platform for Disaster Risk Reduction</p> <p>3 to 5 Minutes Presentation by the Panellists, and Q/A and Discussion</p>
14:30-14:40 (10 min)	<p>Closing of the Seminar</p> <p>Mr. Hiroaki Nakagawa Principal Representative for ASEAN Coordination Japan International Cooperation Agency (JICA)</p>
14:40	Adjournment

MC: Ms. Aria Mariany
(Junior Researcher of the Study Team, Bandung Institute of Technology)

**FINAL SEMINAR
FOR
“NATURAL DISASTER RISK ASSESSMENT AND AREA BUSINESS CONTINUITY
PLAN FORMULATION FOR INDUSTRIAL AGGLOMERATED AREAS IN THE
ASEAN REGION”**

**Thursday, 28 August 2014
Borobudur Hotel – Jakarta, Indonesia.**

Time : 09.00 - 15.00
Moderator : Khrisna S. Pribadi

A. OPENING

**Opening from Ir. Doddy Ruswandi
Deputy Chief for Prevention and Preparedness
Indonesian National Agency for Disaster Management (BNPB)**

Thank you so much for being with us. This seminar is an excellent initiative. I believe that we all are aware of the business sector plays a very big role in disaster management given that we learned from a disaster in Thailand and Yogyakarta. Adverse effects of the private sector are quite large compared to other aspects. The government needs to build this country even better in order to prepare for a disaster and a continuity plan to encounter a disaster impact. We also need to strengthen Indonesian laws and regulations since the policy has a huge role in disaster management.

Indonesia has many industrial areas in various places: there are also small industries which have become suppliers aside from big industries. It shows that these productions are related to one another and will have a certain effect on other parts whenever there is an affected area.

In Yogyakarta, the earthquake caused a lot of disadvantages, especially for small and medium industries (SMEs), and a number of employees lost their livelihoods.

The government and the private sector should work together since they are inter-connected. In the next five years, Indonesia's government plans to increase cooperation with the private sector in terms of building the resilience of the business sector. This is what we will be discussing today for as we all know that many authority strategies are not integrated with the ones that are privately owned.

Some other important points are how BCP can be applied to SMEs and how to integrate CSR in order to increase resistance among human and/or employee when it comes to dealing with a disaster. It can be a good investment for the future though reducing a disaster risk can mean economic risk reduction.

Thank you for coming and hopefully we all can participate for this concept well.

B. SESSION 1 PROJECT AND AREA BCM

Presentation 1. Project and Area BCM

Presenter: Dr. Masakazu Takahashi

Study Team Leader

Disasters affect businesses directly and certainly threaten the supply chain. Vital infrastructures have destroyed when they got damaged by a disaster and business continuity got disrupted. The entire globe needs a huge improvement in the many areas, especially early warnings, preparedness, and disaster responses for the public sector. When it comes to a response of the private sector, it is meant by creating a significant business continuity plan for ABCM, which the framework needs to be integrated between public and private sectors. This project was previously planned for a conclusion in September 2014 and then it will be extended until March 2015. There are three pilot countries: Indonesia, Philippines, and Vietnam. Subsequently, it will be implemented in 10 countries. Areas that were studied in Indonesia are Bekasi and Karawang, along with Cavite, Laguna, the southern part of Metro Manila (Philippines), and Haiphong (Vietnam).

The study that was focused on the region is defined as the congregate industry and there was also a falsehood about infrastructure, such as public transportation and other support facilities.

JICA initiate the creation of a new framework of ABCM until it formulated into a document of ABCP. The next steps are to conduct a risk analysis and preparation of the ABCM guidebook, establish a system of information, and the dissemination and socialization. Therefore, there are five stages in the ongoing ABCM work steps in total.

Various stakeholders involved consist of business stakeholders, lifeline utilities, transport infrastructure, government, and universities. The structure divides into leaders, members, and supporters. For now, the leader of the implementation of this concept is Bappeda West Java. There are several output generated: a guidebook, risk assessment, country, and asean reports.

Presentation 2. Activities in Indonesia
Presenter: Dr. Khrisna Suryanto Pribadi
National Coordinator for Indonesia

This presentation was about the selected study area and the analysis of the characteristics of the region. How are the conditions of the study area GDP? In January 2014, there was a flood not large enough to affect the industrial area directly, but making a line of attack to disturb industrial operations. Areas that have been chosen were analyzed about its characteristics, like the condition of GDP.

Workshops have been carried out for three times:

- Workshop 1: to clarify the risk
- Workshop 2: to verify the impact of disasters
- Workshop 3: to determine the approach that needs to be done and the actions that have to to be implemented.

The working group has been arranged and the structure consisted of a coordinator, working group members from each city or regency, along with members of their respective industries. There are also observers composed of government and private sector organizations outside the study area that are capable of providing input for the sustainability of BCM.

In the first workshop, it was found that the life-threatening hazards are earthquakes, floods, flooding, and power outages. The problems that continue to rise are critical lifeline disruption, employment disruption, social unrest, and other matters related to property and infrastructure.

During the second workshop, the main impact of the disaster on the industry was cessation of operations in addition to the cause of unemployment, such as the events occurred in Yogyakarta. Critical issues include as bad roads, disrupted streets, and polluted water.

In the last workshop 3, note that the implementation schedule is really necessary for future improvements along with coordination mechanisms, enhanced maps, legal framework and integration with other local documents. In addition, there was a discussion about who is the leader of the working group, until it was finally concluded as Bappeda West Java. The resources that were needed for this concept list as budgets, commitments, communication forums, coordinations, exercises, human resources, organizations, MOU, and rules.

Some notes about the workshop are:

- Group members actively capture some ideas, but representatives are the ones who often get alternated and the homework mechanism was not working effectively.
- Some inputs at the end of the seminar need to be more detailed and there should be SOP and stakeholder mapping. Institutions also need to involve the central government as well as BPBD as a major stakeholder.

Discussion

1. Frans –PVMBG

I got aware of the steps for this concept from the past explanations. I would like to know what the strategy of increasing the capacity is and are there any contingency plans. In my opinion, the downstream part is already executed, but for the upstream need to be deepened again and so it is necessary to prepare a variety of detailed risk maps? Will the simulation be prepared to set the readiness of the involved parties?

Answer:

PVMBG is one of the members of the working group and we obtain a lot of data from them. It is true that the questioner said it is necessary to have more detailed risk maps, but what we have done are still at the macro level until now. We also agree that it is

essential to increase the capacity of the members by way of training and drills or simulations. Another important thing is how the ABCP document can be adopted by the local governments and how the implementation steps need to be done.

2. Irwandi – PT. KBN Cakung

Our area did not have any floods; on the other hand, our access was being flooded with water. Many plans, such as Grand Cakung and BKT (to accommodate 13 streams in Jakarta) that has been established were not running. I was wondering how the existence of Jakarta Provincial Government can run effectively and also about the opening of Cipularang that was contributed to the congestion in both directions. Did the constructions of the toll roads that go towards the port contributed to the disrupt access to our area?

Answer:

Access Network is the bottleneck. Supervision is required in a broader context which is something beyond the ability of the industry itself. Therefore, having the cooperation with the government is essential. We provide some suggestions for industries to sit together with the government of Jakarta to discuss such matters.

3. Nanang –Oxfam

We welcome the ABCP concept and we think this concept is similar to CBDRM, but should focus more on the private sector. I want to discuss the related inputs that have been given in the previous workshops and I think this concept needs to be integrated with plans at the national level in order for the document output can be official. The second thing is about the integration of this ABCM forum and the other formal forums in Disaster Risk Reduction (FPRB Jabar).

Answer:

Yes, it is true that integration is significant and this concept cannot stand alone. The working group could be thematic and it obviously may perhaps (and should) become a member in West Java (FPRB Jabar). Having the participation from a lot people, like our participants from the national team being present in this seminar is extremely important.

B. SESSION 2 DEVELOPMENT OF ABCM

Presentation 3. Area Characteristics

Presenter: Mr. Shukyo Segawa

Basic information, especially about the local economy and local government, of a certain area is very important. We need to know the characteristics of industrial zones along with specific kinds of transportation infrastructure, and support facilities for business and daily lives to the fullest as an aspect of a business.

In order to identify hazards and risks in an area, the process of examining past events or experiences comes first and they will be used with the purpose of continuing to simulate jeopardies. There are several stages of this concept: identification, hazard assessment, risk assessment, and making a disaster scenario. Consequently, the entire phases will eventually become an input for the business impact analysis.

In the hazard identification stage, we collected data from various database records (national and international) and identified dominant hazards that need to be considered afterwards. Hazard maps were used in this phase, but got replicated – the existing information or survey data. The probability of disasters needs to be set and ready to discuss in order to assess the hazard levels (e.g flooding has 1% or 1 in 200 years).

Risk assessment was carried out for the infrastructure and then calculating the recovery period from past experience(s) occurred as the next phase. Road and railroads were closed when the inundation receded, the port got stopped operating, and a number of houses got swamped, as suppose to flood risks.

The fourth stage is creating a disaster scenario intended for determining damage levels that devastate a lot of structures and the location of the circumstances takes place after the disaster. The targeted length of time along with a service level should be included.

Presentation 4. ABCM Strategy and Forming of ABCP

Presenter: Mr. Yoshiki Kinehara

ABCM strategy can be described by the following themes:

1. Impact of disasters
2. An obstacle to the business continuity
3. Objectives
4. Activities that need to be planned

A. The impact of flooding in Bekasi and Karawang

Many areas got flooded for about two weeks, a lot of people got wounded, and many facilities got smashed by a great mass of waters. The flood that occurred in Bekasi and Karawang slowed the recovery of the industry down and caused major damages to toll roads.

B. Bottleneck

It is predicted that there are three obstacles:

1. Automobiles could not enter the highways given that the highway access got blocked for two weeks
2. The weakening conditions of the society and communications were limited
3. Tanjung Priok port was closed, which is unfortunate for the industry since it depends on on the port

C. Objectives

How to resume on creating production activities in the industrial area or rebuild quickly in the event of a disaster, such as living conditions and infrastructure services. There are certain roles that should be performed by each stakeholder in order to achieve that goal.

D. Activities that need to be carried on

Activities, such as strengthening organizations or structures, developing emergency response, and preparing collaboration need to be accomplished in order to improve the survival of the industry. There are also other actions that were proposed by the workshop participants in Bekasi and Karawang.

ABCP goals have to remember how to create a sustainable development of an area, help with the co-operation of stakeholders, and provide important information to them.

Presentation 5. Implementation and Review

Presenter: Mr. Takahashi

Designing exercises for disasters is different from what is featuring in this concept. Exercising Here is a table top exercising. We have to put ABCM into effect for the reason that this concept requires validation plans and then train the key stakeholders, integration of plans, and so forth.

Implementation method may possibly be able to use testings, exercises with discussions, trainings and seminars, as well as direct implementations. Various activities were proposed through examining the suitability of ABCP with other government plans, studying the disaster that has occurred in the past, and distributing to the public.

When it comes to the review process, the evaluations of experts or self assessments are checked at first and then it will be documented until the leader validates and approves. It should be indicated that the ABCM needs to keep up to date and follow the changing conditions constantly for the maintenance process. Application outputs, too, needs to be documented, not just the review itself.

We have not completed the "exercising and reviewing" until now; it is necessary to think about the ABCM handover to local parties and how to make ABCM sustainable if the cycle has been completed.

We currently have Guidelines & Plan Book 1 and we are in the stages of revising for making Guideline & Plan Book 2. The next schedule is an assessment of the outline in November which leads that we will have a second version of the Guideline & Plan Book. If the process is already completed, it can be compiled into Guideline & Plan Book 3 for ASEAN.

Discussion

1. Basuki –BPBD Provinsi DKI Jakarta

DKI Jakarta has begun to initiate Continuity Plan up until now. We want to inform that BPBDs Jakarta is aware of this and advise that everybody can work together. We already had made the DRR (Disaster Risk Reduction) Forum, climate change adaptation Jakarta, and a variety of disaster risk activities. What's more, we opened our cooperation up with KBN (first questioners) to find a possible solution to the problems that were experienced by their industry area (information)

2. Prasetya – PVMBG

The challenges in the implementation of this concept are within the coordination. What are some strategies to deal with them?

Answer:

By initiating and sharing information.

3. Raditya – BPPT

How about BCM or BCP Funding? What is the funding scheme of BCM or BCP in Japan?

Answer:

In Japan, the government only provides a guidebook while the industry is largely engaged with consultants with the purpose of fashioning specific plans.

C. SESSION 3 PANEL DISCUSSION

AREA BCM: EXPECTATION, CONTRIBUTIONS, AND RELEVANT ACTIVITIES

Moderator. Dr. Khrisna Suryanto Pribadi

Panelist:

1. Dr. Kridanto Surendro
Sekolah Tinggi Elektro dan Informatika (STEI) - ITB
2. Ir. Aryawan Soetiarso Poetro
State Ministry of National Development Planning (Bappenas)
3. Ms. Anny Isgiati
Indonesian National Agency for Disaster Management (BNPB)
4. Mr. Faisal Djalal
Indonesian National Platform for Disaster Risk Reduction

1. Ir. Aryawan Soetiarso Poetro

Natural Disaster Risk Assessment & Area Business Continuity Plan (ABCP)

During the first decade (2004-2014), Indonesia suffered there were a lot of serious damages. The new paradigm of disaster management activities initiated from responsive to preventive, sectoral to multisectoral, government initiatives to shared responsibilities, centralized to decentralized and emergency response to disaster risk reduction.

Business continuity planning (BCP) ensures the steadiness of a business for the duration of emergencies. The purpose is how to reduce, respond to, recover and restore in indoors using the concept. We should be aware of the pre-existing plans that we've already had, like spatial planning, strategic life assessment, disaster risk analysis, and disaster risk assessments.

In the end, we need to emphasize how spatial planning approaches the capability of accommodating disaster risk. Businesses should create an emergency plan in order to keep running all through the disaster and for the employees to continue working as usual.

2. Ms. Anny Isgiati (BNPB)

BNPB Response

Many stakeholders, who were supposed to improve their future coordination, have been present at today's event. Badan Nasional Penanggulangan Bencana (BNPB) has a hope and a challenge to create a module or guidelines applied in practices and other places.

West Java has been formed Disaster Risk Reduction Forum (FPRB) from the government, business, and community organizations. In the business world, we can also make a thematic forum, which is a part of FPRB. According to the BNPB symbol, this indicates the cooperation between various stakeholders and one should pay attention to the community as well. In addition, the government is able to provide rewards, such as reducing taxes.

BNPB will support this activity for the reason that the small and medium enterprises have been entered on the APEC agenda. The next thing is BNPB will be concentrating on the role of business institutions in disaster risk reduction during the first five-years. In the third, Corporate Social Responsibility (CSR) is expected to concentrate on pre- and post-disaster, (which is now focused even more on emergency response) while the role of external agencies should keep in mind since these institutions have an important resource in disaster management, such as having a group of volunteers who care about the disaster

BNPB has a memorandum of understanding (MOU) with the HIPMI Association and the Board is expected to be fully grasped in the local area (BPBDs). BNPB has performed capacity building activities through the facilitation and the development of volunteer business institutions, disaster resilient villages, facilitation and establishment of disaster risk reduction forum. Thus, there are a total of seven provinces that have organized a forum about disaster risk reduction.

ABCP various inputs on the draft include:

1. Inventory of resources (particularly the company's) that are owned by each stakeholder who resides in the region has the right to use them. Take Jasa Marga for instance; who has heavy equipments for evacuation and Sampoerna has volunteers.
2. One of the components of the BCP is insurance. Is it possible to include it in the concept along with the descriptions of how to claim it? What about having a list of different equipments that needs to be protected?

3. Simulation points and procedures, and the implementation of stakeholders on a regular basis.

3. Faisal Djalal

Response from Platform Nasional

This concept is the theory of participating in parties both from the government, industry, and society. This conception can obviously strengthen communication horizontally and vertically. It is good that we get information or share the results of existing research in the Philippines and Vietnam in order for us to know some possible alternatives that can be applied in Indonesia. This is what the commitment of each party should carry out to keep moving forward: aspects have to be considered afterwards.

The National Platform for Disaster risk reduction (DRR) has many programs and we have learned from one of them, the tsunami near Sendai, Japan. From these events, we are aware of the time of the disaster events were held and the well-provided integration between different infrastructure and support.

A good cooperation was already shown between NGOs (non-governmental organizations) and the public; it should be emphasized that this information should be disseminated to a variety of sources.

Another important thing is that we already have a platform in the city and the national level. Consequently, we wish to be familiar with the advantages and disadvantages of this system that can be shared with the platform for later. The next thing to note is the importance of doing the simulation and the last is how Indonesia is not focused only on one aspect like flooding given that different industrial areas (eg. Cilegon Industrial Area) have various characteristics.

Discussion:

1. Denny- XL Asiata

Based on the descriptions that have been explained about this concept, telecommunication operators have a very important role, especially in running

communications continuously. The time of when the flood came, the power cut off and surely affected our performance. It would be challenging when the supplied fuel is imminent even if we have prepared generators and fuel. Hence, what if we make a policy that prioritizes fuel for operators and incorporate into the BCP document?

Answer:

Mr. Iryawan: An emergency assistance cannot be separated from the communications, and this has to be one of the things that must be considered for sure.

2. Sahib – PT. Nippon

Looks like flooding is the only thing to explain for hazards; yet, it was mentioned earlier that there is another hazard probability. We do not know why Bekasi and Karawang got chosen just because they have many industries. When you look at a dangerous hazard, no doubt it leads to Cilegon industrial Area. Furthermore, we have to report to Mrs. Ani that emergency response facilities at our place (Cilegon) already exists, specifically the Tsunami Siren. However, the siren only lasted for six months due to lost or damaged. How can we hope for adding new facilities, while the existing ones have a certain condition that we don't have?

Answer:

Mr. Iryawan: Other than the evacuation routes, signs, too, are significant. The process of maintenance is essential, but its importance of training people for dealing with disasters is quite equal. It is necessary to be aware of what has been done or prepared in order to stay functionate for maintenance in the purpose of determining the responsibility of a certain facility and/or the person as well as the allocation.

Mrs Anny: These tools lack of distributing the functionality. It is possible that they were initially belonged to the center government, but there were regional responsibilities after the handover. If there is an instrument that does not work, it needs to be reported to the local government. We consider any third party as responsible if a utensil is lost or got damaged in a short time.

Takahashi: We do observe the seriousness of the hazard and the incident if it were to occur. We do not get a lot of information on this subject in the past, which is why we gave it to the workshop participants and we chose to flood the area and Bekasi based

on the results. This study desired a general approach on ASEAN where a number of different hazards in other countries got chosen.

3. Jajang – Jasa Marga

Kami disebutkan sebagai stakeholder yang berperan penting ketika tanggap darurat. We mentioned that stakeholders play an important role when it comes to emergency response. Flood refugees have tried to refuse to leave the road corridor. This should be point out to the relevant parties that the road corridor is not a safe place for refugees. The conclusion is assumed that the possibility of flooding is caused by the expansion of the industrial areas.

Answer:.

Mr. Irawan: The issue of the expansion of industrial areas may perhaps need to be returned to the spatial plan and it looks like the spatial plan has not been accommodated to the disaster risk reduction.

Mr. Faisal: I would like to emphasize here that the coordination between the various parties is necessary. Take the experience of nuclear disaster in Fukushima as an example. We can comprehend how to strengthen our skills to avoid human errors. In Bangladesh, a microfinance group was formed to prepare SMEs for disaster insurance for the duration of a disaster. The next step is to have teamwork between retailers, so their places can be used as a location for emergency response. A lot of things that we can learn, which are based on applications have been accomplished by other countries.

4. Nanang – Oxfam

I just wanted to propose to BNPB that this activity can be sustained and translated into a policy, like making Perka for the private sector.

C. CLOSING

Mr. Hiroaki Nakagawa
Principal Representative for ASEAN Coordination
Japan International Cooperation Agency (JICA)

It was an honor for me to finish this seminar and many appreciations goes to those the participants who have attended. BCP and BCM ultimately need to be adjusted to the local conditions of each region. In the end, we would like once again to express our gratitude to the participants who are present at the moment.

**Final Seminar
for
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August 15, 2014, Crimson Hotel, Filinvest City Alabang, Muntinlupa City, Philippines

*A Joint Project of Japan International Cooperation Agency (JICA) and the ASEAN
Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

Participants

Country	Name	Organization	Position
Advisory Group National Government Agency			
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Philippines	Susan M. Cruz	OCD- National Capital Region(NCR)	Regional Director
Philippines	Amy Daura Gumboc	OCD	OIC, Training Div.
Philippines	Rosauro Arnel Q. Gonzales	OCD Region IV-A	Assistant Regional Director(ARD) for Operation
Philippines	Corazon T. Jimenez	Metropolitan Manila Development Authority(MMDA)	Undersecretary/General Manager
Philippines	Adelina C. Santos-Borja	Laguna Lake Development Authority(LLDA)	
Philippines	DDG Justo Porfirio Ll. Yusingco	Philippine Economic Zone Authority (PEZA)	Deputy Director General (Finance & Administration)
Philippines	Engr. April Joy Medico	PEZA	
Philippines	Engr. Ramon Lacap	PEZA	
Philippines	Sheila Marie P. Pidlaoan	PEZA - Laguna Technopark, Inc.	Zone Administrator
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Philippines	Jhericho Evangelista	PEZA	PDRRM Office Staff
Philippines	Cecil D. Miranda	PEZA - DRRMO	DRRM Officer
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Philippines	Darianne M. Natividad	PEZA	
Philippines	Trixia M. Flores	PEZA	
Philippines	Engr. George B. Fojas	PEZA	Provincial Engineer
Philippines	C/insp Farida B. Ymballa	PEZA	Sn Pedro Fire Marshal
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Philippines	Rommel Palacol	PEZA	Executive Assistant
Philippines	Donald James D. Gawe	National Economic Development Authority (NEDA) Region IV-A	Chief Economic development specialist
Philippines	Dino C. Lagos	Department of Interior and Local Government(DILG)	Div Chief
Philippines	Desi James V. Bernardino	DILG	LGOO III

**Final Seminar
for
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Participants

Country	Name	Organization	Position
Philippines	P/DIR. CARMELO E. VALMORIA	The Philippine National Police (PNP) - National Capital Regional Police Office (NCRPO)	Regional Director
Philippines	P/Ssupt. Edgardo Wycoco	PNP-NCRPO	
Philippines	Jillsen Natano	PNP-NCRPO	Admin Staff
Philippines	Insp Regie Dimalanta	PNP-NCRPO	C, Admin
Philippines	Dr. Genia Santos	Department of Education -NCR	Chair, RDRRMC
Philippines	Jerome Carlo R. Paunan	Philippine Information Agency (PIA)-NCR	Information Officer
Philippines	Julius Andrew C. Dizon	Department of Trade and Industry(DTI)	Information Officer
Philippines	Berverly Jimenez	DTI	
Philippines	Ferdinand Monforte	DTI	Regional Director
Philippines	Catherine C. Agustin	Department of Tourism(DOT)	OIC-NCR
Philippines	Maria Fe Santos	DOT	Personnel Officer
Philippines	Dominador G. Vergara	Manila International Airport Authority (MIAA)	Civil Security Officer B
Philippines	Alma N. Betenio	Philippine Coast Guard (PCG), Coast Guard District NCR-Central Luzon	
Philippines	Capt Daryl G. Vargas	PCG, Manila	SC, CGS, Manila
Philippines	Rowel R. Dumadal	PCG, Manila	CGS, Manila
Philippines	Ann Rosslyn Keith Tan	Housing and Urban Development Coordinating Council	PEO
Philippines	Jhecca Cleofe	Housing and Urban Development Coordinating Council	PEO I
Philippines	Valerie Marquez	Climate Change Commission	Commissioner and Vice Chairperson
Philippines	Corazon Jaime	Govt Service Insurance System (GSIS)	Vice Pres, Risk Mngt
Philippines	Sheila Chavez	Phil. Health Insurance Corporation (Philhealth)	
Philippines	Marisa Lerlas	League of Cities of the Philippines	Regional Representative for NCR
Philippines	Col. Vic Tomas	Armed Forces of the Philippines (AFP) - Joint Task Force (JTF) NCR	Deputy Commander
Philippines	Vilma B. Cabrera	Department of Social Welfare and Development (DSWD)	Asstnt Sec, Operations and Programs Group ? Protective Programs
Philippines	Dir. Thelsa P. Biolena	DSWD	Director IV - Disaster Risk Reduction and Response Operations Office
Philippines	Roderick Guisadio	DSWD	

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Participants

Country	Name	Organization	Position
Advisory Group Government Research Institute			
Philippines	Dr. Esperanza Cayanan	Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)	Head, NCR
Philippines	Dr. Renato U. Solidum, Jr.	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	Director
Philippines	Lynn Melosantos	PHIVOLCS	Senior Science Research Specialist
Advisory Group Regional Government Agency			
Philippines	Richard Stephen S. Bandong	DILG Region IV-A	Div Chief
Philippines	Florececi G. Gunio	DSWD Region IV- A	Asst. Reg. Dir.
Philippines	P/Supt. Felix T. Sarsozo, Jr.	Philippine National Police (PNP)	Deputy ROPD
Philippines	Supt. Romel C. Trado	Bureau of Fire Protection (BFP)	City Fire Marshal
Philippines	FOI Christian Leo O. Camo	BFP	
Philippines	F/A Kirby Clein Serva	BFP	
Philippines	Leonardo Cargullo	DOE Region IV- A	
Philippines	Carmela E. Canape	Department of Environment and Natural Resources (DENR)-Environmental Management Bureau(EMB)	EMS I
Philippines	Joseph Gilbert Lazaro	DOT Region IV- A	Tourism Opns Offr
Philippines	Felizardo Cupit	DTI Region IV- A	
Philippines	DIR. ROGEL JOSEPH V. DEL ROSARIO	Bangko Sentral Ng Pilipinas (BSP)	Dir, Lucena Branch
Philippines	Mario O. Eleazar	BSP	
Philippines	Carlo Nino Ching	Commission on Higher Education (CHED)	EPS II
Philippines	Dolores Ledesma	Philippine Information Agency (PIA)	Admin Assistant
Philippines	Osmundo R. Guinol	National Irrigation Authority (NIA)	REI0
Philippines	ATTY MANUEL CARLOS C. PORTUS	Maritime Industry Authority (MARINA)	Regional Director
Philippines	Anne Stepahnie Tapales	National Commission on Indigenous Peoples (NCIP)	CAO-I
Philippines	Luisito A. Manalansan, Jr.	Philippine Red Cross (PRC) -CAVITE	
Philippines	Frank Gray M. Soromero	PRC -LAGUNA	OIC-Administrator
Philippines	Rommel DL Peneyra	Carmona, Cavite	DRRM Officer
Philippines	Jejomar Tenedero	Carmona, Cavite	

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Participants

Country	Name	Organization	Position
Philippines	Hector Reyes	Makati City DRRM Office	Div. Head
Philippines	Edwin I. Aguilar	Makati City DRRM Office	Operations & Warning Head
Philippines	Liza Velle . Ramos	Makati City DRRM Office	Research & Planning Head
Philippines	Rene Ebuna	Malabon City DRRM Office	Opns & Warning Head
Philippines	Giovanni Reyes	Malabon City DRRM Office	Research & Warning section
Philippines	Antonio T. Tolentino, Jr.	Manila City DRRM Office	OIC-Medical Unit
Philippines	Gerardo D. Toledo, Jr.	Manila City DRRM Office	Staff
Philippines	Bienvenido V. Barbosa	Manila City DRRM Office	SWO III
Private Sector Group			
Philippines	Grace Morella	Philippine Chamber of Commerce and Industry (PCCI)	Manager
Philippines	Virgilio Lorenzo	Laguna Chamber of Commerce and Industry	President
Philippines	Edwin Tirona	Laguna TechnoPark, Inc.	Aichi Forging Co. of Asia Inc -VP-External Affairs
Philippines	Emerline Malicdem	ROHM Electronics Philippines, Inc.	
Philippines	Eric De Pedro	ROHM Electronics Philippines, Inc.	Section Manager
Philippines	Godofredo Magsino	Yazaki-Torres Manufacturing, Inc.	
Philippines	Dr. Fe Bandy	Yazaki-Torres Manufacturing, Inc.	Company Doctor
Philippines	Fidel W Eblasin, Jr.	Yazaki-Torres Manufacturing, Inc.	Spl Assistant to the Vice President
Philippines	Gerardo G. Castro	Yazaki-Torres Manufacturing, Inc.	ADR/ Safety Officer
Philippines	Nhel S. Maronilla	NEP Logistics, Inc.	Assistant Mgr.-Gen. Affairs & Procurement Dept.
Philippines	Ryan Liwanag	NEP Logistics, Inc.	Assistant manager
Philippines	Claire T. Coladilla	Ichinomiya Electronics Philippines Corporation	Admin Manager
Philippines	Bernadette R. Bautista	Kou Fu Color Printing Corp.	
Philippines	Ma. Aileen Mae Macayan	Kou Fu Color Printing Corp.	Management Representative
Philippines	Emiliano Labitigan	Kapco Manufacturing, Inc	Safety Officer
Philippines	Giovanni Manikad	Philippine International Manufacturing & Engineering Services Corporation (P. IMES)	Senior Manager

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Participants

Country	Name	Organization	Position
Philippines	Vergilio Torres	Philippine International Manufacturing & Engineering Services Corporation (P. IMES)	SSO
Philippines	Mylene Echenique	Bridgestone Precision Molding Philippines, Inc.	Admin Manager
Philippines	Celina Manalo	Bridgestone Precision Molding Philippines, Inc.	Safety Officer
Philippines	Ma. Adelina "Lenie" A. Gutierrez	San Technology, Inc	HR/CSR/CCS Manager
Lifeline Group			
Philippines	Jeffrey Jardin	Manila Water Company, Inc.	
Philippines	Angel Echano	National Transmission Corporation (TRANSCO)	Head, Safety Committee
Philippines	Roel R. Estrella	TRANSCO	Head, DCB
Philippines	Anthony Louen R. Fernandez	SMART	
Philippines	Leisl Lim	SMART	Consultant
Philippines	Ramon G. Reyes	Phil Long Distance Telephone Company (PLDT)	Representative to MMDRRMC
Philippines	Atty. Oliver Carlos C. Odulio	PLDT	Head, Assist. Protection & Rsk Mngt.
Philippines	Marco R. Carlos	Manila Electric Company (MERALCO)	
Infrastructure Group			
Philippines	Gen. Luisito L. Maralit	South Metro Manila Skyway Project (SKYWAY)	Head- Traffic management and Security Division (TMSD)
Philippines	Antonio F. Elegino	SKYWAY	Sr. Safety Officer
Philippines	Jonafe L. Irasga	SKYWAY	
Philippines	Eduardo Villarín	SKYWAY	Assistant Head
Philippines	Rebecca Olivia S. Dimasacat	Cavite Expressway (CAVITEX)	
Philippines	Joseph Frankie Argana	CAVITEX	
Philippines	Engr. Conrad Joseph Perez	Department of Public Works and Highways (DPWH) -Region IV-A	Engineer II
Philippines	Engr. Michael M. Angeles	DPWH -Region IV-A	
Philippines	Engr. Eduardo V. Santos	DPWH -NCR	
Philippines	Mariel S. Vergara	DPWH -NCR	Engineer Asst A

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JICA and JICA Study Team

Country	Name	Organization	Position
Japan	Dr. Hitoshi Baba	JICA Headquarter Office	Senior Advisor
Japan	Noriaki Niwa	JICA Philippine Office	Resident Representative
Japan	Takahiro Morita	JICA Philippine Office	Senior Representative
Japan	Kohei Hori	JICA Philippine Office	Proj Formulation Adviser
Japan	Hayato Nakamura	JICA Philippine Office	Project Formulation Advisor (Disaster Management)
Japan	Misa Kemmiya	JICA Philippine Office	Coordination Unit
Philippines	Catherine Palanca	JICA Philippine Office	Program Officer (Disaster Management)
Japan	Takaaki Kusakabe	JICA - Office of Civil Defense	JICA Expert
Japan	Dr. Masakazu Takahashi	JICA - AHA Centre Study Team	Team Leader
Japan	Yoshiyuki Tsuji	JICA - AHA Centre Study Team	Deputy Team Leader / Area BCP
Japan	Shiro Matsunami	JICA - AHA Centre Study Team	Coordinator
Philippines	Ramon J. Santiago	JICA - AHA Centre Study Team	National Coordinator
Philippines	Josephine R. Sy	JICA - AHA Centre Study Team	Project Staff
Philippines	Rizza Mae C. Yson	JICA - AHA Centre Study Team	Project Staff
Philippines	Dante A. Susano	JICA - AHA Centre Study Team	Project Staff
Philippines	Roxanne Joy R. Sy	JICA - AHA Centre Study Team	Project Staff
Philippines	Alex Nicolas P. Tamayo	University of the Philippines	Documentor/Transcriber
Philippines	Claire Pantoja	University of the Philippines	Documentor/Transcriber
Japan	Yuri Minami	Ryukoku University	Observer

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Agenda

Opening Session	
13:30-14:00	Registration
14:00-14:20 (20 min)	<p>Opening Address (10)</p> <p>Mr. Noriaki Niwa Chief Representative JICA Philippine Office</p> <p>BGen. Romeo F. Fajardo AFP (Ret) Deputy Administrator, Office of Civil Defense (NDRRMC)</p>
Session 1 Project and Area BCM	
14:20-15:10 (50 min)	<p>Project and Area BCM (20) including Video</p> <p>Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Activities in the Philippines (15)</p> <p>Mr. Ramon J. Santiago National Coordinator of the Philippines</p> <p>Q & A / Discussion</p>
15:10-15:30	Coffee Break

Session 2 Developing Area BCM	
15:30-16:30 (60 min)	<p>Understanding the Area (15)</p> <p style="text-align: center;">Dr. Masakazu Takahashi</p> <p>Determining Area BCM Strategy and Developing Area BCP (15)</p> <p style="text-align: center;">Mr. Yoshiyuki Tsuji Deputy Team Leader of the Study Team</p> <p>Exercising and Reviewing, Maintaining and Improving, and Next Steps (15)</p> <p style="text-align: center;">Dr. Masakazu Takahashi</p> <p>Q & A / Discussion</p>
Session 3 Panel Discussion: Area BCM; Expectations, Contributions and Related Activities	
16:30-17:30 (60 min)	<p>Moderator: Mr. Ramon J. Santiago</p> <p>Panelist:</p> <p style="text-align: center;">DDG. Justo Porfirio Ll. Yusingco Philippines Economic Zone Authority (PEZA)</p> <p style="text-align: center;">Commo. Rosauro Arnel Gonzales AFP (Ret) Office of Civil Defence (OCD) Region IV A</p> <p style="text-align: center;">Mr. Jesus I. Barrera Cavite Provincial Government</p> <p style="text-align: center;">Mr. Valentin P. Guidote, Jr. Laguna Provincial Government</p> <p style="text-align: center;">USec. Corazon T. Jimenez General Manager, Metro Manila Development Authority (MMDA)</p> <p style="text-align: center;">Mr. Donald James D. Gawe National Economic and Development Authority (NEDA)</p> <p style="text-align: center;">Ms. Grace G. Morella Philippine Chamber of Commerce and Industry (PCCI)</p>

	<p>Mr. Fidel Eblasin Yazaki-Torres Private Company</p> <p>Mr. Marco R. Carlos Manila Electric Company (MERALCO) Utility Company</p> <p>Ms. Rebecca Olivia Dimasacat Cavite Expressway (CAVITEX) Highway Operator</p> <p>Dr. Hitoshi Baba Senior Advisor Japan International Cooperation Agency (JICA) HQ</p> <p>3 to 5 Minutes Talk by the Panellists, Q/A and Discussions</p>
<p>17:30-17:40 (10 min)</p>	<p>Closing of the Seminar</p> <p>Takahiro Morita Senior Representative JICA Philippine Office</p>
<p>17:40</p>	<p>Adjournment</p>

MC: Mr. Ramon J. Santiago



Natural Disaster Risk Assessment and Area Business Continuity Plan Formulation for Industrial Agglomerated Areas in the ASEAN Region

AHA Centre
Japan International Cooperation Agency
OYO International Cooperation
Mitsubishi Research Institute, Inc.
CTI Engineering International Co., Ltd.

Final Seminar
15 August 2014
Crimson Hotel, Alabang, Muntinlupa City

Now on its 60th year in the Philippines, the Japan International Cooperation Agency (JICA) through Mr. Noriaki NIWA opened the seminar with a pledge to continuously support the growth of the local economy, especially through the Area Business Continuity Plan (ABCP).

Likewise, Brig. Gen. Romeo F. FAJARDO from the Office of Civil Defense National Disaster Risk Reduction and Management Council (OCD-NDRRMC) affirmed that ABCP would be a vital means of protecting the economy—a duty that must be braved by one and all. As ABCP sees to local conditions and vulnerabilities, the project’s relevance has been undeniable since its inception, Brig. Gen. Fajardo added. He also mentioned that ABCP will be valuable throughout Asia-Pacific Economic Cooperation (APEC) preparations; next year’s APEC will be hosted by the Philippines.

Project and Area BCM;

Understanding the Area;

Determining Area BCM Strategy and Developing Area BCP;

Dr. Masakazu TAKAHASHI of the Study Team asserted that hazards and disasters have critical consequences on the performance, competitiveness, and sustainability of various sectors in an area. A video presentation subsequently emphasized the importance of mutual dependence among these sectors. Notably, reliance is something that is yet to be reinforced among local stakeholders. Dr. Takahashi then discussed how actions taken by different sectors are seemingly mismatched; manners through which local government units support investments in high risk areas compromise installed or established early warning and response systems. Correspondingly, not all businesses have BCPs especially small and medium-sized ones.

Blueprints have been produced in response to these concerns however, a new framework was deemed necessary. In this light, the AHA Center and JICA proposed and pilot tested the ABCP in Indonesia, the Philippines, and Vietnam. Dr. Takahashi went into the details of ABCP next.

The ABCP is a framework for business continuation and “coordinated damage mitigation measures and recovery actions” of a certain area as a whole such as an industrial agglomerated area. As such, it encompasses industrial parks and enterprises as well as transport infrastructures and lifeline utilities.

To gain a deeper understanding and appreciation of ABCP, Dr. Yoshiyuki TSUJI of the Study Team further talked about how the project came to be. He provided background information on the structure of local industries; policies on continuity; results of business impact analyses; likely bottlenecks; as well as roles of stakeholders.

Stakeholders, as in Individual enterprises, industrial area managers, and administrators of the infrastructures to local and national authorities to professional associations, research institutes, and universities, must partake of:

- probabilistic analysis of risks and impacts;
- management of critical external resources;
- area wide scalability of management; and
- private-public coordination.

ABCP is enhanced through ABC Management (ABCM), a “scalable cross sector coordination framework of disaster management for business continuity.” ABCM is a cyclic process of:

- understanding risks and impacts;
- determining common strategy of risk management;
- developing the ABCP;
- implementing the planned actions; and
- monitoring.

In doing so, scientific and standardized risk assessment, stakeholders’ forum, and development of ABCP (through discussions, workshops, and table-top exercises) has been carried out.

Activities in the Philippines

ABCP became all the more relatable as Mr. Ramon J. SANTIAGO reacquainted participants with local project activities; Mr. Santiago discussed ABCP’s purpose and scope to area impact analysis to continuity strategies specifically for the Philippines. After which, he presented a comprehensive summary of workshop outcomes.

Local participants came to realize the value of ABCP/M during the first workshop. On top of heightened awareness, a sense of urgency to strive for security and sustainability was felt—even more so upon the affirmation of earthquake as a primary concern for the Southern Luzon area.

It has also been established that minor corrections be done on the proposed policy statement and implementation schedule. Suggestions on realigning the project in accordance to coordination protocols, local BCPS, and legal frameworks were put forward as well.

In the second workshop, a deeper understanding of ABCP/M and its scope and limitations was gained—all of which were considered in the formulation of mitigation measures; selection of owners (i.e., Philippine Economic Zone Authority ‘PEZA’, OCD-NDRRMC, Department of the Interior and Local Government ‘DILG’, or a coordinating council); and enhancement of resources and systems for sustainability.

Finally, local participants expressed interest in learning more about the next steps to take for the project’s initial run. A permanent secretariat as well as continuous trainings and forums were some of the recommendations during the third workshop.

Exercising and Reviewing, Maintaining and Improving, and Next Steps

It can be said that the Study Team and local participants have found common ground; Dr. Takahashi agreed that there would be a need to monitor, review, improve, and disseminate information—all of which are slated as the next steps for ABCP/M. More specifically, steps include:

- validating plans;
- information dissemination;
- local integration;
- rehearsing key stakeholders; and
- taking into account outcomes of previous exercises as well as rate of change.

In doing so, testing; discussion based and table top exercises; and also simulations shall be carried out.

Project and Area BCM

Q&A

Seminar attendees, likewise, showed interest in the implementation of ABCP/M. Supt. Romel C. TRADIO from the Batangas Bureau of Fire Protection inquired about expansion in terms of coverage area while Mr. Rommel DL PENEYRA, a DRRM Officer from Cavite, asked about the project’s applicability to other sectors, agriculture in particular. In response, they were reassured of ABCP/M’s applicability and replicability; Dr. Takahashi and Mr. Santiago stated that the project can scale up in range or magnitude.

Then there were inquiries on whether knowledge management and data protection (Ms. Marisa Y. LERIAS from the League of Municipalities) as well as recovery (Mr. Valentin P. GUIDOTE, Jr. from the Laguna Planning and Development Office) are incorporated in the ABCP/M. According to Dr. Takahashi, the project may provide context for these areas of concern. However, he maintained that the project is at a stage where the current focus is on mutual interests rather than individual ones. Mr. Santiago and Dr. Renato U. SOLIDUM Jr. alike urged participants to approach ABCP/M as an overall scheme.

All the same, Mr. Desi James V. Bernardino from the Department of Interior Local Government looks forward to the ABCP/M guidebook and asked if it may be distributed among local government units. A revised version will be available for circulation early next year, Dr. Takahashi said.

Panel Discussion:

Area BCM;

Expectations, Contributions, and Related Activities

The dialogue carried on to the panel discussion, where Mr. Santiago assumed the role of moderator.

Mr. Marco R. CARLOS opened the discussion and reported how comprehensive Manila Electric Company's (MERALCO's) BCP is, owing to 111 years of extensive research and experience. MERALCO's prioritization scheme was then discussed; in times of calamity, power will primarily be restored for life/survival (e.g. hospitals), communication, and water systems. Peace-and-order bodies will come in next. Then, support vital infrastructures shall be tended to. Mr. Carlos, however, stressed that this does not mean that businesses will not be provided with.

Here, Mr. Santiago pointed out that if someone in the chain fails to deliver, the whole process seizes up. This is what ABCP/M hopes to elude, he added.

PEZA claimed to be well-aware of the circumstances too. Mr. Justo Porfirio LL. YUSINGCO affirmed that the agency is not just interested rather in urgent need of ABCP/M. It also came to PEZA's realization that it is but crucial to realign with the zones so that businesses may effectively pull through after disastrous events. If it were not for the local workshops, the agency would not have been directed toward such orientation. Now public and private zones as well as locators are encouraged to take part in the project—regardless if they have BCPs or not.

Results of an inventory also revealed that most of their members have BCPs and so, PEZA was all the more encouraged to formulate their own BCP—which will be valuable for the approaching ASEAN integration, Mr. Yusingco added. Similarly, Mr. Jesus L. BARRERA and Ms. Rebecca Olivia DIMASACAT reported that institutions they belong to (Cavite Provincial Government and Cavite Expressway respectively) have commenced with the development of their own BCPs.

The National Economic and Development Authority Region IV-A, like PEZA, supports the project as they have long waited for a catalyst such as ABCP/M, Mr. Donald James D. GAWE said. He particularly commended the project’s scalability and its importance in the proliferation of risk communication, improvement of planning guidelines, and operationalization of public-private partnerships (PPPs). “It unifies the region”, declared Mr. Gawe. The prospect of collaborative effort appealed to Mr. Barrera, Ms. Dimasacat, and Ms. Grace G. MORELLA (Philippine Chamber of Commerce and Industry) as well.

All of them, including Mr. Fidel W. EBLASIN Jr. from the Yazaki-Torres Manufacturing, Inc., anticipate actual preparations for the implementation of ABCP/M. Mr. Eblasin and Ms. Morella further regarded the project as being timely and significant.

On top of that, ABCP/M is believed to be valuable in strengthening resiliency in the economy and among the communities and so, Ms. Morella, Commo. Rosauro Arnel Q. GONZALES Jr. (OCD Region IV-A), and Mr. Valentin P. GUIDOTE Jr. (Laguna Provincial Government) even mentioned that the project must be institutionalized and mainstreamed.

In doing so, Commo. Gonzales hopes to impart the ABCP/M’s risk assessment and trainings to OCD Region IV-A’s growing network. It would be valuable now more than ever as people increasingly turn to his agency especially after the recent earthquake in Bohol and typhoon Yolanda.

The Laguna Provincial Government, likewise, sees ABCP/M as a platform where the public and private sectors meet as well as a blueprint in evaluating other undertakings; Mr. Guidote said that knowledge and skills gained from the project will be particularly useful as they review the Lakeshore Development Project.

Akin to other panelists, USec. Corazon T. JIMENEZ affirmed that the Metro Manila Development Authority (MMDA) has become more proactive and its data and action plans more reliable. With this in mind, USec Jimenez assured ABCP/M of MMDA's unwavering support. She hoped that other stakeholders will follow suit.

Panelists were eager to participate in the next steps of ABCP/M as well as in producing their own BCPs, especially since most of the institutions that they belong to do not have one. Keen to impart newfound insight, panelists also look forward to convene with other stakeholders thus fortifying socioeconomic resiliency.

JICA's Dr. Hitoshi BABA and Mr. Takahiro MORITA expressed gratitude and commended the Study Team and the stakeholders for their diligence. Endeavors at hand, Dr. Baba maintained, are the standardization of the ABCM/P framework as well as putting it into effect; he hopes the project will pave the way for prompt and effective recovery and, more importantly, capacity-building among stakeholders. Dr. Baba emphasized that collaboration is at the heart of ABCM/P. He trusts that this, on top of insight from various PPP cases worldwide, will stir stakeholders to action and, ultimately, fostering the local economy. ■



“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”



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Japan International Cooperation Agency (JICA)

Attendees list

Final Seminar on Area BCP Formulation, Vietnam

Hai Phong, Vietnam, August 19, 2014

Participants

No.	Country	Name	Organization	Position
Advisory Group				
1	Vietnam	Mr. Do Trung Thoai	Hai Phong city People's Committee	Vice Chaire
2	Vietnam	Mr. Tran Ngoc Duc	Office of Chairman, Hai Phong city People's Committee	Officer
3	Vietnam	Mr. Nguyen Ba Tien	Dyke Management and Flood and Storm Control Department of Agriculture and Rural Development Department	Director
4	Vietnam	Mr. Nguyen Duc Tho	Dyke Management and Flood and Storm Control Department of Agriculture and Rural Development Department	Head of Administration Office
5	Vietnam	Mr. Tran Vinh Hoan	Hai Phong Economic Zone Management Board	Vice Director
6	Vietnam	Ms. Tran Thi Hong Hanh	Hai Phong Economic Zone Management Board	Expert
7	Vietnam	Mr. Nguyen Thanh Long	Dept. of Planning and Investment	Deputy Director
8	Vietnam	Ms. Vu Lan Anh	Dept. of Industry and Trade	Deputy Director
9	Vietnam	Mr. Pham Quoc Ka	Dept. of Natural Resources and Environment	Deputy Director
10	Vietnam	Mr. Nguyen Quang Anh	Dept. of Construction	Deputy Director
11	Vietnam	Mr. Pham Van Tuan	Department of Communication	Deputy Director
12	Vietnam	Mr. Hoang Van Binh	Police Department of Fire Fighting	Deputy Director
13	Vietnam	Mr. Nguyen Vu Thang	Hydrometeorology Forecasting Centre in Northern East Zone	Deputy Director
14	Vietnam	Mr. Nguyen Xuan Truong	Management Board of the Project for Infrastructure Construction of Industrial Zone of Hai Phong	Director
15	Vietnam	Mr. Bui Ngoc Nam	Maritime Administration of Hai Phong	Head of Department
16	Vietnam	Ms. Nguyen Thi Bich Dung	Department of Foreign Affairs	Deputy Director
17	Vietnam	Mr. Nguyen Quang Tuan	Hai Phong Police	Head of Department
18	Vietnam	Ms. Nguyen Thu Huong	Hai Phong Industry Zone Management Department	Deputy Director of Accounting Department
Infrastructuer and Lifeline Group				
19	Vietnam	Mr. Vu Duy Tung	Dept. of Transportation	Deputy Director
20	Vietnam	Mr. Pham Van Tuan	Dept. of Information and Communication	Deputy Director
21	Vietnam	Mr. Bui Anh Tuan	Hai Phong Electric One Member Limited Company	Expert
22	Vietnam	Mr. Vu Xuan Han	Hai Phong Water Supply Two Member Company	General Director
International Donners				

No.	Country	Name	Organization	Position
23	USA	Mr. John Sandirs	Peace Winds	Director
Private Companies				
24	Vietnam	Mr. Truong Van Thai	Hai Phong Port Holding Limited Liability Company	Deputy Director
25	Vietnam	Mr. Nguyen Van Diep	Trung Anh Security Co.,Ltd	Director
26	Vietnam	Ms. Bui Thi Thu Hong	Limited Liability Company Phu Vinh	Director
27	Vietnam	Ms. Doan Thi Sen	Limited Liability Company Commercial Toan Tuan	Director
28	Vietnam	Ms. Nguyen Thi Thu Hien	Nam Binh Vu Investment Joint Stock Company	Head of Department
29	Vietnam	Mr. Cao Manh Ha	Hai Phong Vinaline Services One Member Limited Company	Vice Director
30	Vietnam	Mr. Nguyen Huy Hoang	International Huy Hoang JSC	General Director
31	Vietnam	Mr. Pham Cong Chuc	19-3 Cooperative	Vice Director
32	Vietnam	Mr. Doam Minh Chan	Silicat Viet An Company	Director Board
33	Vietnam	Ms. Nguyen Thi Hong Van	Viet Nam Toyo Denso Limited Liability Company	Head of Administration Department
34	Vietnam	Mr. Bui Quang Hung	Viet Nam Toyo Denso Limited Liability Company	Head of production department
35	Vietnam	Mr. Dinh Van Viet	International Hai Phong Container Company	Director
36	Vietnam	Mr. Do Van Viet	International Hai Phong Container Company	Expert
37	Vietnam	Ms. Nguyen Thi Nhung	Kokuyo Vietnam Limited Liability Company	Staff
38	Vietnam	Mr. Le Doan Tam	Dai Duong Company	Director
39	Vietnam	Mr. Vu Nguyen Han	Hai Phong Water Supply Number No.2	Director
40	Vietnam	Mr. Vu Duc Dong	Construction Hai Phong No. 9 JSC	General Director
41	Vietnam	Mr. Le Trung Thanh	Hai Phong EIC	Director
42	Vietnam	Mr. Dinh Van Vy	Duc Thanh Phuong Company	Director
43	Vietnam	Ms. Nguyen Thi Minh Ha	Hai Phong Maritime Service and Tourist Co.,Ltd	Director
44	Vietnam	Mr. Nguyen Xuan Giang	Vietran Branch in Hai Phong	Deputy Director
45	Vietnam	Mr. Bui Huy Thien	Cao Minh Commercial Joint Stock Company	Deputy Director
46	Vietnam	Ms. Vu Thi Anh	My Hao Joint Stock Company	Director
47	Vietnam	Ms. Vu Thi Ngoc Lan	Tay Au beer Joint Stock Company	Director
48	Vietnam	Ms. Cu Ngoc Phuong	Duyen Hai Company	Director
49	Vietnam	Mr. Tran Quoc Toan	Công ty CP & LD- HP	Deputy Director
50	Vietnam	Mr. Nguyen Ngoc Hung	Thanh Hung Private Enterprise	Deputy Director
51	Vietnam	Mr. Phi Minh Khoa	Vietravel Hai Phong	Deputy Director
52	Vietnam	Mr. Hoang Trieu Hung	Hai Phong Waterway Traffic Assurance One Member Limited Company	Expert
53	Vietnam	Ms. Nguyen Thi Xuan Ha	Song Cam Shipbuilding JSC	Deputy Director
54	Vietnam	Mr. Nguyen Huu Dien	Hai Phong Eletronic Cables Co.,Ltd	Chairman
55	Japan	Mr. Puumurh	Hai Phong PV Company	General Director

No.	Country	Name	Organization	Position
56	Vietnam	Mr. Dang Tien Manh	Hai Phong Station	Deputy Director
57	Vietnam	Mr. Nguyen Viet Hoa	Container Viet Nam Joint Stock Company	General Director
58	Vietnam	Mr. Hoa Quang Thiep	Sivico Joint Stock Company	General Director
59	Vietnam	Ms. Nguyen Thi Huyen	A Chau Asest Investment and Management Company	Expert
60	Vietnam	Mr. Trinh Ngoc Toan	A Chau Asest Investment and Management Company	Expert
61	Vietnam	Mr. Nguyen Thanh Phuong	Nam Binh Vu Investment Joint Stock Company	General Director
62	Vietnam	Ms. Pham Thi Bich Hong	Truong Hong Printing and Advertisement Co.,Ltd	Chairman
63	Vietnam	Mr. Do Duc Hieu	Hai Phong Steel and Material JSC	Vice Director
64	Vietnam	Mr. Dinh Thanh Tung	Hai Phong Port Service and Technical JSC	Director
65	Vietnam	Mr. Hoang Trung Hieu	Seas and Island Department of Hai Phong	Officer
66	Vietnam	Mr. Nguyen Vam Chan	Kien Long Construction JSC	Director
67	Vietnam	Ms. Nguyen Thi Bich	Sumi Rubber Viet Nam Limited Liability Company	Officer
68	Vietnam	Ms. Hoang Thi Binh	Binh Duong International Investment JSC	Director
69	Vietnam	Ms. Le Thi Thanh Huong	Saigon Viet Nam Limited Liability Company	Head of Administration Department
70	Vietnam	Mr. Le Van Toan	Hai Phong Union Tourism Services One Member Company	Director
71	Vietnam	Mr. Dao Quang Huy	Huy Hoang Coal processing and trading factory	Director
72	Vietnam	Mr. Tran Viet Khanh	Lisemco Joint Stock Company	Director
73	Vietnam	Mr. Nguyen Van Thuong	The North Steel JSC	Chairman
74	Vietnam	Mr. Dang Van Viet	Duc Giang Viet Hung Chemical Co.,Ltd	Director
75	Vietnam	Ms Phung Thi Thu Huong	Duyen Hai PVI Company	Expert
76	Vietnam	Ms. Luu Trung Thuy	Hai Phong Electric Industry JSC	Expert
Media				
77	Vietnam	Mr. Cao Minh Hao	Hai Phong Portal	Reporter
78	Vietnam	Mr. Nguyen Trung Kien	Hai Phong Newspaper	Reporter
79	Vietnam	Ms. Ngo Thu Thuy	Hai Phong Newspaper	Reporter
80	Vietnam	Ms. Vu Hong Nhung	Hai Phong Portal	Reporter
81	Vietnam	Mr. Bui Thanh Long	Hai Phong Radio and Television	Vice Director
JICA and Study Team				
82	Vietnam	Nguyen Thi Thu Le	JICA Viet Nam in Hanoi	Senior advisor
83	Japan	Masakazu TAKAHASHI	AHA Center -Jica Study Team	Team Leader
84	Japan	Yoshiyuki TSUJI	AHA Center -Jica Study Team	Deputy Team Leader
85	Japan	Shukyo SEGAWA	AHA Center -Jica Study Team	Leader of Natural Disaster Risk
86	Japan	Akira WATANABE	AHA Center -Jica Study Team	Coordinator
87	Vietnam	Hoang Minh Nguyet	AHA Center -Jica Study Team	MC/Facilitator
88	Vietnam	Nguyen Thanh Ha	AHA Center -Jica Study Team	National Coordinator

No.	Country	Name	Organization	Position
89	Vietnam	Ngo Thi Minh	AHA Center -Jica Study Team	National Coordinator
90	Vietnam	Nguyen Phuong Nhung	AHA Center -Jica Study Team	junior researcher
91	Vietnam	Bui Bich Ngoc	AHA Center -Jica Study Team	Intepreter
92	Vietnam	Tran Thi Duyen	AHA Center -Jica Study Team	Facilitator
93	Vietnam	Nguyen Van Dung	AHA Center -Jica Study Team	Intepreter
94	Vietnam	Nguyen Thi Dung	AHA Center -Jica Study Team	Ha's staff
95	Vietnam	Luu Thi Thanh Tam	AHA Center -Jica Study Team	Ha's staff
96	Vietnam	Nguyen Ky	AHA Center -Jica Study Team	Interpreter

Total Participants : 96 persons, Including:	
Advisory Group	18
Infrastructuer and Lifeline Group	4
International Donners	1
Private Companies	53
Media	5
JICA and Study Team	15

**Final Seminar
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formulation for Industrial Agglomerated Areas
in the ASEAN Region”**

August 19, 2014, Haiphong Convention Centre, Hai Phong Viet Nam

*Under a Joint Program of Japan International Cooperation Agency (JICA) and ASEAN
Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

AGENDA

Opening Session	
8:00-8:30 (30 min.)	Registration
8:30-8:45 (15 min.)	Opening Address (10) Mr. Do Trung Thoai Vice Chairman, Hai Phong People's Committee
Session 1 Project and Area BCM	
8:45-9:30 (45 min.)	Project and Area BCM (20) including Video Dr. Masakazu Takahashi Team Leader of the Study Team Activities in Hai Phong (15) Mr. Nguyen Thanh Ha National Coordinator of Vietnam Q & A / Discussion
Session 2 Developing Area BCM	
9:30-10:40 (70 min.)	Understanding the Area (15) Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment Determining Area BCM Strategy and Developing Area BCP (20) Mr. Yoshiyuki Tsuji Deputy Team Leader of the Study Team

	<p>Exercising and Reviewing, Maintaining and Improving, and Tools for Area BCM (20)</p> <p>Dr. Masakazu Takahashi</p> <p>Q & A / Discussion</p>
10:40-11:00 (20 min.)	Coffee Break
<p>Session 3 Panel Discussion Expectations, Contributions and Relevant Activities for Area BCM</p>	
11:00-12:00 (60 min.)	<p>Moderator: Mr. Nguyen Thanh Ha</p> <p>Panellists:</p> <p>Mr. Nguyen Ba Tien Secretariat, Steering Committee for Flood & Storm Prevention, Search & Rescue/ Hai Phong People's Committee</p> <p>Mr. Tran Vinh Hoan Vice Director, Hai Phong Economic Zone Authority</p> <p>Mr. Phan Cong Minh Vietnam Chamber of Commerce and Industry</p> <p>3 to 5 Minutes Presentation by the Panellists,</p> <p>Q/A and Discussion</p>
12:00-12:10 (10 min.)	<p>Closing of the Seminar</p> <p>Ms. Nguyen Thi Thu Le JICA Vietnam Office</p>
12:10-	Lunch

MC: Ms. Hoang Minh Nguyet

Final Seminar

on

the Project

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

August 19, 2014, Hai Phong Convention Centre, Hai Phong, Viet Nam

*Under a Joint Program of Japan International Cooperation Agency [JICA]
and ASEAN Coordinating Centre for Humanitarian Assistance on disaster
management [AHA Centre]*

MINUTES OF THE SEMINAR

At 08:30 am on August 19th 2014, the Final Seminar was started. Ms. Hoang Minh Nguyet, MC of the Seminar gave a brief about the process of project from the initiatives, the purposes, necessity, and activities in pilot areas in nearly two years. The Study Team conducted a lot of activities with the active cooperation from stakeholders in Hai Phong areas to have certain results which would be showed in this final seminar. On behalf of the Study Team, she warmly welcomed the participation of representatives from local governments, operators of infrastructure and lifeline, private companies, NGOs, international organizations, research institutes and universities, media... especially she emphasized the presence of Mr. Do Trung Thoai, Vice Chairman of Hai Phong People’s Committee, Ms. Nguyen Thi Thu Le from Hanoi JICA office and Dr. Masakazu Takahashi, Team Leader of JICA Study Team.

After that, Dr. Do Trung Thoai, Vice Chairman of Hai Phong People’s Committee gave his welcome address. He emphasized the important roles of Hai Phong in the economy of Vietnam: economic centre in the North, the most important port in the North... with a lot of industrial parks. At the moment, Hai Phong has made detailed planning systems for industrial parks at areas of 12,000 ha, especially Dinh Vu- Cat Hai

Economic Park at 22,540 ha, 8 other industrial parks with total areas of 4,100 ha. In such industrial parks, there are many on-going investment projects with modern infrastructure system. He also mentioned the contribution of enterprises in such industrial parks: accounting for 36.3% values of industrial productions, 56% of export value with 7,305 billion VND contribution into the State Budget, providing 45,670 jobs for employees in Hai Phong.

Mr. Thoai also talked about the disadvantages of Hai Phong as a coastal city. With 125 km of costal line, over 4,000 km² of sea surface areas and 5 large river mouths, Hai Phong city is suffering serious damages from the impacts of natural disasters and climate changes. Then to protect Hai Phong against them is the top priority tasks of all stakeholders. Actually Hai Phong has been implementing a lot of structural and non-structural measures to mitigate the impact of natural disasters and to adapt to the climate change in order to make Hai Phong safe before the natural disasters. Such measures specified in Master Planning Adjustment of Hai Phong city to 2025 and Vision toward 2050 approved by the Prime Minister. He also summarized the tasks regarding to the environment protection in such plans.

Furthermore, Mr. Thoai reminded historical great disasters in the past which caused serious damages in human and buildings to countries in all over the world, especially in ASEAN region such as great flood in Thailand in 2011, tsunami in Indonesia, Thailand, Sri Lanka, India... and such disasters suspense the business continuity of industrial parks. This project raised by JICA and AHA Centre is very useful and practical for the natural disaster mitigation and industry continuity in Hai Phong. Moreover, this project supports to implement the National strategy on natural disaster prevention to 2020 and carry out the Commitment of Hai Phong City to build a city to be safe before the disasters, contribute to the sustainable development of Hai Phong City. On behalf of Hai Phong People's Committee, he highly appreciated the great contribution of all stakeholders, particularly the support of JICA Study Team and AHA Center to implement this project in Hai Phong. He hoped that all representatives in this final seminar would actively

cooperate with the Study Team to give more opinions, feedbacks about their expectations, next steps to finalize the Area BCP, to make it practical and feasible in disaster prevention and industry continuity. He called the support from JICA, NGOs, central government agencies, research institutes, private companies and other stakeholders to help Hai Phong People's Committee to successfully implement pilot project in Hai Phong City. And he confirmed that Hai Phong People's Committee would make best efforts to support, to direct and to ask other bodies to implement this project successfully.

At 08:45 am, the seminar came to the first session- Project and Area Business Continuity Management. Dr. Masakazu Takahashi made presentation about the project and Area BCM. Firstly, he introduced the Promotion Video about Area BCM. This Video gave an overview about the project: reason to choose ASEAN region, damages of natural disasters to the economy of the local and countries, impacts to local industry and communities, purposes of projects, the necessity, orientations and roles of stakeholders and so on.

After that, Dr. Takahashi explained more details about the project. He highlighted the importance of the project, responses of the Public Sector, of Private sector, the needs to have new frameworks- Area BCM. He showed 3 pilot areas in the Philippines, Indonesia and Vietnam. And he summarized all activities done by JICA-AHA Centre, clarified the stakeholders in Area BCM-who they are and considered issues during nearly 2 years. In addition, Dr. Takahashi overviewed all topics discussed in 3 previous workshops, defined the sub-groups to formulate Area BCP. He hoped that Area BCM/BCP was a giant leap for enterprises.

For more details, referring document no. FSHP_VN04: Project and Area Business Continuity Management

Next, Mr. Nguyen Thanh Ha, National Coordinator in Vietnam presented about the major activities of the project in Hai Phong pilot areas. He summarized all major activities done from the beginning of the project in February 2013. He emphasized that the study team conducted a lot of surveys with disaster study institutes and agencies,

worked with industrial parks to find out the damages of the natural disaster in the past and estimated the damages of disasters in the future if it happened. During nearly two years, the study team and all stakeholders focused formulating the Area BCP by organizing the workshops with many working groups. Such groups included representatives from central/local government agencies, infrastructure operator, lifeline operators, and private sectors to make the interaction among groups to address the bottlenecks in the natural disaster time. And after that the study team provided draft Area BCP for working groups for advice in order to finalise the plan. Mr. Ha also introduced the topics discussed in 3 Workshops and outputs of each. And in the end, he highlighted that the Area BCP was just in the first step as draft, it required the support and feedbacks from all stakeholders to finalise and complete it. And the purpose of this seminar was to collect the comments from all participants for have sharpened analysis and advice for the plan.

For more details, referring document no. FSHP_VN05 Activities of Project in Vietnam

At 09:22 am, the seminar passed to the Session 2: Developing Area Business Continuity Plan. In this session, study team members presented overviews on the project: understanding, strategy and process of project.

Firstly, Mr. Shukyo Segawa, Leader of Disaster Risk Assessment presented about the Understanding of the Area. He defined the term “Area” used in the project, identified the stakeholders, understanding about Hai Phong areas with general information on natural disaster, business and industry to protect, infrastructure and lifeline utilities. Moreover, Mr. Segawa talked about the hazards and risks for Hai Phong areas, especially risks of storm surge and floods with the consumption of once per 200 years. He also introduced the risk assessments for some type of disasters such as floods, storm surge, earthquakes, tsunami, volcanic eruption or landslide. Based on such information, the study team created the disaster scenario.

For more details, referring document no. FS_VN06: Understanding of Areas

Secondly, Mr. Yoshiyuki Tsuji, Vice Team Leader of Study Team presented about the Area BCM Strategy and Area BCP Development. He overviewed the content of Draft Area BCP through 7 Chapters. He concentrated on the structures of local industries in Hai Phong, the impacts to the Local Industry/Community, bottlenecks for the industry continuity, roles of Stakeholders. In addition, Mr. Tsuji showed measures in categories which were proposed in previous workshops.

For more details, referring document no. FS_VN07: Determining Area BCM and Developing Area BCP.

Thirdly, Dr. Takahashi presented about the Exercising and Reviewing, Maintaining and Improving and Tools for Area BCM. He showed the roles of exercises, ways for exercises and proposed activities for it. He gave examples for exercises in Chile at national level, Angamos port and so on. About reviewing, Dr. Takahashi pointed out the issues to review and consider, the individual/organization to review, confirm and approve it. Last but not least, he showed next steps to maintain the Area BCM, to implement in pilot countries and their expectations for the sustainability. He hoped that Area BCM should be the giant leap for Business in ASEAN region.

For more details, referring document no. FSHP_VN08 Exercising and Reviewing, Maintaining and Improving and Tools for Area BCM.

After presentation of Study Team member, one question was raised from private sector. He mentioned that in Draft Area BCP, the study team only assessed the risks of floods and storm surges while there were a lot of risks in Hai Phong such as strong wind in great hurricane which frequently occurred with largely negative impacts. He asked whether study team considered such natural disaster in the Area BCP or not.

On behalf of study team, Dr. Takahashi replied the question as follows: the study team applied multi-dimensional approach for this project. In Hai Phong, there were a lot of risks such as floods, earthquake, storms, storm surges...The study team already asked

working groups about the most serious natural disasters in Hai Phong and they decided to choose flood and storm surge. That was the reason why this project in Hai Phong areas focused on flood and storm surge. However, after reviewing in the next circle, the study team would supplement more feedbacks and comments to add more risks to analyse in the future.

Mr. Ha gave more explanations that when identifying the top priority for natural disasters in Hai Phong, all working groups chose flood and storm surges as the top priority. But it did not mean that they did not pay attention to other risks and hazards such as strong storm wind. It was the 2nd level of priority in the study.

10:25 am: Coffee break

After coffee break, the seminar began the Session 3 for the Panel discussion: Expectation, Contributions and Activities relating to Area BCM. This section was moderated by Mr. Nguyen Thanh Ha with the participants of Mr. Nguyen Ba Tien, Steering Committee of Flood Control and Search & Rescue, Hai Phong People's Committee, Mr. Tran Vinh Hoan, Vice Director, Hai Phong Industrial Parks Authority and Mr. Phan Cong Minh from VCCI in Hai Phong. Each panellist presented their comments in this section.

Mr. Nguyen Ba Tien from Steering Committee of Flood Control and Search & Rescue, Hai Phong People's Committee gave first speech. On behalf of Hai Phong authorities, Mr. Tien gave the expectations to the project: raising awareness of business and public on natural disasters; ensuring the sustainable socio-economic development of Hai Phong and industrial parks; maintaining the continuity of industrial productions, quickly recovering the lifeline services and production activities; mitigating economic losses; requiring supports from organizations inside and outside the ASEAN region. By the way, he confirmed that Hai Phong authorities would implement the Area BCM efficiently with the active participation of the stakeholders to ensure the industry continuity; the Public sector, private sector and operators of lifeline & infrastructure should cooperate closely to mitigate the risks; assign relevant agencies to implement the

tasks of Area BCM in their sectors; organize efficiently the prevention, response, and recovery of natural disasters; implement structural and non-structural measures; train maneuvers on managements, direction and responses against natural disasters and develop Area BCM strategy in each sector and enterprise.

Mr. Tien gave requirements to improve Area BCM to suite with conditions of Hai Phong City such as regularly updating, adjusting and supplementing Area BCM; raising readiness to respond and recover the natural disasters, enhancing the capability to provide sustainable services; preparing materials and equipment to meet the requirements of quick recovery; setting up task force in enterprises for professional and quick response in all circumstances; strengthening the coordination and mutual support amongst sectors, agencies, businesses and communities.

Finally, he talked about the contributions of Hai Phong to the improvement of Area BCM by training core staff involving disaster prevention and Area BCP implementation in major stakeholders; building up efficient systems of early warning and information on natural disasters; improving capability of natural disasters management for business owners and local officials in different levels; setting up hazard maps and vulnerability status, guidelines on basic steps of preparation, response and recovery of natural disasters in each industrial park.

After Mr. Tien's presentation, some question were raised. He asked that the response measures were built or not, time to activate such measures. Moreover, one among measures to mitigate and prevent natural disasters was to mobilise human resources and equipment. So, he concerned about the party who would be responsible for the investment in human resources and equipment- State or enterprise or both. And then the use rights would belong to what party.

To answer this question, Mr. Tran Vinh Hoan from Hai Phong Industrial Park authority gave some comments. Firstly he encouraged all representatives in this seminar to raise opinions to finalise the Area BCP, to put the Area BCP into the reality. He shared that in the first meeting about Area BCM, he had no idea about this concept because it

was very new. However, after attending some workshops, he acknowledged a lot of understandings. If the participants in this seminar heard this term first time, they might have some basic information from Mr. Thoai's speech. For the question, he replied that after conducting 3 workshops, they might expand more stakeholders participating in the working groups to have more opinions and to formulate the more detailed plan. So he hoped to receive more feedbacks from the stakeholders in this seminar to put into the plan. About the resources, it was important that both enterprise and communities understood the Area BCM. It was the chance to disseminate and promote from the enterprise level to local government levels. In Area BCM, it showed the details that each stakeholders should implement in case of emergency. He expressed again the purpose of this seminar to collect more feedbacks and opinions from the stakeholders, especially from private sector to complete the plan.

Mr. Tien added more comments that the activities to prevent natural disasters in Haiphong had been carefully prepared with many measures for a long time, not at this moment. However, such measures were for the security of the whole regions, whole areas, not specific for the enterprises, the industries or for the continuity of the business. Individual enterprises implemented their own BCP to protect themselves. The purpose of this project was to coordinate the private sector, public sector and operators of infrastructure & lifeline in the games to prevent natural disasters.

For the investment, it was required to apply "Socialization" with the coordination of the State and enterprises. The Law on natural disaster prevention, validity from May 1st 2014 mentioned "socialization" in natural disaster management. To ensure the sustainability, it was very essential to coordinate private sector and public sector, the mutual support among enterprises in the industrial parks.

About Hai Phong authorities, they usually maintained materials and equipment to prevent natural disasters such as materials to protect dykes, forces for search and rescue. The detail assignment for specific agencies was mentioned in annual plan. And each enterprise should implement their own BCP to protect themselves.

Mr. Toi from VCCI Hai Phong gave some comments as follows: the National Assembly passed through the Law on Natural Disaster Prevention 2013, Decree no. 66 regulating the details in implementation of some articles of Law on natural disaster prevention with the validity from August 22nd 2014, after attending this seminar, many enterprise wondered that Area BCM/BCP was an effective activity to implement Decree no. 66 or not. In that case, the enterprises should apply their own BCP in what way to be suitable with Area BCP. The fact was that just some enterprises compulsorily implemented disaster management plans in their organization due to the business features, not all enterprises implemented such plans.

Mr. Hoan replied the question related to the response measures in enterprise. In general, when establishing an enterprises, the owners acknowledged the importance of natural disaster management by their experience. However, such efforts were not well connected. For example, in construction industry, it was required that a construction should bear a specific level of storm or earthquake. Such awareness showed their compliance to the Law on natural disaster prevention. Actually the enterprises knew the need to protect themselves, however, it was discrete, not continual. When the enterprises implemented the Area, they would know the time to recovery, available resources for their recovery, transport infrastructure situation or telecommunication status...

Next, Mr. Phan Cong Minh from VCCI gave his speech related to the Public-Private coordination in natural disaster management. He provided some general information about the natural disaster in enterprises in Hai Phong City. Recently some enterprises in Hai Phong implemented some measures as natural disaster management, however, it was based on the previous experience without the comments from the competent authorities. Then in the future, when the Area BCP was formulated successfully by JICA study team with the detailed assignment for each stakeholders, they would unify all to prevent the natural disasters. Therefore, they highly appreciated this project.

Mr. Minh shared some information on a project participated by VCCI and Asia Funds

called: Strengthening public-private cooperation in natural disaster management and enhancing response capabilities in the communities organized in Central provinces. Through 3 implementation years, targets on SMEs, it was found that during the disaster time, the individual enterprises, especially SMEs met a lot of difficulties in response against natural disaster such as corruption of transport infrastructure, power supply, water, and telecommunication and so on.

As Mr. Tien said, the natural disaster management was conducted in macro level, however, it was very limited in organization level. The enterprises was passive because they thought that the recovery activities belonged to the responsibilities of local authorities. They only depended on accurate weather programs. Their plans were very simple, even no plan. They paid attention to disaster management, however, they had no budget for it. In this difficult economic situation, it was very hard to reserve a fund for natural disaster prevention. So, it was requested to raise awareness for enterprises, leader of such enterprises to reserve a fund for such matter. He concerned about the method to apply Area BCP into the enterprises with guidebook.

While VCCI only concentrated on knowledge on business, investment improvement, legal support, they still did not pay much attention on the natural disaster management. He confirmed that in the future, after finishing Area BCP, VCCI would support to ask enterprise to apply this plan. At the moment, the targets of VCCI were to improve capabilities of SMEs in disaster time, integrate Area BCP with other disaster management methods.

He advised that the study team should exercise in major enterprises, SMEs, then to expand to other organization. It was not good to apply this Area BCM in all enterprise in one time.

After opinions from panellist, one representative from private sector gave her comments that it was her first time to hear this Area BCP/BCM then she had a lot of surprises. Via this Area BCP, she acknowledged that in the course to prevent natural disasters, the enterprise was not alone, they would receive the support from the local

authorities, from competent agencies and other stakeholders.

One representative from transport section raised a question. The purpose of the Area BCP was to prevent and response to the natural disaster. The Area BCM was very important. The more detailed Area BCP was, the better results in disaster management was. For the risks of flood and storm surges in Hai Phong, he wanted to know which place would be flooded first, the solutions for such places, plans for transportation or evacuation plan for such place... he emphasized the importance of cooperation among the stakeholders to minimize the risks, so he wanted to know what plan was the most effective one to apply in the shortest time for the recovery.

Mr. Tien answered this question. He mentioned about the 4 on-site strategies. Each sector should make their own plans to protect themselves before asking the support from outside. 4 on-site strategy was implemented very well at the moment. Many enterprises organized drills, exercises in case of emergency. After that, the enterprise should apply 3 readiness strategy to actively prevent the natural disaster.

Mr. Ha gave more comments about this problem. Talking about Area BCP was mentioning the interaction among stakeholders in areas. In the flood scenario in large scale such as in Dinh Vu Industrial Park, so, in this case, the first step to do was to map the hazards. If the depth of storm surges was 0.8 m or 1 m, so they would point out which place would be flooded first, then they would provide the measures to address it such as escape roads, facilities for quick recovery... such matters should be address in the next steps of the project with the contributions of local authorities, private sector and other stakeholders for more detailed disaster scenarios and measures.

Finally, Mr. John Sander, from Peace Winds America Project in Vietnam shared some opinions. It was just be the first step and many participants found complicated to understand the Area BCP in the first time. This project would take a lot of time and efforts to complete. He would like to highly appreciate the efforts of JICA Study team for certain study results in a short time with a lot of activities and researches. He hoped that all participants in this seminar could exchange information together, talk this topic to

others in their organizations and outside, to promote this Area BCP in their own organization. This project asked the coordination from central/local government, private sector, infrastructure, lifeline sector... there were a lot of questions, matters, issues needed to be clarified. As an NGO in Vietnam with good relationship with VCCI, he asked all participants to actively take part in workshops, to have deeper understanding about the Area BCP because it truly benefited them. It was the fact that JICA study team had a lot of activities in the future to implement and they needed the support from all stakeholders for fulfil their mission.

At 11:48 am, Ms. Nguyen Thu Le from JICA Vietnam made the closing address. In her speech, she showed her sincerest thanks to the support of stakeholders, thanks to the study team for their efforts to make a lot of reports and activities with related bodies. She highlighted that the project required the support, interaction from many different organizations in all levels, the attendance of representatives in this seminar was very valuable. She hoped to receive more support from all stakeholder for the project in the future and wished the project would bring useful efficiency to the enterprises, industrial parks in Hai Phong city, in Vietnam and ASEAN region.

11:50 am: End of Seminar.



“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”

A Joint Project of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) and
Japan International Cooperation Agency (JICA)

Attendees list for Final Seminar on Area BCP Formulation, Vietnam

Melia Hotel, Ha noi City, Vietnam, August 21, 2014

Participants

No	Country	Name	Organization	Position
Advisory Group				
1	Vietnam	Dang Quang Minh	Ministry of Agriculture and Rural Department, DMC	Acting Director
2	Vietnam	Nguyen Thi Thu Ha	Ministry of Agriculture and Rural Department, DMC	Head of Division
3	Vietnam	Nguyen Phuong Tra	Ministry of Agriculture and Rural Department, DMC	Expert
4	Vietnam	La Quang Trung	Ministry of Agriculture and Rural Department, DMC	Expert
5	Vietnam	Nguyen Ba Thanh	Ministry of Agriculture and Rural Department, DMC	Expert
6	Vietnam	Nguyen Anh Son	Ministry of Agriculture and Rural Department, DMC	Expert
7	Vietnam	Nguyen Viet Tham	Ministry of Agriculture and Rural Department, DMC	Expert
8	Vietnam	Hoang Thi Hien	Ministry of Agriculture and Rural Department, DMC	Expert
9	Vietnam	Nghiem Phuong Thuy	Ministry of Agriculture and Rural Department, Directorate of Forest	Expert
10	Vietnam	Nguyen Duc Thang	Ministry of Agriculture and Rural Department, Dyke Management and Flood and Storm Prevention Division	Expert
11	Vietnam	Nguyen Thu Hong	Ministry of Trade and Industry, International Cooperation Department	Expert
12	Vietnam	Nguyen Thi Hong Quyen	Ministry of Trade and Industry, International Cooperation Department	Expert
13	Vietnam	Vuong Thi Minh Hieu	Ministry of Planning and Investment	Expert
14	Vietnam	Nguyen Trung Hieu	Ministry of Sources and Environment	Expert
15	Vietnam	Nguyen Thanh Huong	Ministry of Resource and Environment, Vietnam Administration of Seas and Islands	Expert
16	Vietnam	Nguyen Hong Viet	Ha Noi Trade and Industry Department	Expert
17	Vietnam	Nguyen Xuan Son	Ha Noi Planning and Investment Department	Vice Head of Department ODA
18	Vietnam	Nguyen Ba Tien	Dyke Management and Flood and Storm Prevention Division, Department of Agriculture and Rural Development of Hai Phong	Director
Infrastructure and Lifeline Group				
19	Vietnam	Doan Thi Hong Tham	Ministry of Transport, Environment Department	Expert
20	Vietnam	Nguyen Quang Tuan	Ministry of Transport, Science and Technology Institution	Deputy director
21	Vietnam	Dao Dinh Hoang	Ministry of Transport, Science and Technology Institution	Expert
22	Vietnam	Le Hong Quan	Ha Noi Construction Department	Expert

No	Country	Name	Organization	Position
Associations and Institutions				
23	Vietnam	Trinh Tuyet Nga	Insurance Association	Expert
24	Vietnam	Pham Thi Ha	Vietnam Woman Union	Deputy Director of Economic Department
25	Vietnam	Nguyen Quynh Linh	Vietnam Woman Union	Expert
26	Vietnam	Duong Thi Thoan	Vina SME Association	Expert
27	Vietnam	Pham The Truyen	Vietnam Academy of Science and Technology, Institute of Geophysic	Head of Department
28	Vietnam	Nguyen Le Minh	Vietnam Academy of Science and Technology, Institute of Geophysic	Expert
29	Vietnam	Nguyen Luu Huong	Academy of Science and Environment	Expert
30	Vietnam	Vu Thi Cuc	Geoenvironment and Territorial Institution Center	Officer
31	Vietnam	Pham Viet Hoa	Vietnam Academy of Science and Technology, Space Technology Institute	Head of Department
32	Vietnam	Nguyen Phuong Nam	Vietnam Academy of Science and Technology, Space Technology Institute	Expert
33	Vietnam	Nguyen Thi Quynh Trang	Vietnam Academy of Science and Technology, Space Technology Institute	Expert
34	Vietnam	Vu Thi Vui	VNU University of Science	Teacher
35	Vietnam	Pham Viet Dung	National Center for Hydrometeorological Forecasting (NCHMF)	Vice director
36	Vietnam	Tran Quoc Viet	National Center for Hydrometeorological Forecasting (NCHMF)	Expert
International Organizations				
37	Vietnam	Nguyen Tri Thanh	The Asia Foundation	Senior Advisor
38	Vietnam	Mr Vu Quang Hieu	WHO	TBA
39	Vietnam	Le Xuan Hieu	CARE Int'	Expert
40	Vietnam	Ha Thi Quynh Nga	CARE Int'	Expert
41	Vietnam	Vu Thu Trang	ADRA in Ha Noi	Development Marketing Assistant
42	Vietnam	Dang Quang Tinh	UNDP	Officer
43	Vietnam	Vu Tuan Anh	SCDMII Project	Officer
44	Japan	Ayaka Arai	Save The Children	Country Representative
45	Vietnam	Nguyen Van Gia	Save The Children	Emergency Operations Manager
Private Company				
46	Japan	Shigito Katsuhiko	TERUMO	ADM Manager
47	Japan	Manabu Itos	Nikkei	Chief in Hanoi
48	Japan	Hideki Mishiha	Bao Viet- Tokio Marine	Senior Expert
49	Japan	Ryusuvie Shimojima	UIC United Insurance Co.	Senior Expert
50	Vietnam	Nguyen Thi Huyen Trang	Yashima Kizai Office in Hanoi	Officer
51	Vietnam	Tran Anh Tuan	Petro Vietnam Group	Deputy Director of S, Health and Environment Department
52	Vietnam	Do Khanh Phuong	Electricity Vietnam Ha Noi	General Director
53	Vietnam	To Duc Hung	MSIG Insurance Company	Senior Expert
54	Vietnam	Duong Phung Hienn	MSIG Insurance Company	Senior Expert

No	Country	Name	Organization	Position
55	Vietnam	Ho Thi Thu Trang	Electricity Vietnam Ha Noi	Head of Department
56	Vietnam	Bui Quang Huy	Viet nam Water Suply Sewerage & Inveronment General Company	Expert of Investment Department
57	Vietnam	Dao Ba Diep	Viet nam Water Suply Sewerage & Inveronment General Company	Expert of Investment Department
58	Vietnam	Ngo Phuc Cuong	VID Group	Senior Expert
59	Vietnam	Thai Minh Huong	Peapros	Expert
60	Vietnam	Nghiem Ba Hung	Peapros	Director
61	Vietnam	Bui Cao Minh	19-5 Garment Company	Expert
Media				
62	Vietnam	Nguyen Thi Minh Duc	Investment Newspaper	Reporter
63	Vietnam	Tran Hai Ha	Investment Newspaper	Reporter
64	Vietnam	Pham Ke Toai	Agricuture Newspaper	Reporter
65	Vietnam	Pham Anh Minh	Vietnam Investment Review	Reporter
66	Vietnam	Nguyen Chung	Vietnam Investment Review	Reporter
67	Vietnam	Tran Linh Nga	Resource and Environment Newspaper	Reporter
68	Vietnam	Nguyen Thi Hanh	Trade and Industry Newspaper	Reporter
69	Vietnam	Duy Phong	Jouralism Newspaper	Reporter
70	Vietnam	Ms Nguyen Thi Ngoc Anh	VTC media - VTV 10	Reporter
71	Vietnam	Nguyen Van Quyet	VTC media - VTV 10	Reporter
72	Vietnam	Hoang Van Phuong	VTC media - VTV 10	Reporter
73	Vietnam	Le Lai	Ha noi Radio and Television	Reporter
74	Vietnam	Quang Huy	Ha noi Radio and Television	Reporter
75	Vietnam	Quoc Dung	Ha noi Radio and Television	Reporter
76	Vietnam	Nguyen Hong Nga	Ha noi Television Online	Reporter
77	Vietnam	Mr Nguyen Hai Dang	VTC media- VTV 14	Reporter
JICA and Study Team				
78	Vietnam	Nguyen Thi Thu Le	JICA Vietnam in Hanoi	Senior Programme Officer
79	Japan	Masakazu TAKAHASHI	AHA Center -Jica Study Team	Team Leader
80	Japan	Yoshiyuki TSUJI	AHA Center -Jica Study Team	Deputy Team Leader
81	Japan	Shukyo SEGAWA	AHA Center -Jica Study Team	Leader of Natural Disaster Risk
82	Japan	Akira WATANABE	AHA Center -Jica Study Team	Coordinator
83	Vietnam	Hoang Minh Nguyet	AHA Center -Jica Study Team	MC/Facilitator
84	Vietnam	Nguyen Thanh Ha	AHA Center -Jica Study Team	National Coordinator
85	Vietnam	Ngo Thi Minh	AHA Center -Jica Study Team	National Coordinator
86	Vietnam	Nguyen Thi Van Anh	AHA Center -Jica Study Team	Facilitator
87	Vietnam	Nguyen Phuong Nhung	AHA Center -Jica Study Team	Junior researcher

No	Country	Name	Organization	Position
88	Vietnam	Bui Bich Ngoc	AHA Center -Jica Study Team	Intepreter
89	Vietnam	Nguyen Van Dung	AHA Center -Jica Study Team	note taker
90	Vietnam	Tran Thi Duyen	AHA Center -Jica Study Team	staff
91	Vietnam	Nguyen Ky	AHA Center -Jica Study Team	Interpreter

Total Participants : 91 persons, Including:	
Advisory Group	18
Infrastructure and Lifeline Group	4
Associations and Institutions	14
International Organizations	9
Private Company	16
Media	16
JICA and Study Team	14

**Final Seminar
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formulation for Industrial Agglomerated Areas
in the ASEAN Region”**

August 21, 2014, Melia Hotel, Ha Noi, Viet Nam

*Under a Joint Program of Japan International Cooperation Agency (JICA) and ASEAN
Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)*

AGENDA

Opening Session	
8:00-8:30 (30 min.)	Registration
8:30-8:45 (15 min.)	Welcome Address Disaster Management Centre Ministry of Agriculture and Rural Development Opening Address Ms. Nguyen Thi Thu Le JICA Vietnam Office
Session 1 Project and Area BCM	
8:45-9:30 (45 min.)	Project and Area BCM including Video Dr. Masakazu Takahashi Team Leader of the Study Team Activities in Hai Phong Mr. Nguyen ThanhHa National Coordinator of the Vietnam Q & A / Discussion
Session 2 Developing Area BCM	
9:30-10:40 (70 min.)	Understanding the Area Mr. ShukyoSegawa Leader of Natural Disaster Risk Assessment

	<p>Determining Area BCM Strategy and Developing Area BCP Mr. Yoshiyuki Tsuji Deputy Team Leader of the Study Team</p> <p>Exercising and Reviewing, Maintaining and Improving, and Tools for Area BCM Dr. Masakazu Takahashi Team Leader of the Study Team</p> <p>Q& A / Discussion</p>
10:40-11:00 (20 min.)	Coffee Break
Session 3 Presentation by Hai Phong People Committee, and Panel Discussion on Expectations, Contributions and Relevant Activities for Area BCM	
11:00-12:00 (60 min.)	<p>Expectations, Contributions and Relevant Activities by Hai Phong People's Committee Mr. Nguyen Ba Tien, Haiphong Dept. of Dyke and Flood Control</p> <p>Moderator: Mr. Nguyen Thanh Ha</p> <p>Commentators:</p> <ul style="list-style-type: none"> - Mr. Dang Quang Minh Acting Director Disaster Management Centre Ministry of Agriculture and Rural Development - Mr. Nguyen Chi Thanh Senior Program Officer Asia Foundation - Ms. Pham Viet Hoa Head of Remote Sensing Department Space Technology Institute
12:00-12:10 (10 min.)	<p>Closing of the Seminar Disaster Management Centre Ministry of Agriculture and Rural Development</p>
12:10 -	Lunch at Melia Hotel

MC: Ms. Hoang Minh Nguyet

Final Seminar

on

the Project

“Natural Disaster Risk Assessment and Area Business Continuity Plan Formation for Industrial Agglomerated Areas in the ASEAN Region”

August 21st, 2014, Melia Hotel, Hanoi, Viet Nam

*Under a Joint Program of Japan International Cooperation Agency [JICA]
and ASEAN Coordinating Centre for Humanitarian Assistance on disaster
management [AHA Centre]*

MINUTES OF THE SEMINAR

At 08:40 am on August 21st 2014, the Final Seminar in Hanoi was started. Ms. Hoang Minh Nguyet, MC of the Seminar gave a brief about the process of project from the initiatives, the purposes, necessity, and activities in pilot areas in nearly two years. The Study Team conducted a lot of activities with the active cooperation from stakeholders in Hai Phong areas to have certain results which would be showed in this final seminar. On behalf of the Study Team, she warmly welcomed the participation of representatives from local governments, operators of infrastructure and lifeline, private companies, NGOs, international organizations, research institutes and universities, media... especially she emphasized the presence of Mr. Dang Quang Minh, Acting Director of DMC, Ministry of Agriculture and Rural Development of Vietnam, Ms. Nguyen Thi Thu Le from Hanoi JICA office and Dr. Masakazu Takahashi, Team Leader of JICA Study Team.

After that, Ms. Nguyen Thi Thu Le, from JICA Vietnam gave her welcome address. She mentioned the dynamic economic development of Vietnam and ASEAN region which attracted a lot of investment from foreigner investors including Japanese one.

However, ASEAN region was the region suffering a lot of natural disasters in the world. In recent years, JICA and AHA Center supported Vietnam and ASEAN region in forecast, response and mitigation of damages from natural disasters. However, we were still not active in unexpected disaster such as earthquake in Japan in 2011, flood in Thailand in 2011 or Haiyan storm in last year. For such disaster, we should make a plan to protect enterprises in industrial parks to maintain business continuity and secure living conditions for employees in such areas. It was the meanings and reasons of this project. The project started in February 2013 and until now, it gained some specific results, particularly draft Area BCP in 1st version.

By this chance, on behalf of JICA, Ms. Le would like to thank DMC and related organizations for their support in over one year. And she showed her great thanks to the participants in this seminar because she acknowledged that this project required the support, interaction from many different agencies, organizations and individuals to finalize the project. The Area BCP was made not only base on scientific research but also from the experiences of institutes, organizations on disaster management. Then the comments from them in this seminar was invaluable. She hoped to receive the support and comments from the representatives in this seminar.

Then, Mr. Dang Quang Minh, acting director of DMC (MARD) gave his Opening remarks. He said that the results to be discussed in this seminar were the outputs of many workshops, activities of the study team over 1 year. Area BCM/BCP was a new concept in Vietnam. The activities to support and ensure the business continuity before and in disasters were very necessary in Vietnam. It was deficient to implement structural measures, it should combine with non-structural measures. The top goals of the project was to clearly identify the risks and way to cope with such risks, then to give measures to address it. It could be said that Area BCM was a master support solutions in natural disaster management. He hoped to receive opinions, comments from the participants to complete the reports and this Area BCP.

At 08:55 am, the seminar came to the first session- Project and Area Business Continuity Management. Dr. Masakazu Takahashi made presentation about the project and Area BCM. Firstly, he introduced the Promotion Video about Area BCM. This Video gave an overview about the project: reason to choose ASEAN region, damages of natural disasters to the economy of the local and countries, impacts to local industry and communities, purposes of projects, the necessity, orientations and roles of stakeholders and so on.

After that, Dr. Takahashi explained more details about the project. He highlighted the importance of the project, responses of the Public Sector, of Private sector, the needs to have new frameworks- Area BCM. He showed 3 pilot areas in the Philippines, Indonesia and Vietnam. And he summarized all activities done by JICA-AHA Centre, clarified the stakeholders in Area BCM-who they are and considered issues during nearly 2 years. In addition, Dr. Takahashi overviewed all topics discussed in 3 previous workshops, defined the sub-groups to formulate Area BCP. He hoped that Area BCM/BCP was a giant leap for enterprises.

For more details, referring document no. FSHP_VN04: Project and Area Business Continuity Management

Next, Mr. Nguyen Thanh Ha, National Coordinator in Vietnam presented about the major activities of the project in Vietnam. He summarized all major activities done from the beginning of the project in February 2013. He emphasized that the study team conducted a lot of surveys with disaster study institutes and agencies, worked with industrial parks to find out the damages of the natural disaster in the past and estimated the damages of disasters in the future if it happened. During nearly two years, the study team and all stakeholders focused formulating the Area BCP.by organizing the workshops with many working groups. Such groups included representatives from central/local government agencies, infrastructure operator, lifeline operators, and private sectors to make the interaction among groups to address the bottlenecks in the natural disaster time. And after that the study team provided draft Area BCP for working groups

for advice in order to finalise the plan. Mr. Ha also introduced the topics discussed in 3 Workshops and outputs of each. And in the end, he highlighted that the Area BCP was just in the first step as draft, it required the support and feedbacks from all stakeholders to finalise and complete it. And the purpose of this seminar was to collect the comments from all participants for have sharpened analysis and advice for the plan.

He said that the lesson learned from Hai Phong City would be applied with national scale and other regions in case of successful implementation of Area BCP in pilot area.

For more details, referring document no. FSHP_VN05 Activities of Project in Vietnam

At 09:35 am, the seminar passed to the Session 2: Developing Area Business Continuity Plan. In this session, study team members presented overviews on the project: understanding, strategy and process of project.

Firstly, Mr. Shukyo Segawa, Leader of Disaster Risk Assessment presented about the Understanding of the Area. He defined the term “Area” used in the project, identified the stakeholders, understanding about Hai Phong areas with general information on natural disaster, business and industry to protect, infrastructure and lifeline utilities. Moreover, Mr. Segawa talked about the hazards and risks for Hai Phong areas, especially risks of storm surge and floods with the consumption of once per 200 years. He also introduced the risk assessments for some type of disasters such as floods, storm surge, earthquakes, tsunami, volcanic eruption or landslide. Based on such information, the study team created the disaster scenario.

For more details, referring document no. FS_VN06: Understanding of Areas

Secondly, Mr. Yoshiyuki Tsuji, Vice Team Leader of Study Team presented about the Area BCM Strategy and Area BCP Development. He overviewed the content of Draft Area BCP through 7 Chapters. He concentrated on the structures of local industries in Hai Phong, the impacts to the Local Industry/Community, bottlenecks for the industry continuity, roles of Stakeholders. In addition, Mr. Tsuji showed measures in categories which were proposed in previous workshops.

For more details, referring document no. FS_VN07: Determining Area BCM and Developing Area BCP.

Thirdly, Dr. Takahashi presented about the Exercising and Reviewing, Maintaining and Improving and Tools for Area BCM. He showed the roles of exercises, ways for exercises and proposed activities for it. He gave examples for exercises in Chile at national level, Angamos port and so on. About reviewing, Dr. Takahashi pointed out the issues to review and consider, the individual/organization to review, confirm and approve it. Last but not least, he showed next steps to maintain the Area BCM, to implement in pilot countries and their expectations for the sustainability. He hoped that Area BCM should be the giant leap for Business in ASEAN region.

For more details, referring document no. FSHP_VN08 Exercising and Reviewing, Maintaining and Improving and Tools for Area BCM.

After presentations of study team members, some questions were raised by Mr. Dang Quang Tinh, from DMC. He asked about the vulnerability status and vulnerable subjects in industrial parks in Hai Phong; to maintain the business continuity, what was the limit for storm level, from which level of storm, it was impossible for enterprises to maintain business continuity; in the probability of 200 years for once, it was equivalent to which level of storm occurring in Hai Phong; in assessment of storm surges, which level of storm could cause it, whether a great storm like Haiyan or not; for case of Hon Dau island, did the study team assess the impact of sea level when it was estimated that to 2050 the sea level in this island could increase by 0.47m; in such industrial parks, level of the capabilities of them to response to the flood and storm surges; lastly he concerned about the program to raise the awareness for workers and PIC in this area.

Regarding to the vulnerability, Dr. Takahashi answered as follows: the vulnerable subjects in this study were industrial parks along the sea coast, especially SMEs and private companies.

Regarding to the level of typhoons, Mr. Segawa said that the project was based on

historical database about the typhoon only. All estimation and consumption were based on database and experience in the past of Hai Phong. For the climate changes, they also reviewed it but they would consider more details in the next steps. For the awareness raising programs, it was mentioned in the exercising and reviewing section of the next steps of the study.

Mr. Dang Quang Minh reminded the question about the level of storm in the study, because for the super typhoon, the Government asked the carefully preparation to response to it.

However, the study team still replied that all information in this study based on the historical database. And it was new matter to be studied in the future.

10:45 am: Coffee break

11:15 am: Session 3 of the seminar: Panellist discussion

After coffee break, the seminar began the Session 3 for the Panellist discussion: Expectation, Contributions and Activities relating to Area BCM. This section was moderated by Mr. Nguyen Thanh Ha with the participants of Mr. Nguyen Ba Tien, Steering Committee of Flood Control and Search & Rescue, Hai Phong People's Committee, Mr. Dang Quang minh, Acting Director of DMC, Mr. Nguyen Chi Thanh, Senior Program Officer from Asia Foundation and Ms. Pham Viet Hoa from Space Technology Institute. Each panellist presented their comments in this section.

Mr. Nguyen Ba Tien from Steering Committee of Flood Control and Search & Rescue, Hai Phong People's Committee gave first speech. On behalf of Hai Phong authorities, Mr. Tien gave the expectations to the project: raising awareness of business and public on natural disasters; ensuring the sustainable socio-economic development of Hai Phong and industrial parks; maintaining the continuity of industrial productions, quickly recovering the lifeline services and production activities; mitigating economic losses; requiring supports from organizations inside and outside the ASEAN region. By the way, he confirmed that Hai Phong authorities would implement the Area BCM

efficiently with the active participation of the stakeholders to ensure the industry continuity; the Public sector, private sector and operators of lifeline & infrastructure should cooperate closely to mitigate the risks; assign relevant agencies to implement the tasks of Area BCM in their sectors; organize efficiently the prevention, response, and recovery of natural disasters; implement structural and non-structural measures; train maneuvers on managements, direction and responses against natural disasters and develop Area BCM strategy in each sector and enterprise.

Mr. Tien gave requirements to improve Area BCM to suite with conditions of Hai Phong City such as regularly updating, adjusting and supplementing Area BCM; raising readiness to respond and recover the natural disasters, enhancing the capability to provide sustainable services; preparing materials and equipment to meet the requirements of quick recovery; setting up task force in enterprises for professional and quick response in all circumstances; strengthening the coordination and mutual support amongst sectors, agencies, businesses and communities.

Finally, he talked about the contributions of Hai Phong to the improvement of Area BCM by training core staff involving disaster prevention and Area BCP implementation in major stakeholders; building up efficient systems of early warning and information on natural disasters; improving capability of natural disasters management for business owners and local officials in different levels; setting up hazard maps and vulnerability status, guidelines on basic steps of preparation, response and recovery of natural disasters in each industrial park.

For more information, referring document no. FSHN_VN09: Expectations, Contributions and Relevant Activities by Hai Phong People's Committee in Developing Area BCM.

After Mr. Tien's presentation, some questions were raised by Mr. Dang Quang Tinh from DMC as follows: in Mr. Tien's talk, he mentioned about the support from Hai Phong authorities for early warning systems. So the question was about the method of information transmission, the way to implement this system. And to manage the business continuity activities effectively, any criteria to evaluate such activities.

Mr. Tien replied as follows: regarding to the methods and tools of information transmission to the communities and enterprises, Hai Phong authorities would implement on mass media system such as broadcasting, news, website... such information had to be sent to the enterprises in force ways. By the way, Hai Phong authorities was studying new telecommunication technology based on the Internet or message software, applying technologies in the Internet, dissemination programs by foreign languages such as English, Chinese and Japanese. Reliable information on Hai Phong websites on natural disasters was limited, then they would promote news in foreign languages about such news. For the legislation, they would propose to the leaders of Hai Phong City to assign industrial parks in details such as the management board of industrial parks was responsible for notifying the tenants of the industrial parks and so on...

For the assessment criteria, Mr. Ha said that, during the study course, the study teams gave some criteria for assessment such as recovery time objectives: what should be recovered in 1 day, in 1 week or 1 month..., the time for 50% of recovery, 100% of recovery. It could be said that the recovery time was the critical criteria for assessment of the effectiveness of Area BCP. However, it would be really big matter to prove the effectiveness of one project.

Mr. Minh from DMC, the coordination agency about the natural disaster mitigation gave some comments. He said that Area BCP was among the master plan of the State about the public and private cooperation. It was a great chance to narrow the gap between the public sector and private sector but it required the directions and operation mechanism. He concerned about the feasibility of the project when the study team just applied in the pilot areas in a short time with many activities, workshops to formulate the Area BCP. So, to finalize the project, a lot of works and activities should be done. He pointed out the questions about the issues to be dealt by the state, how to address the negative plans, to deepen the matters in Hai Phong city.

Mr. Gia, from Children Rescue Organization gave a comment that the natural disaster usually led to a lot of negative consequences. For examples, the storm caused electric

shocks, fire and explosion which could expand to the surroundings. So whether the plan reviewed the multidimensional impacts among the enterprises, between the enterprises and the communities or not such as the floods in chemical factory may lead to the pollution in the whole area.

Mr. Ha replied that, in Hai Phong there were a lot of infrastructures relating to the oil and gas industry. When the great natural disaster occurred, the negative impacts should be reviewed in both sides: the loss of resources in this industry would affect other companies in industrial parks and the chemical pollution would affect the local community. Such matters were reviewed in the study in section of impacts to the local industry and community. However, Hai Phong People's Committee would build plans to fight against such risks.

Mr. Tien added more comments about this matter as follows. Regarding to the consequences of the natural disasters such as chemical safety, fire and explosion, electric shock... under the regulations of Vietnam Laws, all matters related to environmental pollution should be considered. For the chemical risks, oil spills in oil ports, plans to response to oil spills were made by a professional consultant agencies, approved by scientific study board of Hai Phong People's Committee. All enterprises working in this industry were required to receive such approval to implement their business. Other activities relating to telecommunication, power supply, water supply... they also were requested to prepare their own plan to response in case of emergency. It was necessary to integrate all plans and projects of industries on related matters in order to prevent and response effectively, ensure the business continuity.

After that, Ms. Hoa, Head of Remote sensing department, Space Technology Institute gave her speech in the seminar. She also reminded that there were a lot of natural disasters occurred in Vietnam, not only in Hai Phong city. She hoped that JICA may expand their research to other areas in the North of Vietnam such as Lao Cai, Lai Chau, Dien Bien about the earthquake or landslide. She introduced the technologies used in Space Technology Institute to map the hazards and then propose the measure to

address such natural disasters. This would support the stakeholder to have the true and objective images about the disasters. She advised to use satellite technology in case natural disaster to quickly map the hazard, show the affected areas and so on. After having such information, it should be sent to mass media as SMS to the citizen for their preparedness and update.

Mr. Thanh, from Asia Foundation contributed some opinions in the seminar. He introduced the recent project of Asia Foundation named strengthening the public-private cooperation in disaster risk management which focused on the improvement of cooperation between public sector and private sector; and enhancement of disaster management capabilities in enterprises. The beneficiary of this project was not only the enterprises but also the communities. During the project implementation, they found out that the most difficult problem was to create motivation for the enterprise to participate in disaster management. Asia Foundation implemented many programs to push up motivations for the enterprises because the enterprise did not pay much attention to natural disaster risks.

For Area BCM/BCP, it was very new and strange to all participants. It was new approach, new vision for the whole regions, depriving from the consequences of natural disaster in some recent years. He highly appreciated the approach of the study team. What he concerned was the benefits of Vietnam from this project. The Area BCP showed the connection among private sector, local government and infrastructure & lifeline operators such as power supply, water supply, road, airport... According to the surveys, the more enterprise depended on public services, the slower it recovered from the natural disasters. He also wondered about the next steps of the projects. It was a master questions requiring the support from many organizations. He asked JICA to support Hai Phong city to be the model then MARD could learn lesson from Hai Phong to apply, not only pilot area project. And he hoped that the enterprises should pay more attention to the natural disaster management to secure their business and ensure the sustainability.

On behalf of JICA Study Team, Dr. Takahashi thanked to all comments and opinions in this seminar. Area BCP was a master plan of business in the area. Sharing information among stakeholders was very important. The information on Area BCP should be brought back to each organization to apply. He hoped to receive support from central government, Hai Phong Government, international organizations and all stakeholders in the way to finish the Area BCP.

12:08 pm: Closing of the Seminar

Mr. Dang Quang Minh, Acting Director of DMC gave the final speech to close the seminar. Through the seminar, some issues were discussed, raised and built. Because it was new approach, then it took time to create, exercise, implement, review and evaluate. In conclusion, the project made some certain agreements on technical terms such as operation cooperation, next steps, maintaining activities....Opinions from the participants, from DMC, MARD would help study team to fulfil the project. He asked JICA to continuously support Hai Phong for more study. He also gave some requirements for the project such as the operation mechanism between Hai Phong People's Committee and Industrial Parks, the legalization of plan by decision of People's Committee or Steering Board of Flood Control to be the background to ask other organizations to follow, clarification in responsibilities of each stakeholder and so on. This plan required the technical supports, assessment tools, which created the connection between People's Committee and Science Institutes in all activities.

He advised some methods on telecommunication suitable for Hai Phong City such as message, website. It was required training course to raise awareness of all people in industrial parks, to train the skills to operate the project...After finishing the project, it was important to share information and understandings and call for the participation of other organizations.

About MARD, Directorate of Water Resources, he confirmed to expand the lessons from Hai Phong areas to apply to the similar areas in the whole country.

Finally, he would like to show his great thanks to JICA for the support and efforts in disaster management in Vietnam.

12:21 pm: Ending Seminar

A8 Record of AHA Centre Hazard Workshop

“NATURAL DISASTER RISK ASSESSMENT AND
 AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
 INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”

A Joint Project of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) and
 Japan International Cooperation Agency (JICA)

AHA Centre Hazard Workshop, Jakarta

February 23 and 24, 2015, Jaya Room, Sari Pan Pacific Jakarta, Indonesia

List of Participants

Trainees of ACE Programme

Name	Country	Organization	Position
Mr. Mao Saohorn	Cambodia	National Committee for Disaster Management (NCDM)	Chief of Bureau of Search and Rescue Department
Mr. Ly Chandara	Cambodia	National Committee for Disaster Management (NCDM)	Assistant to the Senior Minister and Second Vice President
Ms. Merina Sofiati	Indonesia	National Disaster Management Agency	Head Section of Food Relief
Mr. Theophilus Yanuarto	Indonesia	National Disaster Management Agency	Public Relations Officer
Mr. Sombath Douangsavanh	Lao PDR	Disaster Management Office (DMO), Social welfare Department, Ministry of Labour and Social Welfare	Technical Staff
Mr. Bouasavanh Vongbounleua	Lao PDR	The Secretariat of National Disaster Prevention and Control Committee The Department of Disaster Management and Climate Change (DDMCC), Ministry	Technical Officer
Mr. Amir Shah Noor Ahmad	Malaysia	Task Force (S/L), National Security Council Sabah	Chief Regional Office of Tawau
Mr. Muhammad Fauzie Ismail	Malaysia	National Security Council, State of Melaka Office	Asisstant Secretary
Mr. Min Soe Han	Myanmar	Relief and Resettlement Department, Ministry of Social Welfare, Relief and Resettlement	Information Moderator
Mr. Khan Lynn	Myanmar	Relief and Resettlement Department, Ministry of Social Welfare, Relief and Resettlement	Staff Officer
Ms. Riezel Joy S. Chatto	Philippines	Office of Civil Defense (OCD) Region 11	Operations Officers - Civill Defence Officer I
Mr. Marc Rembrandt Victore	Philippines	Office of Civil Defense (OCD) Region 4B	Operations Officers - Civill Defence Officer I
Mr. Pisuth Wannachatrasi	Thailand	Disaster Plan & Policy Bureau, Department of Disaster Prevention and Mitigation, Ministry of Interior of Thailand	Plan and Policy Analyst, Professional Level
Ms. Wirinda Sirisuwan	Thailand	Dissater Prevention and Mitigation Provincial Office, Nakhon Pathom Province	Plan and Policy Analyst, Professional Level
Mr. Vu Hoang	Vietnam	Department of Dyke Management, Flood and Storm Control (DDMFSC), Directorate of Water Resources (WRD), MARD	Dikes Management and Planning Officer
Mr. Duong Duc My	Vietnam	Department of Dyke Management, Flood and Storm Control (DDMFSC), Directorate of Water Resources (WRD), MARD	Officer

“NATURAL DISASTER RISK ASSESSMENT AND
AREA BUSINESS CONTINUITY PLAN FORMULATION FOR
INDUSTRIAL AGGLOMERATED AREAS IN THE ASEAN REGION”

A Joint Project of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) and
Japan International Cooperation Agency (JICA)

AHA Centre Hazard Workshop, Jakarta

February 23 and 24, 2015, Jaya Room, Sari Pan Pacific Jakarta, Indonesia

List of Participants

AHA Centre, JICA and JICA Study Team

Name	Country	Organization	Position
Mr. Khiam Jin Lee	Indonesia	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)	Head of Corporate Affairs and Programme Division
Mr. Janggam Adhityawarma	Indonesia	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)	Senior Disaster Monitoring and Analysis Officer
Mr. Bachtiar Andy Musaffa	Indonesia	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)	Disaster Monitoring and Analysis Officer
Ms. Ririn Haryani	Indonesia	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)	Officer for AHA Centre Executive Programme
Mr. Andri Suryo	Indonesia	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)	Communications Officer
Ms. Nami Kasahara	Indonesia	Japan International Cooperation Agency (JICA)	Project Formulation Advisor (ASEAN Partnership)
Mr. Shukyo Segawa	Japan	JICA-AHA Center Project Study Team	Leader of Hazard and Risk Assessment
Mr. Hajime Tanaka	Japan	JICA-AHA Center Project Study Team	Expert for Flood
Mr. Toshihiro Yamada	Japan	JICA-AHA Center Project Study Team	Expert for Tsunami
Mr. Hideshige Iida	Japan	JICA-AHA Center Project Study Team	Expert for Cyclone and Meteorological Hazard
Dr. Krishna S. Pribadi	Indonesia	JICA-AHA Center Project Study Team	National Coordinator
Ms. Aria Mariany	Indonesia	JICA-AHA Center Project Study Team	Junior Researcher
Ms. Mona Foralisa	Indonesia	JICA-AHA Center Project Study Team	Note Taker

**Hazard workshop
for
“Natural Disaster Risk Assessment and Area Business Continuity Plan
Formation for Industrial Agglomerated Areas in the ASEAN Region”**

February 23 and 24 2015, Sari Pan Pacific Hotel, Bangkok, Thailand

*Under a Joint Program of Japan International Cooperation Agency (JICA) and
ASEAN Coordinating Centre for Humanitarian Assistance on disaster management
(AHA Centre)*

Agenda

February 23, 2015, Monday

Opening Session	
9:00-9:10	<p>Introduction of Program</p> <p>Mr. Janggam Adhityawarma Senior Disaster Monitoring and Analysis Officer</p>
9:10-9:30	<p>Pre-Test for Natural Hazards</p> <p>Mr. Shukyo Segawa Leader of Natural Disaster Risk Assessment</p>
9:30-9:50	Coffee Break
Session 1 Flood	
9:50-11:50	<p>Flood Disaster Management</p> <p>Mr. Hajime Tanaka Expert for Flood</p> <p>Q&A</p>
11:50-13:00	Lunch



Session 2 Tropical Cyclone and Storm Surge	
13:00-15:00	Tropical Cyclone (Storm Surge) Mr. Hideshige Iida Expert for Cyclone and Meteorological Hazard Q&A
15:00-15:20	Coffee Break
Session 3 Area Business Continuity Management (Area BCM) (1)	
15:20-16:00	Introduction of Area BCM Including Video Mr. Shukyo Segawa Q&A
16:00	Adjournment

Moderator: Mr. Shukyo Segawa

February 24, 2015, Tuesday

Session 4 Earthquake	
9:00-11:00	Earthquake Hazard And Disaster Management Mr. Shukyo Segawa Q&A
11:00-11:20	Coffee Break
Session 5 Tsunami	
11:20-12:20	Tsunami Hazard and Disaster Management (1) Mr. Toshihiro Yamada Expert for Tsunami



12:20-13:30	Lunch
13:30-14:30	Tsunami Hazard and Disaster Management (2) Mr. Toshihiro Yamada Q&A
14:30-14:50	Coffee Break
Session 6 Area Business Continuity Management (Area BCM) (2)	
14:50-15:30	Natural Disaster Assessment for Area BCM Mr. Shukyo Segawa Q&A
Closing Session	
15:30-15:50	Post-Test for Natural Hazards Mr. Shukyo Segawa
15:50-16:10	Coffee Break
16:10-16:20	Closing of the Workshop Mr. Lee Khiam Jin Head of the Corporate Affairs and Programme Division AHA Centre
16:20	Adjournment

Moderator: Mr. Shukyo Segawa

Minutes of Meeting

ASEAN INTRODUCTION WORK SHOP Natural Hazards in ASEAN Region

1st Day of Workshop

February 23rd, 2015

1. Welcome Address by Mr. Janggam
2. Explanation about two days workshop's rundown by Mr. Segawa
3. Pre test 09.22 – 10.00

4. Flood disasters in ASEAN

- a. Mr. Mao Sao Horn (Cambodian)

Q : From the slide that you have presented, you gave some examples from few ASEAN countries. Is the activity for flood disaster management can be applied for each ASEAN countries or other countries?

Answer (A) : Some activities can be applied, but not completely all of the activity have been applied. One of the activity that have been applied such as hazard map. But not every activity of the disaster management can be applied for another countries or agencies. Some of the activities need time to applied according to resources of the country or agencies. For some countries, they still need time to prepare basic obligation or regulation from government.

- b. Mr. Amir Shah Noor Ahmad (Malaysia)

Q : From some caused of flood such as rising sea level and increasing of temperature, is melting ice at North Pole is considered in climate change?

A : Melting of ice has been considered in climate change and already discussed in International Conference, research in university or government. And some studies still going on

- c. Mr. Sombath Douangsavanh (Lao PDR)

Q : Give example about land use control

A : Landuse is important thing that can change ecosystem of the area. When we consider about regional planning, land use planning is important. Land use should

considered about existing hazard. Changing of landuse could make drainage and hydrological system interrupted.

d. Mr. Amir Shah Noor Ahmad (Malaysia)

Q : Even we already have and implemented/conducted early warning system, sometimes people don't want to evacuated from their house or move from disaster area, because they don't want to leave their house empty. How we prevent that happen for the next disaster?

A : People have to realized that their life is the most important think. They should think about their safety and healthy first. They have to be evacuated in evacuation zone.

e. Mr. Khan Lynn (Myanmar)

Q : Please explain again about direct and indirect damage

A : Direct damage for example the damage of the bridge structure, crop damage, or another damage. Indirect damage is the secondary effect of the damage of the bridge such as impact to economy and traffic that interrupted because collapse of bridge, closure of roads etc.

f. Mr. Pisuth Wannachatrasiri (Thailand)

Q : What is the priority of mainstreaming?

A : according to disaster management, the government have to prepare action plan. Mainstreaming means explanation about Action plan how to conduct disaster management, what type of disaster will impact to the area or city. What capacity they have to reduce impact of disaster.

5. Typhoon

a. Mr. Amir Shah Noor Ahmad (Malaysia)

Q : According to the slide, the velocity of the typhoon is maximum or average velocity?

A : It's the maximum velocity that could reach the area.

b. Mr. Theophilus Yanuarto (BNPB Indonesia)

Q : Indonesia has several increasing frequency and impact of disasters such as landslide and flood. What the government can do about it?

A : the government have to prepare mitigation management or system to increase capacity to overcome and reduce impact of disaster.

c. Mr Amir Shah Noor Ahmad (Malaysia)

Q : What countries that can access and use Himawari satellite?

A : Some countries near Japan and member can use this satellite for information telecommunication.

d. Ms. Fransisca (ITB, Indonesia)

Q: Is direction of the cyclone/typhoon always counter direction of clockwise or sometimes is it the same as direction of clockwise ?

A : it's always counter clockwise

e. Mr. Pisuth Wannachatrasiri (Thailand)

Q : What is the key factor that caused La Nina or El Nino. What can we do to fix it?

A : La Nina and El Nino are the climate change symptoms. Many factors caused climate change. How to fix it, it's very difficult to answer this question. I'll answer next session maybe tomorrow....

f. Mr. Amir Shah Noor Ahmad (Malaysia)

Q : How accurate the forecasting so far?

A : The real event sometimes higher than the forecasting

6. Area Business Continuity Management

a. Mr. Theophilus Yanuarto (Indonesia)

Q : about the Area BCP document the BCM, is it fix document or periodically can be updated?

A : JICA proposed the Area BCP document now only for 3 ASEAN countries including Indonesia for Bekasi and Karawang area. The document should be discuss by members, but for step or next cycle should be prepare by themselves.

b. Mr. M. Fauzie Ismail (Malaysia)

Q : regarding this area BCM as integrated collaboration that should prepared not only by the business or one single company but with operator or government also such as electricity or water. Does it make increasing of cost for area BCM ?

A : we promoted this BCM idea as bright new idea that maybe caused additional cost.

2nd day of Workshop February 24th, 2015

1. Earthquake Hazard and Disaster Management

a. Mr. Ari (Indonesia)

Q : How do we know what magnitude or intensity of the earthquake is the correct one because some agencies give different information about magnitude or intensity of the earthquake

A : the information that given by agencies are depend on or influenced by distance and hipocenter of the earthquake and position of the seismograph. Also depend of characteristic of the such as long or short period and the different type of measurement

b. Ms. Mona FT (Indonesia)

Q : Would you please give us example for procedures or guidance to conduct or applied disaster risk assessment for roads or other infrastructures?

A : You may download the study of hazard and risk assessment from Philippines
http://www.phivolcs.dost.gov.ph/index.php?option=com_content&view=article&id=419:mmeirs&catid=66

2. Tsunami

a. Q : Mr. M. Fauzie Ismail (Malaysia)

Is there any document such as movies about tsunami

A : There are view documents ex. Mexico tsunami, also from Sendai but there are some computers graphic also.

b. Q : Does Japan government give the lesson into any curriculum in school for students about disaster

A : There are some lessons for kids at school and some simulations or tsunami drill.

c. Q : How to make people understand from community based

A : the important thing about community based is how the community can give information about disaster, and hazard around the community. The other important thing is the community can learn lessons from past disaster.

d. Ms. Mona FT (Indonesia)

Q : about simulation of tsunami from your presentation, is there any earthquake scenario that might induced tsunami in that simulation?

A: there is no exactly scenario from the biggest one of tsunami or earthquake. But it is taken by some assumptions of few studies and research, from disaster mitigation management. It is rather difficult to define what magnitude of earthquake scenario will induced the height of tsunami based on historical event or experiences.

3. Natural Disaster Assesment for Area BCM

There are no questions