

マレーシア国
サバ州を拠点とする
生物多様性・生態系保全のための
持続可能な開発プロジェクト
終了時評価報告書

平成28年11月
(2016年)

独立行政法人国際協力機構
地球環境部

環境
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略 語 表

略語	正式名称	和名
ASEAN	Association of Southeast Asian Nations	東南アジア諸国連合
BBEC	Bornean Biodiversity and Ecosystems Conservation	ボルネオ生物多様性・生態系保全プログラム
BR	Biosphere Reserve	生物圏保存地域
C/P	Counterpart	カウンターパート
CBD	Convention on Biological Diversity	生物多様性条約
CEPA	Communication, Education and Public Awareness	広報教育啓発活動
CRBR	Crocker Range Biosphere Reserve	クロッカー山脈生物圏保存地域
CUZ	Community Use Zone	コミュニティ利用ゾーン
DID	Department of Irrigation and Drainage	灌漑排水局
DOA	Department of Agriculture	農業局
EPD	Environment Protection Department	環境保護局
GEF	Global Environmental Facility	地球環境ファシリティ
ICC	International Co-ordinating Council	(MAB 計画) 国際調整委員会
ISCMW	International Symposium on Conservation and Management of Wetlands	国際湿地シンポジウム
IPSI	International Partnership for the Satoyama Initiative	SATOYAMA イニシアティブ国際パートナーシップ
ITBC	Institute for Tropical Biology and Conservation	サバ大学熱帯生物学保全研究所
JICA	Japan International Cooperation Agency	独立行政法人国際協力機構
LKSW	Lower Kinabatangan and Segama Wetland	キナバタガン・セガマ河下流域湿地
LSD	Lands and Surveys Department	土地測量局
MAB 計画	Man and Biosphere Programme	人間と生物圏計画
MONRE	Ministry of Natural Resources and Environment	天然資源環境省
NRO	Natural Resources Office	天然資源庁
ODA	Official Development Assistance	政府開発援助

PDM	Project Design Matrix	プロジェクト・デザイン・マトリックス
PES	Payment for Ecosystem Services	生態系サービスへの支払い
PMC	Project Management Committee	プロジェクト管理委員会
PO	Plan of Operations	活動計画
PRA	Participatory Rural Appraisal	参加型農村調査（法）
PSC	Project Steering Committee	プロジェクト運営委員会
R/D	Record of Discussions	討議議事録
REEP	River Environmental Education Programme	河川環境教育プログラム
SaBC	Sabah Biodiversity Center	サバ州生物多様性センター
SATREPS	Science and Technology Research Partnership for Sustainable Development	地球規模課題対応国際科学技術協力
SBS	Sabah Biodiversity Strategy	サバ州生物多様性戦略
SDBEC	Project on Sustainable Development for Biodiversity and Ecosystems Conservation in Sabah (Malaysia)	サバ州生物多様性及び生態系保全のための持続的な開発プロジェクト
SEEP	Sabah Environmental Education Policy	サバ州環境教育政策
SFD	Sabah Forest Department	サバ州森林局
SPs	Sabah Parks	サバ州公園局
STB	Sabah Tourism Board	サバ州観光局
SWD	Sabah Wildlife Department	サバ州野生生物局
TCTP	Third Country Training Programme	第三国研修
TOR	Terms of Reference	業務指示書
UMS	Universiti Malaysia Sabah	マレーシア国立サバ大学
UNDP	United Nations Development Programme	国連開発計画
UNESCO	United Nations Educational, Scientific and Cultural Organization	国連教育科学文化機関（ユネスコ）

評価調査結果要約表

1. 案件の概要	
国名：マレーシア	案件名：サバ州を拠点とする生物多様性・生態系保全のための持続可能な開発プロジェクト
分野：自然環境保全	援助形態：技術協力プロジェクト
所轄部署：地球環境部	協力金額：2.2 億円
協力期間（4 年間） 2013 年 7 月 1 日～2017 年 6 月 30 日	先方関係機関： ・サバ州政府機関（天然資源庁、生物多様性センター、森林局、公園局等）、 ・国立サバ大学熱帯生物学保全研究所（ITBC-UMS）
	日本側協力機関： 環境省
1-1 協力の背景と概要	
<p>マレーシア・サバ州には、東南アジア最高峰のキナバル山やアジアゾウの生息する低地熱帯林、汽水域のマングローブ林等、世界的に多様な生態系と生物相が見られる。しかし、大規模伐採やアブラヤシプランテーション開発等により、同州の森林面積は1970年代と比較して、約3分の2に減少した。また、土壌汚染や水質汚濁等の環境劣化も顕在化している。この結果、自然資源への依存度が高い伝統的な生活を営む地域住民は、自然環境の劣化に伴い、生活基盤が脅かされている。独立行政法人国際協力機構（JICA）は、サバ州の生物多様性保全に対して統合的に取り組むために、サバ州政府や国立サバ大学（UMS）等とともに技術協力プロジェクト「ボルネオ生物多様性・生態系保全プログラム（BBEC）」を実施した（フェーズ1、2）。BBEC1 では「サバ州の生物多様性保全のための包括的かつ持続可能なアプローチの構築」を目標として、研究機関の体制強化、研究成果の発表、協働保護区管理の概念を取り入れたクロッカー山脈公園管理計画の策定及び実施、セガマ河下流域野生生物保全区の提案、住民参加型エコツーリズムの試行、環境教育活動の実践、国際セミナーの開催等を支援した。BBEC2 では「サバ州における生物多様性保全のための体制強化と、マレーシア国内外への知識・情報発信の拠点化」を目標として、サバ州生物多様性センターの正式組織化、「サバ州生物多様性戦略（SBS）」の策定準備、クロッカー山脈公園及び周辺域の国連教育科学文化機関（UNESCO）「人と生物圏（MAB）計画」の一つである生物圏保存地域（BR）への登録申請、セガマ河下流域野生生物保全区の登録、キナバタンガン・セガマ河下流域湿地（LKSW）のラムサール条約への登録及び管理計画の策定、生物多様性保全に係る第三国研修の実施等を支援した。</p> <p>2011 年8 月、マレーシア政府から、SBS 策定後の実施支援、ラムサール条約登録湿地やユネスコBR登録予定地をはじめとする保護区及びバッファゾーンの統合管理の促進、第三国研修を通じた東南アジア諸国連合（ASEAN）地域への生物多様性に係る経験共有を内容とする後継の技術協力プロジェクトが要請され、2013 年より本プロジェクトが開始された。</p>	

1-2 協力内容

本プロジェクトは、2015年6月30日に改訂されたプロジェクト・デザイン・マトリックス (PDM) Version 4 に従い実施されている。

(1) 上位目標

サバ州が生物多様性保全と持続可能な開発のアジアにおける中核的拠点として国内的・国際的に知られる。

(2) プロジェクト目標

国内的・国際的認知のもとにサバ州における持続可能な開発のための生物多様性・生態系保全が推進される。

(3) 成果

1. サバ州における生物多様性・生態系保全の管理システムが強化される。
2. 生物多様性・生態系保全に関するサバ州の経験が国内的・国際的に共有される。

(4) 投入 (終了時評価時点での実績)

日本側：

- 長期専門家：延べ合計4名
 - ・2 新旧チーフ・アドバイザー
 - ・1 旧業務調整 ・1 新業務調整員/環境教育
- 短期専門家：延べ合計36名
- 本邦研修：延べ合計36名 (2016年9月現在)
- 機材供与：約556千円 (1 リンギ =25.00 円)
- ローカルコスト負担：約49,033千円 (2016年9月現在)

マレーシア側：

- カウンターパート (C/P) 配置：約15機関
- プロジェクト事務所：天然資源庁 (NRO) 内のプロジェクト事務所及び必要設備
- 予算支出：約3,600米ドル (NRO)

2. 評価調査団の概要

調査団

氏名	分野	所属
見宮 美早	総括/団長	JICA 地球環境部 森林・自然環境グループ 自然環境第一チーム 企画役
飯塚 令子	協力企画	JICA 地球環境部 森林・自然環境グループ 自然環境第一チーム 専門囑託
浜田 哲郎	評価分析	A&M コンサルタント (有)

調査期間：2016年10月30日～11月17日

評価種類：終了時評価

3. 評価結果の概要

3-1 実績の確認

(1) 成果

成果 1：設定された六つの指標のうち、四つの指標は達成されており、二つの指標は達成される予定である。

指標 1-1：達成予定〔クロッカー山脈生物圏保存地域（CRBR）管理計画及び年次事業計画は最終化され、プロジェクト終了までにサバ州政府によって承認される予定である。〕

指標 1-1-1：達成予定（パイロット・サイトの裨益住民の満足度は今後査定される。）

指標 1-1-2：達成済み〔広報教育啓発活動（CEPA）の業務指示書（TOR）研修の大多数の参加者は新知識を取得し、環境意識が向上している。〕

指標 1-2：達成済み（CEPA キット研修の大多数の参加者に環境に対する意識向上と行動変容があったことが確認されている。）

指標 1-3：達成済み（プロジェクト活動を通じて、ターゲット・グループの知識が向上したことが確認されている。）

指標 1-4：達成済み（改訂 SBS モニタリングシステムが公式に 2016 年 10 月 11 日から始動する。）

成果 2：設定された七つの指標はすべて達成されている。

指標 2-1：達成済み（サバ州の経験に関する 5 編以上の文書を作成した。）

指標 2-2：達成済み〔2014 年と 2016 年に湿地保全・管理に関する国際シンポジウム（ISCMW）を共同開催し、CRBR の国内セミナーを 2015 年 12 月に開催した。〕

指標 2-3：達成済み（C/P 機関は 2 つ以上の国際セミナー、ワークショップ、会議に参加した。）

指標 2-4：達成済み（第三国研修に合計 70 名が参加した。）

指標 2-5：達成済み（第三国研修参加者の 92～95%が満足と回答した。）

指標 2-6：達成済み〔NRO はマレーシアで最初の SATOYAMA イニシアティブのための国際パートナーシップ会議（IPSI）の公式会員となった。また、自然資源・環境省（MONRE）にマレーシア国家湿地員会が設置された。〕

指標 2-7：達成済み（2014 年に策定された SBS の概念が「マレーシア生物多様性国家戦略」に反映されている。）

(2) プロジェクト目標：設定された四つの指標のうち、三つの指標は達成済みであり、残り一つの指標は達成予定である。

指標 1：達成済み（改定 SBS はプロジェクトの支援により作成された。）

指標 2：達成予定（SBS はモニタリングシステムを通じてモニターされ、結果は報告される。）

指標 3: 達成済み [マレーシア生物多様性国家戦略は SBS の保護区の官報掲載の法制化計画とタガール (伝統的水産資源管理) に言及している。また、IPSI のアジア地域会合を 2017 年 4 月に開催し、サバの経験と知識を共有する予定である。]

指標 4: 達成済み [CRBR は UNESCO MAB 計画の BR に 2014 年 6 月に国際調整委員会 (ICC) によって承認され、コタキナバル (KK) 湿地はラムサール条約への登録を待っている。]

(3) **上位目標** : 四つの指標が上位目標の達成度を測定するために設定されている。

指標 1 から指標 3 に関しては、プロジェクト終了後 5 年以内に必要な情報を収集することで達成度を測定するようにデザインされている。そのため、上位目標の達成度を現時点で測定することは困難である。一方、指標 4 に関しては、愛知目標の達成に対するサバ州の貢献は、2016 年にメキシコで開催される生物多様性条約第 13 回締約国会議 (CBD-COP 13) のマレーシア政府の報告書で言及される予定である。

3-2 評価結果の要約

(1) 妥当性: 高い

- マレーシアの国家開発計画「第 11 次マレーシア計画」(2016 年～2020 年) 及びサバ州の開発計画「サバ州開発及び発展の指針」「サバ州の戦略的長期行動計画」(2016 年～2035 年) に合致している。
- 日本の対マレーシア援助政策に合致している。
- プロジェクトは、持続的開発に必要なターゲット・グループの能力開発に対応しており、現行の PDM (Version 4) にも適切に反映されている。

(2) 有効性: 中程度より高い

プロジェクト目標はおおむね達成されることが予想される。中間レビュー調査時の変更により、現行 PDM (Version 4) において、成果とプロジェクト目標の間の論理的整合性は確保されている。

(3) 効率性: 高い

日本側とインドネシア側による投入は質、量、タイミングともに適切であり、計画された活動実施に貢献しており、成果の達成につながっている。マレーシア側からの要望への対応として、プロジェクト後半より業務調整員が環境教育も兼任している。C/P 機関は本邦研修で習得した知識や技術を業務実施に適用している。事業費の増加は、予定していなかったコミュニティホールの改修と国際会議参加の増加により発生した。コミュニティホールの改修によりパイロット・サイトでの活動が強化された。また、より多くの国際会議参加により、サバ州の経験が国際的に共有され、効果的に成果達成に貢献している。プロジ

ェクト活動の決定的な遅れは生じておらず、技術移転も問題なく実施され、コスト・パフォーマンスは高い。

(4) インパクト: 中程度より高い

上位目標はおおむね達成されることが予想される。具体的な効果は C/P 機関の能力開発とパイロットプロジェクト活動の成果において確認できる。負のインパクトや予期できない負のインパクトは確認されていない。

(5) 持続性: 中程度より高い

政策・制度的持続性及び技術的持続性は高い。しかしながら、組織的持続性及び財政的持続性については、予算、人員、資源の確保に関し、予測が困難なことから“中程度”と評価した。

3-3 プロジェクトの促進要因

- NRO の調整能力の強化と関係機関の間で認識されているリーダーシップ。
- プロジェクト活動（特に、第三国研修）の実施での UMS サバ大学の計画・管理能力の高さ。
- 国際会議や研修に適切な高級官僚を戦略的に選出することで、リーダーシップ/イニシアティブの強化だけでなく、日本とのネットワークの構築を行ったこと、例えば、UMS の副学長（副プロジェクトダイレクター）の北海道への訪問がある。
- 本邦研修の実施が C/P 機関職員のモチベーションを高めたこと。
- 特に、サバ州国別研修に現地コミュニティが参加することで、生物多様性と生態系保全の意識と機能を強化したこと。

3-4 プロジェクトの阻害要因

- SBS の閣議承認が遅延したこと。
- LKSW 地域の治安状況の悪化。
- プロジェクト活動に関与する C/P 機関の限られた職員数。
- C/P 機関への限定的な予算配布（特に、C/P 機関の優先度が低いプロジェクト活動への職員の配置と予算の配分）。

3-5 結論

プロジェクト期間前半に数々の制約と困難に直面したものの、プロジェクト活動は着実に進捗し、プロジェクト終了時までにはプロジェクト目標がおおむね達成できることを確認した。プロジェクトは、サバ州住民の生物多様性と生態系保全に関する意識を向上し、C/P 機関がサバ州の持続的開発という共通目標に向けて協働する上で重要な役割を果たした。

プロジェクトは、現地における調整の役割、及び、本邦研修と短期専門家等現地投入の有機的な支援を通じて、C/P 機関の能力開発に大きく貢献した。その結果、C/P 機関の技術的及び組織的能力は大きく向上した。

こうした結果は、C/P 機関のプロジェクトと協力する強い意志に加えて、プロジェクト活動への積極的な関与によってもたらされたものであることは特筆されるべきである。

上記の評価結果から、調査団は、プロジェクトは当初の計画通り 2017 年 6 月 30 日をもって終了すべきと判断する。

3-6 提言

(1) C/P 機関

- プロジェクト関係機関は引き続き、知的拠点としてサバ州の生物多様性・生態系保全に従事し、国内外にサバ州の知識・経験を普及する。
- プロジェクト関係機関は、サバ州の生物多様性・生態系保全とともにグリーン経済・開発を促進する上で、民間との連携を強くする。
- 持続的に資金を確保するために、プロジェクト関係機関は、州政府予算に依存せず、引き続き外部資金動員に努める。

(2) 農業局

- 農業局は、他の機関と協力し、引き続きパイロット・サイトの活動を支援する。
- 農業局は、地域住民の意見をくみ上げられるようなツール〔例えば参加型農村調査 (PRA)〕を活用し、他地域においても生計向上活動を推進する。また、同局は、入手可能な資源や地域特有の文化を活用し、多様な農産物や付加価値をつけた製品の開発を地域住民に指導する。

(3) JICA

- JICA は、知的拠点としてのサバ州の経験・情報の発信を支援するとともに、サバ州と日本の地方政府や地域が生物多様性保全について共に学べるネットワークが築かれるよう引き続き支援する。
- JICA は、生物多様性保全分野において、引き続きサバ州のパートナーとしてさまざまなスキームを通し側面的に支援をしていく。

3-7 教訓

(1) プロジェクトフレームワークとプロジェクト管理

- プロジェクトの投入規模と期間を考慮して、達成可能かつ具体的なプロジェクト目標を設定する。さらに、必要に応じ、柔軟にプロジェクト目標を含めた PDM の見直し・修正をする。

- プロジェクト活動・指標はプロジェクトがコントロールできるものとする。例えば、登録申請プロセスを支援できるが登録承認を支援できない。
- 多数の C/P を対象としかつ活動分野・地域が多岐にわたる場合は、詳細活動計画 (PO) を作成し、具体的な PO (実施主体者、活動内容及び活動時期) を明確にし、プロジェクト調整委員会において各自の進捗情報を共有・確認、調整する。

(2) 研修・短期専門家派遣の活用及び留意点

- 本邦研修と専門家を有機的に連携させる。例えば、研修員が研修で習得した技術・経験を、専門家が現地適用のための指導をする、短期専門家が本邦研修で受入れ支援する等の連携により、大きな成果が発現された。
- 研修員が研修期間中に作成するアクションプランに関し、プロジェクトの活動に有効な計画を作成するよう事前に指導し、帰国後プロジェクトがその実施を支援する。
- 行政官のみならず、地域住民代表者が本邦研修に参加する機会を設ける。本邦研修を通し、地域住民が知識・経験を得るとともに、行政官と地域住民のお互いの理解が深められる。ただし、より高い効果のためには、現地語 (マレー語) 通訳の配置が望ましい。

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Summary Results of the Terminal Evaluation Study

I. Outline of the Project	
Country: Malaysia	Project title: Project on Sustainable Development for Biodiversity and Ecosystems Conservation in Sabah
Issues/Sector: Nature Conservation	Cooperation scheme: Technical Cooperation
Division in Charge: Global Environment Dept.	Estimated Total Cost: Approx. 222 million yen
Period of Cooperation:(R/D): July 1, 2013 – June 30, 2017 (four years)	Implementing Organizations: <ul style="list-style-type: none"> • Sabah State Govt. Agencies (NRO, SaBC, SFD, SP, SWD, EPD, DID, etc.), • Institute for Tropical Biology and Conservation, University of Malaysia, Sabah (ITBC-UMS)
	Related Organizations in Japan: Ministry of Environment
<p>1-1. Background of the Project</p> <p>Sabah is one of the few places on earth still blessed with mega-biodiversity, which is not only vital to sustainable socioeconomic development of the State, but also a treasure for all humankind. Conservation of its biodiversity and ecosystems is of utmost importance.</p> <p>JICA supported the Malaysian Federal and Sabah State Governments through the “Programme for Bornean Biodiversity and Ecosystems Conservation (BBEC) Phase 1 and 2” as technical cooperation projects under Japan’s Official Development Assistance (ODA). The Programme Purpose of BBEC/Phase 1 (February 2002 – January 2007) was “Comprehensive and sustainable approach for conservation is established,” while BBEC/Phase 2 (October 2007 – September 2012) aimed “A system for biodiversity and ecosystem conservation in Sabah is strengthened and Sabah State becomes capable of extending knowledge and skills on biodiversity conservation to other states of Malaysia and foreign countries.”</p> <p>The authorities concerned of the Government of Malaysia have set the implementation of Sabah Biodiversity Strategy as a next step to be taken and requested the Government of Japan for the “Project on Sustainable Development for Biodiversity and Ecosystems Conservation in Sabah (SDBEC).”</p> <p>1-2. Project Overview</p> <p>The Project is being implemented according to PDM (version 4) modified on 30 June 2015.</p> <p>(1) Overall Goal</p> <p>Sabah is known as the Asian Centre of Excellence for biodiversity conservation and sustainable development nationally and internationally.</p>	

(2)Project Purpose

Biodiversity and ecosystem conservation for sustainable development in Sabah is promoted with national and international recognition.

(3)Outputs

Output1: Management system of biodiversity and ecosystem conservation in Sabah is strengthened.

Output2: The Sabah's experiences in biodiversity and ecosystem conservation are shared nationally and internationally.

(4)Inputs (as of Terminal Evaluation)

Japanese Side:

- Long-term Experts: 4 persons in total
 - 2 Chief Advisors
 - 1 Project Coordinators and 1 Project Coordinator/Environmental Education
- Short-term Expert: 36 persons in total
- Trainees received in Japan: 62 persons in total (as of September, 2016)
- Equipment Provision: Approx.55,6200 JPY (1 Malaysia Ringgit =25.00 JPY)
- Local Operational Cost: Approx. 49033 thousand JPY (as of September, 2016)

Malaysia Side:

- Counterpart Agencies: 15 different agencies
- Land and facilities: Project office in NRO
- Budget Execution of NRO: Approx. 3,600 US dollar

II. Evaluation

Terminal Evaluation Team		
Name	Position	Affiliation
Ms. Misa KEMMIYA	Leader	Senior Deputy Director, Nature Environment Team 1, Forestry and Nature Conservation Group, Global Environment Department, JICA
Ms. Reiko IITSUKA	Cooperation Planning	Officer, Nature Environment Team 1, Forestry and Nature Conservation Group, Global Environment Department, JICA
Dr. Tetsuro HAMADA	Evaluation Analysis	Senior Consultant, A&M Consultant. Inc.

Period of Evaluation: 30 Oct – 17 Nov. 2016	Type of Evaluation: Terminal Evaluation
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III. Results of Evaluation

3-1. Achievements

(1) Outputs

Output 1: Four out of six indicators have been achieved and two indicators are to be achieved.

Indicator 1-1: To be achieved (Management plan for Crocker Range Biosphere Reserve (CRBR) and its annual plan were finalised and will be approved by the end of the Project.)

Indicator 1-1-1: To be achieved (Level of satisfaction of project site beneficiaries will be assessed.)

Indicator 1-1-2: Achieved (Majority of CEPA TOR participants obtained new knowledge and improved their awareness.)

Indicator 1-2: Achieved (Majority of CEPA kit training participants confirmed to be more concerned about environment and changed their behavior.)

Indicator 1-3: Achieved (Knowledge of target group has been enhanced by the project activities.)

Indicator 1-4: Achieved (The revised SBS monitoring system was launched on 11 October 2016.)

Output 2: All of indicators have been achieved.

Indicator 2-1: Achieved (More than five (5) documents have been prepared.)

Indicator 2-2: Achieved (Two International Symposiums on Conservation and Management of Wetlands (ISCMW) in 2014 and 2016 were co-organized and national CRBR Seminar was organized in December 2015.)

Indicator 2-3: Achieved (C/Ps have participated in more than two international seminars, ect.)

Indicator 2-4: Achieved (70 persons in total have participated in TCTP.)

Indicator 2-5: Achieved (92-95% of participants showed their satisfaction to TCTP.)

Indicator 2-6: Achieved (NRO became the first official International Partnership for the Satoyama Initiative (IPSI) member in Malaysia and National Committee of wetlands in Malaysia is formed under Ministry of Natural Resources and Environment (MoNRE.)

Indicator 2-7: Achieved (SBS formulated in 2014 has been incorporated in the National Policy on Biological Diversity in Malaysia.)

(2) Project Purpose: Three indicators out of four have been achieved and one is to be achieved.

Indicator 1: Achieved (Revised SBS was prepared and approved through support from the Project.)

Indicator 2: To be achieved (SBS will be monitored through monitoring system and reported.)

Indicator 3: Achieved (National Policy on Biological Diversity in Malaysia refers to SBS for gazetting protected areas and the Tagal. Sabah State Government will host IPSI

regional workshop for Asia in April 2017 and will share its experience and knowledge.)

Indicator 4: Achieved (CRBR was declared by ICC for MAB programme under UNESCO in June 2014 and Kota Kinabalu (KK) Wetland is waiting for designation as a Ramsar convention site.)

(3) Overall Goal: Four indicators are established to measure the level of achievement.

The indicators of 1 to 3 are designed to measure the degree of fulfillment by collecting necessary information in 5 years after the end of the Project. In respect to Indicator 4, It is expected that Sabah's contribution to the achievement of Aichi Target will be mentioned in the report for CBD-COP 13 in Mexico in 2016.

3-2. Evaluation Results by Five (5) Evaluation Criteria

Results of Terminal Evaluation by the five (5) evaluation criteria are summarized below.

(1) Relevance: High

- The Project is consistent with the Malaysian national development plan “11th Malaysia Plan” as well as the Sabah state’s development plan “Direction of Sabah State Development and Advancement” and “Sabah’s Strategic Long Term Action Plan.”
- The Project is consistent with Japan’s ODA policy.
- The Project responded to necessity of capacity development of the target group for sustainable development and appropriately reflected in the current PDM (version 4).

(2) Effectiveness: Medium high

Project Purpose is most likely to be achieved. The relationship between Outputs and Project Purpose is logically connected in the current PDM (version 4) due to adjustment by the Mid-Term Review.

(3) Efficiency: High

Inputs from both Malaysia and Japanese sides have been appropriate in terms of quality, quality and timeline to contribute to the implementation of planned activities. Responding to the request from the Malaysian Government, the present Project Coordinator has playing a role of environmental education expert as well. The C/P agencies have applied technologies and knowledge obtained from the training courses in Japan to their own work. The increase in the total cost was explained by the renovation of a community hall at one of pilot sites and the C/Ps’ participation in more international conferences. The activities at the pilot site were strengthened due to the

renovation. The C/Ps joined more international conferences than originally anticipated and this effectively led to achievements of outputs. The significant delay of the Project activities is not identified and technology transfer is conducted without any difficulties. Cost-performance is high.

(4) Impact: Medium high

Overall Goal is most likely to be achieved. The tangible effects are observed on capacity development of C/P agencies and outcome of the pilot project activities. No negative impact and unexpected negative impact are identified.

(5) Sustainability: Medium high

Policy/institutional aspects and Technical aspect are “high”. Organizational aspect and Financial aspect are “medium” due to uncertainty of budget, manpower and resources.

3-3. Major supporting factors to achieve the Project Purpose

- Enhancement of NRO's coordination capacity and its recognized leadership among the stakeholders.
- High capacity of planning and management of UMS in implementation of the Project activities, particularly implementation of TCTP.
- Strategic selection of appropriate senior officials for trainings and international meetings for enhancing their leaderships and initiatives as well as developing networks in Japan, for example the visit of Vice-chancellor of UMS (Deputy Project Director) to Hokkaido in Japan.
- Extension of technical trainings in Japan as motivation for staffs of the C/P agencies.
- Involvement of local communities in Regional-focused trainings for Sabah, which enhanced their empowerment and awareness for biodiversity and ecosystem conservation.

3-4. Major hampering factors to achieve the Project Purpose

- Delay in obtaining approval of SBS from the Cabinet.
- Unfavorable security situation in the Lower Kinabatangan and Segama Wetland (LKSW) area.
- Limited number of staffs in the C/P agencies involving in the Project activities.
- Limited financial allocation to the C/P agencies (Particularly the Project activities that are not the C/P agencies' prioritized activities).

3-5. Conclusion

The Team confirmed that the Project has been carried out satisfactory and it is most likely to achieve Project Purpose by the end of the Project even though the Project encountered several

constraints and difficulties in the first half of the Project period. The Project has improved awareness of peoples in Sabah for biodiversity and ecosystem conservation, and played an important role to encourage various C/P agencies to collaborate towards the common goal of sustainable development in Sabah State.

The Project has greatly contributed to capacity development of the C/P agencies particularly through technical trainings in Japan and inputs from short-term experts. Accordingly, the C/P agencies have sufficiently improved their technical and institutional capacities.

It should be noted that these results are attributed to the strong willingness of the C/P agencies to cooperate with the Project and their initiatives for the Project activities.

Judging from the above findings, it is concluded that the Project should be terminated on 30 June, 2017 as planned.

3-6. Recommendations

(1) Counterpart Agencies

- C/P Agencies will continue to engage in the conservation of biodiversity and ecosystems in Sabah as the Asian Centre of Excellence for biodiversity conservation and sustainable development. They will also continue to disseminate and share such knowledge and experience nationally and internationally especially through NRO and UMS.
- C/P agencies are expected to strengthen collaboration with private sector in order to promote Green Development and Economy for conservation of biodiversity and ecosystems in Sabah.
- For sustainable financing, C/P agencies will continue to make efforts to mobilize external financial resources rather than relying on the State Government budget.

(2) Department of Agriculture

- DOA will continue to support activities at the pilot sites under collaboration with other relevant C/Ps.
- By utilizing tools such as PRA, DoA will promote the livelihood improvement activities to other villages. For development and value-add of agricultural products, DOA will guide the local communities to diversify the products based on the available local resources and cultures.

(3) JICA

- JICA will continue to be a partner of Sabah for the conservation of biodiversity and ecosystems.
- JICA will continuously support Sabah as COE to disseminate their information and experiences as well as to facilitate Sabah's network with Japanese sites, areas, local

governments for mutual learning on biodiversity conservation.

3-7. Lessons Learned

(1) Project Framework and Project Management

- To set a concrete and achievable project purpose and review/revise the PDM if necessary.
- To design project activities and indicators which C/Ps and JICA experts can directly engage or/and support.
- To develop and share a detailed Plan of Operation among C/Ps.

(2) Utilization of trainings in Japan and JICA short-term experts

- To utilize trainings in Japan and short-term experts to maximize impact.
- To utilize action plans of JICA trainees to the Project implementation.
- To include the representatives of local community in training with government officials.

-End-

第 1 章 終了時評価の概要

1-1 背景

マレーシア・サバ州には、東南アジア最高峰のキナバル山やアジアゾウの生息する低地熱帯林、汽水域のマングローブ林等、世界的に多様な生態系と生物相が見られる。しかし、大規模伐採やアブラヤシプランテーション開発等により、同州の森林面積は 1970 年代と比較して、約 3 分の 2 に減少した。また、土壌汚染や水質汚濁等の環境劣化も顕在化している。この結果、自然資源への依存度が高い伝統的な生活を営む地域住民は、自然環境の劣化に伴い、生活基盤が脅かされている。

独立行政法人国際協力機構（Japan International Cooperation Agency : JICA）は、サバ州の生物多様性保全に対して統合的に取り組むために、サバ州政府や国立サバ大学（Universiti Malaysia Sabah : UMS）等とともに技術協力プロジェクト「ボルネオ生物多様性・生態系保全プログラム（Bornean Biodiversity and Ecosystems Conservation : BBEC）」を実施した（フェーズ 1、2）。BBEC 1 では「サバ州の生物多様性保全のための包括的かつ持続可能なアプローチの構築」を目標として、研究機関の体制強化、研究成果の発表、協働保護区管理の概念を取り入れたクロッカー山脈公園管理計画の策定及び実施、セガマ河下流域野生生物保全区の提案、住民参加型エコツーリズムの試行、環境教育活動の実践、国際セミナーの開催等を支援した。BBEC 2 では「サバ州における生物多様性保全のための体制強化と、マレーシア国内外への知識・情報発信の拠点化」を目標として、サバ州生物多様性センターの正式組織化、「サバ州生物多様性戦略（Sabah Biodiversity Strategy : SBS）」の策定準備、クロッカー山脈公園及び周辺域の国連教育科学文化機関（United Nations Educational, Scientific and Cultural Organization : UNESCO）「人と生物圏（Man and Biosphere : MAB）計画」への登録申請、セガマ河下流域野生生物保全区の登録、キナバタンガン・セガマ河下流域湿地（Lower Kinabatangan and Segama Wetland : LKSW）のラムサール条約への登録及び管理計画の策定、生物多様性保全に係る第三国研修（Third Country Training Programme : TCTP）の実施等を支援した。

2011 年 8 月、マレーシア政府から、SBS 策定後の実施支援、ラムサール条約登録湿地や UNESCO MAB 登録予定地をはじめとする保護区及びバッファー・ゾーンの統合管理の促進、第三国研修を通じた東南アジア諸国連合（Association of Southeast Asian Nations : ASEAN）地域への生物多様性に係る経験共有を内容とする後継の技術協力プロジェクトが要請され、2013 年より本プロジェクトが開始された。

1-2 目的

上述の背景を踏まえ、以下を目的として終了時評価を実施した。

- (1) 討議議事録 (R/D) に記載の当初計画、現行のプロジェクト・デザイン・マトリックス (PDM) の Version 4、及び活動計画 (PO) に従って、プロジェクトの達成状況を確認すること。
- (2) プロジェクトを評価 5 項目 (妥当性、有効性、効率性、インパクト、持続性) の観点から評価すること。
- (3) プロジェクト終了後にプロジェクトが取るべき活動と進捗に関して提言を行うこと。
- (4) プロジェクト実施から教訓を抽出すること。
- (5) 終了時評価報告書を作成し、協議議事録に署名すること。

1-3 終了時評価調査団の構成

終了時評価調査団 (以下、「調査団」と記す) は、下表で示したメンバーから成る。

氏名	分野	所属
見宮 美早	総括/団長	JICA 地球環境部森林・自然環境グループ 自然環境第一チーム企画役
飯塚 令子	協力企画	JICA 地球環境部森林・自然環境グループ 自然環境第一チーム専門嘱託
浜田 哲郎	評価分析	A&M コンサルタント (有)

1-4 調査日程と主要面談者

マレーシアでの現地調査は、2016年10月30日から2016年11月17日にかけて実施した。現地調査日程の詳細は付属資料「合同評価調査報告書 (英文)」Appendix 1 に示した。主要面談者リストは Appendix 2 に示した。

1-5 終了時評価の手法

プロジェクトの終了時評価は『新 JICA 事業評価ガイドライン第 1 版』に従って実施する。調査団はプロジェクトを三つの側面、(i) 実施プロセス、(ii) 達成度と進捗状況、(iii) 評価 5 項目の視点 (「妥当性」「有効性」「効率性」「インパクト」「持続性」) から評価する。

プロジェクトの終了時評価のために設定された質問と指標は、付属資料 Appendix 3 の評価グリッドに記載した。

データ収集のために、調査団はまず、文献調査を行い、続いて、プロジェクトに関係するサバ州政府機関職員、UMS 熱帯生物学保全研究所 (Institute for Tropical Biology and Conservation : ITBC)、関連郡事務所、パイロットプロジェクトのサイトの JKK 会長 (村落治安・開発委員会 : Jawatankuasa Kemajuan dan Keselamatan Kampung) に対して質問票による調査とインタビュー調査を実施した。さらに、調査団は、日本人専門家やプロジェクト関係者 (現地 NGO、UNDP の国連機関など) に対する聞き取り調査を行った。また、調査団はパイロットプロジェクトのサイトの視察を 2 度にわたり行った。

上記の調査結果に基づき、調査団は実施プロセスとプロジェクトの達成状況を査定し、以下に示す評価 5 項目に基づきプロジェクトを評価した。

評価項目	定義
妥当性	プロジェクトの目指している効果（プロジェクト目標や上位目標）が受益者のニーズに合致しているか、問題や課題の解決策として適切か、対象地域と日本側の政策との整合性はあるか、プロジェクトの戦略・アプローチは妥当か、公的資金である政府開発援助（ODA）で実施する必要があるかなどといった「援助プロジェクトの正当性・必要性」を問う視点。
有効性	プロジェクトの実施により、本当に受益者もしくは社会への便益がもたらされているのか（あるいはもたらされるのか）を問う視点。
効率性	主にプロジェクトのコスト及び効果の関係に着目し、資源が有効に活用されているか（あるいはされるか）を問う視点。
インパクト	プロジェクトの実施によりもたらされる、より長期的、間接的効果や波及効果を見る視点。この際、予期しなかった正・負の効果・影響も含む。
持続性	協力が終了しても、プロジェクトで発言した効果が持続しているか（あるいは持続の見込みはあるか）を問う視点。

第2章 プロジェクトの概要

2-1 プロジェクト・デザイン・マトリクス (PDM)

PDMはプロジェクトの枠組みを規定する計画表である。現行 PDM (Version 4) は、中間レビュー調査団 (2015年6月11日～7月1日) の調査結果の提言を受け、2015年6月30日に承認されている。今回の終了時評価は付属資料の Appendix 4 に示されている PDM (Version 4) に基づいて実施する。

2-2 プロジェクトの枠組み

プロジェクト期間	2013年7月1日～2017年6月30日 (4年間)
プロジェクトサイト (サバ州)	ラムサール条約登録湿地である LKSW 及びその上流域 (約 300 万 ha) のコアエリア及びバッファー・ゾーン UNESCO の MAB 計画の下に登録されているクロッカー山脈生物圏保存地域 (CRBR) のコアエリア、バッファー・ゾーン、トランジションエリア (約 35 万 ha)
ターゲットグループ	関係州政府機関の職員 パイロット・サイトの地域住民 UMSの研究者、ローカルNGO
実施機関	サバ州政府機関:天然資源庁(NRO)、サバ州生物多様性センター(SaBC)、サバ州森林局(SFD)、サバ州公園局(SPs)、サバ州野生生物局(SWD)、環境保護局(EPD)、灌漑排水局(DID)、土地測量局(LSD)、農業局(DOA)、サバ漁業局(DFS)、サバ州観光局(STB)、州政府経済計画ユニット(UPEN)、郡事務所(Tuaran, Tambunan, Penampang 及び Keningau 郡) ITBC/UMS

2-3 プロジェクトの要約

(1) 上位目標

内容	サバ州が生物多様性保全と持続可能な開発 ¹ のアジアにおける中核的拠点として国内的・国際的に知られる。
指標	1. (協力終了後) 5年以内に少なくとも20名の研究者が生物多様性及び持続可能な開発の研究のためにサバ州を訪問する。 2. (協力終了後) 5年以内に、少なくとも5つのメディアが生物多様性保全と持続可能な開発の報道のためにサバ州を訪れる。

¹ この文脈での「持続可能な開発」とは、生物多様性と生態系の保全のために、特定地域の住民の持続的な社会・経済活動の推進を指す。

	3. (協力終了後) 5年以内に、少なくとも5編の生物多様性保全と持続可能な開発に関するサバ州の経験・取組に係る論文が、国際的な専門誌に掲載される。
	4. マレーシア政府が作成する愛知目標の達成に関する報告書にサバ州の貢献が目に見える形で記載される。

(2) プロジェクト目標

内容	国内的・国際的認知のもとにサバ州における持続可能な開発のための生物多様性・生態系保全が推進される。
指標	<p>1. プロジェクト活動がSBSの実施に貢献する。</p> <p>2. SBSの進捗状況が定式化された手法でモニターされ、Biodiversity Council及びChief Ministerに報告される。</p> <p>3. 生物多様性・生態系保全に関するサバ州の知見が国内的・国際的に良い事例として参照される。</p> <p>4. 生物多様性保全に関する国際的な枠組みの下で、新規サイトが少なくとも1カ所登録される、もしくは既存サイトが拡張される。</p>
上位目標のための外部条件	生物多様性・生態系保全に関するマレーシア及びサバ州の政策が都合の良い形で継続する。

(3) 成果

内容	指標	プロジェクト目標のための外部条件
<p>成果 1:</p> <p>サバ州における生物多様性・生態系保全の管理システムが強化される。</p>	<p>1-1. CRBR の管理計画及び年次事業計画が州政府に承認され、(プロジェクトの)パイロット(サイトにおける)活動及び広報教育啓発活動(CEPA)の投入がなされる。</p> <p>1-1-1 パイロット・サイトの裨益住民が、代替生計活動を含むプロジェクトによる人材育成活動に満足する。</p> <p>1-1-2 CRBR における CEPA キット研修の対象者の、保全に対する意識が向上する。</p> <p>1-2. LKSW における CEPA キット研修の対象者の、保全に対する意識が向上する。</p> <p>1-3. 裨益グループの生物多様性・生態系保全に関する知識が高まる。</p> <p>1-4. SBS モニタリングシステムが構築される。</p>	<p>JICA の支援する関連プロジェクトが計画通り実施される。</p>

成果 2: 生物多様性・生態系保全に関するサバ州の経験が国内的・国際的に共有される。	2-1. サバ州の経験に関する文書が少なくとも 5 編作成される。	
	2-2. 少なくとも二つの国内／国際セミナー、ワークショップ、会議を開催する。	
	2-3. カウンターパート (C/P) 機関が少なくとも二つの国際セミナー、ワークショップ、会議に参加する。	
	2-4. 少なくとも 50 名が海外から TCTP に参加する。	
	2-5. 少なくとも 90% の参加者が TCTP に関して満足を表明する。	
	2-6. 国内外のネットワークを通じて生物多様性・生態系保全のため知識が共有される。	
	2-7. 2014 年に作成されるマレーシアの National Biodiversity Strategy に SBS の概念が盛り込まれる。	

(4) 活動

成果	活動内容	成果のための外部条件
成果 1: サバ州における生物多様性・生態系保全の管理システムが強化される。	1-1. SBS の必要な改定・修正を支援する。	SBS が閣議了解される。 UNESCO が最終的に CRBR の認定を行う。 C/P 機関への予算配分が大幅に減少しない。 政府によって適当な C/P が配置され、定期的に会議及びプロジェクト活動に従事する。
	1-2. SBS のモニタリングシステムを開発する (フォーマット、報告、フィードバック)。	
	1-3. CRBR の管理計画・年次事業計画の作成とモニターを支援する。	
	1-4. C/P 機関及び他の関係者との継続的な協力関係を通じ、サバ州において JICA の支援するすべての環境技術・自然保全プロジェクトに協力し、会合・知見共有を定期的に行う。	
	1-5. 管理計画の実施における資金調達のためのプログラム、援助機関と協調する〔国連開発計画 (UNDP)、地球環境ファシリティ (GEF)、EU funded REDD+ など〕。	
	1-6. 生計向上及び貧困緩和のため連邦、州、地方政府	

² それらのプロジェクトは以下である。1) 地球規模課題対応国際科学技術協力 (Science and Technology Research Partnership for Sustainable Development : SATREPS) : 九州工業大学、マレーシア・プトラ大学及びサバ大学による「生物多様性保全のためのパーム油産業によるグリーン経済の推進プロジェクト」(2013 年～2017 年)、2) 草の根技術協力事業 (JPP) : 八女市と (株) バンブーテクノによる「山仙式平窯炭化法によるバイオマス炭化技術研修事業」(2012 年～2015 年)、3) 草の根技術協力事業 (JPP) : 酪農学園大学による「キナバタンガン川下流域の生物多様性保全のための住民参加型村おこしプロジェクト」(2012 年～2016 年)

	<p>及び国際的枠組みからの必要な技術的資金的資源の動員を行うため、関係機関を支援する。</p> <p>1-7. 地方政府、NGO、関連機関と協調し、農業の向上、持続可能な土地利用、エコツーリズム、個人事業の市場参入を通じて、共同体を基本とした保全のための生計向上を実験的に行う。</p> <p>1-8. 大規模開発プロジェクトによって引き起こされる負の環境影響を緩和するため、関係機関が行う関連法令の執行を支援する。</p> <p>1-9. 地域住民、地方政府機関、NGO、関係機関を対象に CEPA に関する研修を実施する。</p> <p>1-10. SEEP (Sabah Environmental Education Policy) のモニタリングを支援する。</p> <p>1-11. 保全と、環境破壊に結びつかない経済活動のための河川管理に関する規定枠組みの改訂及び法執行に関して提言を行う。</p>	<p>前提条件: 特になし。</p>
<p>成果 2: 生物多様性・生態系保全に関するサバ州の経験が国内的・国際的に共有される。</p>	<p>2-1. サバ州の経験を定着させるため文書・文献の形にまとめ、必要であれば追加の調査を実施する。</p> <p>2-2. 生物多様性 (保全) のための可能な資金調達の仕組みに関する調査を行う (即ち、Payment for Ecological Services (PES)、biodiversity accounting, rationalization of incentives and taxes for sustainable development、REDD+、CSR and strengthening of the Biodiversity Centre Fund など)。</p> <p>2-3. TCTP の企画、実施、モニター、評価、フォローアップを行う。</p> <p>2-4. 必要があれば連邦政府と協調し、サバ州の経験に関する知見共有を図るため国内または国際会議、シンポジウム、セミナー、研修等の開催、もしくはこれらへの参加を行う。</p> <p>2-5. 全国レベルの政策策定プロセスにサバ州の経験を共有する。</p> <p>2-6. 積極的な広報、報道戦略に関して関係機関を支援する。</p>	

第3章 プロジェクトの実績と実施プロセス

3-1 投入

(1) マレーシア側からの投入

マレーシア側からの投入の概要を以下の表に示した。

人員の配置	プロジェクトダイレクター	サバ州官房長官	
	副プロジェクトダイレクター	サバ大学副学長	
	プロジェクトマネージャー	NRO 長官	
	C/P 機関 (約 15)	州政府機関関係機関、ITBC/UMS	
施設提供	NRO 内にあるプロジェクト事務所及び必要設備		
NRO の予算支出 (合計: 3,602 米ドル)	2013 年	571.61 米ドル	<現物の供与>: 執務室、機材、会議室、その他
	2014 年	1,100.24 米ドル	
	2015 年	1214.01 米ドル	
	2016 年*	716.21 米ドル	

* 2016 年 9 月現在

(2) 日本側からの投入

日本側からの投入の概要を以下の表に示した。

専門家 派遣	長期専門家 (合計 4 名)	2 新旧チーフ・アドバイザー	
		1 旧業務調整	
		1 新業務調整/環境教育	
	短期専門家 (合計 36 名)	CRBR 管理 (4)	土壌分析 (3)
		里山管理 (3)	土壌断面開発 (2)
		コミュニティ開発 (4)	キナバル山登山道確認調査 (3)
		持続的リーダーシップ (2)	生物多様性戦略モニタリング (1)
持続的土地管理 (2)		環境教育 (1)	
ラムサール条約湿地管理計画 モニタリング (1)	象骨格修復/博物館展示 (1)		
本邦研修 (合計 62 名)	2013 年	20 名	
	2014 年	18 名	
	2015 年	17 名	
	2016 年	7 名 (2016 年 9 月現在)	
機材供与	合計 22,248 リンギ (RM) (ラップトップ・コンピューター 3 台、GPS 1 機、土壌分析機 1 台) (合計 600,696 円 : 1 リンギ=27 円)		

在外事業強化費 (49,033,901 円)	2013 年	364,801.75 リンギ (11,301,558 円)
	2014 年	514,286.00 リンギ (16,626,866 円)
	2015 年	556,180.95 リンギ (16,746,608 円)
	2016 年	163,314.64 リンギ (4,358,8678 円) (2016 年 9 月現在)

3-2 活動

成果 1 及び成果 2 を産出するために、それぞれ 11 の活動と 6 の活動の実施が計画されている。終了時評価の時点では、成果 1 の 11 の活動のうち六つの活動は完了、五つの活動は実施中であった。一方、成果 2 の六つの活動のうち三つの活動は完了し、一つの活動はほとんど完了しており、二つの活動は実施中であった。

成果 1 と成果 2 の各活動の実施状況を以下に示す。

(1) 成果 1 の活動

成果 1 を産出するための活動の実施状況を下表に示した。

成果 1: サバ州における生物多様性・生態系保全の管理システムが強化される。	
活動	実施状況
1-1. SBS の必要な改定・修正を支援する。	<u>実施済み</u> モニタリング制度を含む改定 SBS はプロジェクトが契約した ERE コンサルタントグループによって作成された。改定 SBS の公式発表は 2016 年 10 月 11 日に行われた。
1-2. SBS のモニタリングシステムを開発する（フォーマット、報告、フィードバック）。	
1-3. CRBR の管理計画・年次事業計画の作成とモニターを支援する。	<u>実施済み</u> 管理計画/年次事業計画は最終化された。プロジェクト終了までの閣議承認される予定である。
1-4. 機関及び他の関係者との継続的な協力関係を通じ、サバ州において JICA の支援するすべての環境技術・自然保全プロジェクトに協力し、会合・知見共有を定期的に行う。	<u>継続中</u> プロジェクトは他の JICA プロジェクト（SATREPS 及び草の根技協）と、協働するために、それぞれの活動の進捗を共有している。例えば、河川環境教育プログラム（REEP）活動は 2013 年に Sandakan で、2014 年に Papar で、2016 年に Penampang で行った。
1-5. 管理計画の実施における資金調達のためのプログラム、援助機関と協調する（UNDP/GEF、EU funded REDD+ など）。	<u>継続中</u> NRO は 2016 年に UNDP と PES をテーマとした会議を開催した。プロジェクトは、NRO を通じて、PES メカニズムを創設するための協力を模索するために連絡を密にしている。

<p>1-6. 生計向上及び貧困緩和のため連邦、州、地方政府及び国際的枠組からの必要な技術的資金的資源の動員を行うため、関係機関を支援する。</p>	<p style="text-align: center;"><u>継続中</u></p> <p>DOA や SPs などの関連機関は、プロジェクトを通して、Tudan 村の住民グループに対して技術支援を行ってきた。プロジェクトは Tudan 村における ITBC/UMS の生計向上の調査プロジェクトに協力してきた。このプロジェクトは連邦政府によって承認されている。</p>
<p>1-7. 地方政府、NGO、関連機関と協調し、農業の向上、持続可能な土地利用、エコツーリズム、個人事業の市場参入を通じて、共同体を基本とした保全のための生計向上を実験的に行う。</p>	<p style="text-align: center;"><u>継続中</u></p> <p>プロジェクトは Tudan 村と Sintuong-Tuong/Kiporing 村において、関係機関と協調し、参加型農村調査 (PRA) と桑栽培のようなコミュニティをベースとした保全のための生計向上活動を実験的に行ってきた。</p>
<p>1-8. 大規模開発プロジェクトによって引き起こされる負の環境影響を緩和するため、関係機関が行う関連法令の執行を支援する。</p>	<p style="text-align: center;"><u>継続中</u></p> <p>プロジェクトは C/P 機関がプロジェクトのサイトにおいて、生物多様性保全への負のインパクトがもたせないようにモニターするのを支援してきた。</p>
<p>1-9. 地域住民、地方政府機関、NGO、関係機関を対象に CEPA に関する研修を実施する。</p>	<p style="text-align: center;"><u>実施済み</u></p> <p>プロジェクトはサバ州で国別研修 (CEPA を含む) を行った。また、プロジェクトは、関係機関と CEPA キット研修を共同実施した。</p>
<p>1-10. 環境教育政策 (SEEP) のモニタリングを支援する。</p>	<p style="text-align: center;"><u>実施済み</u></p> <p>EPD はコンサルタントを配置し、SEEP をモニターしており、コンサルタントが作成した提言が提出された。</p>
<p>1-11. 保全と、環境破壊に結びつかない経済活動のための河川管理に関する規定枠組の改訂及び法執行に関して提言を行う。</p>	<p style="text-align: center;"><u>実施済み</u></p> <p>調査報告書「Economics of River Basin Management toward Sustainable Development for Biodiversity and Ecosystems Conservation in Sabah」に基づき、将来の規定枠組に関する提言を行った。具体例として、水使用にかかる保全費用の導入が挙げられる。</p>

(2) 成果 2 の活動

成果 2 を産出するための活動の実施状況を下表に示した。

成果 2: 生物多様性・生態系保全に関するサバ州の経験が国内的・国際的に共有される。	
活動	実施状況
2-1. サバ州の経験を定着させるため文書・文献の形にまとめ、必要であれば追加の調査を実施する。	<u>ほとんど完了</u> プロジェクトは、これまで 14 編の文献/資料をまとめおり、プロジェクト終了までに 4 編の文献/資料を取りまとめることとなっている。
2-2. 生物多様性（保全）のための可能な資金調達の仕事に関する調査を行う（即ち、PES、biodiversity accounting、rationalization of incentives、taxes for sustainable development、REDD+、CSR and strengthening of the Biodiversity Centre Fund など）。	<u>実施済み</u> プロジェクトはコスタリカに PES のスタディツアーを行った。また、「Study on Economics of River Basin Management for Sustainable Development on Biodiversity and Ecosystems Conservation in Sabah」の調査報告書を作成した。PES に従事している 4 名の職員が日本での研修「Training for Realizing a Society in Harmony with Nature」に参加した。
2-3. TCTP の企画、実施、モニター、評価、フォローアップを行う。	<u>実施済み</u> プロジェクトは関連機関と協働して、第三国研修を企画、実施、評価し、モジュール（研修計画）を開発した。フォローアップ調査を 2013 年 10 月にウガンダとタンザニア、2014 年にスリランカ、2015 年にベトナムとカンボジアで実施した。
2-4. 必要があれば連邦政府と協調し、サバ州の経験に関する知見共有を図るため国内または国際会議、シンポジウム、セミナー、研修等の開催、もしくはこれらへの参加を行う。	<u>継続中</u> プロジェクトは 2015 年 12 月に CRBR セミナーを開催するとともに、Sabah Wetlands Conservation Society と国際湿地シンポジウム (ISCMW) (2014 年 10 月と 2016 年 9 月) を共同開催した。また、プロジェクトは、国際会合/シンポジウム/セミナー等に 16 回以上参加した。プロジェクトは NRO が SATOYAMA イニシアティブ国際パートナーシップ (IPSI) アジア地域ワークショップを 2017 年 4 月に開催するのを支援する。
2-5. 全国レベルの政策策定プロセスにサバ州の経験を共有する。	<u>継続中</u> NRO はワークショップ（関係者会合と戦略案会合）を 2 回開催し、2014 年 12 月 12 日にクアラルンプールで開催された MY BioD セミナー（主題：

	Mainstreaming biodiversity: Challenges and Opportunities) において SBS の概略を発表した。
2-6. 積極的な広報、報道戦略に関して関係機関を支援する。	<u>実施済み</u> プロジェクトは EPD が環境教育プログラム用のビデオ「Environmental Education in Sabah」を作成し、サバのイニシアティブを紹介するのを支援した。

3-3 成果

各成果の達成度は、それぞれの成果に設定された指標の達成状況によって測定される。成果1の大部分の指標は達成されており、指標の達成度の査定は、例えば、指標1-1-1ではプロジェクトによって行われる予定である。成果2の指標はすべて達成されている。

成果1と成果2の達成状況を下記に示した。

成果1: サバ州における生物多様性・生態系保全の管理システムが強化される。	
指標	達成状況
1-1. CRBRの管理計画及び年次事業計画が州政府に承認され、(プロジェクトの)パイロット(サイトにおける)活動及びCEPA活動の投入がなされる。	<u>達成予定</u> CRBR 管理計画及び年次事業計画の技術会合は2015年以降、開催されており、これらの計画は2016年11月に最終化された。今後、Sabah Water Resource Councilに提出され、プロジェクト終了までにサバ州政府の閣議において承認される予定である。
1-1-1. パイロット・サイトの裨益住民が、代替生計活動を含むプロジェクトによる人材育成活動に満足する。	指標1-1-1に関しては、パイロット・サイトの裨益住民の満足度は査定される予定である。
1-1-2. CRBRにおけるCEPAキット研修の対象者の、保全に対する意識が向上する。	指標1-1-2に関しては、EPAの業務指示書(TOR)研修の参加者への質問票調査によれば、大多数の参加者が新知識を習得し、環境意識が向上した。
1-2. LKSWにおけるCEPAキット研修の対象者の、保全に対する意識が向上する。	<u>達成済み</u> CEPAキット研修への参加者への質問票調査によれば、大多数の参加者に環境に対する意識の向上と行動変容があったことが確認されている。
1-3. 裨益グループの生物多様性・生態系保全に関する知識が高まる。	<u>達成済み</u> プロジェクト活動を通じて、ターゲットグループの知識が向上したことが確認されている。
1-4. SBSモニタリングシステムが構築される。	<u>達成済み</u> 改定SBSモニタリングシステムが作成され、公式に2016年10月11日から始動した。

成果 2: 生物多様性・生態系保全に関するサバ州の経験が国内的・国際的に共有される。	
指標	達成状況
2-1. サバ州の経験に関する文書が少なくとも5編作成される。	<u>達成済み</u> 2013年のアジア公園会議（日本）や2014年の世界公園会議（オーストラリア）におけるコミュニティ利用ゾーン（CUZ）の導入などを含む5編以上の文書をサバ州の経験に基づき作成した。
2-2. 少なくとも二つの国内／国際セミナー、ワークショップ、会議を開催する。	<u>達成済み</u> Sabah Wetlands Conservation Society と2014年と2016年に ISCMW を共同開催し、CRBR の国内セミナーを2015年12月に開催した。
2-3. カウンターパート機関が少なくとも2つの国際セミナー、ワークショップ、会議に参加する。	<u>達成済み</u> C/P 機関は2013年の日本で開催されたアジア公園会議や2016年に日本で開催された第一回アジア生物文化多様性国際会議などの二つ以上の国際セミナー、ワークショップ、会議に参加した。
2-4. 少なくとも50名が海外からTCTPに参加する。	<u>達成済み</u> 第三国研修に合計70名が参加した（2013年に13名、2014年に20名、2015年に17名、2016年に20名）。
2-5. 少なくとも90%の参加者がTCTPに関して満足を表明する。	<u>達成済み</u> 質問票調査の結果によれば、第三国研修参加者の92～95%が満足と回答した。2016年の満足度はプロジェクトによって調査予定である。
2-6. 国内外のネットワークを通じて生物多様性・生態系保全のため知識が共有される。	<u>達成済み</u> NRO はマレーシアで最初の IPSI の公式会員となった。IPSI のアジア地域会合が2017年4月に開催予定である。また、天然資源環境省（MoNRE）にマレーシア国家湿地員会が設置された。
2-7. 2014年に作成されるマレーシアの National Biodiversity Strategy に SBS の概念が盛り込まれる。	<u>達成済み</u> 2014年に策定された SBS の概念が「マレーシア生物多様性国家戦略」（2016-2025）に反映されている。例えば、保護区の官報掲載のための法制化計画や「タガール」（生物多様性を保全しながら持続的に使用する伝統的制度）の導入などが言及されている。

3-4 プロジェクト目標

プロジェクト目標の達成度は、設定された四つの指標の達成度によって測定される。指標 1、指標 3 及び指標 4 は達成されており、指標 2 については今後達成される。プロジェクト目標の達成状況を下表に示した。

プロジェクト目標：国内的・国際的認知のもとにサバ州における持続可能な開発のための生物多様性・生態系保全が推進される。	
指標	達成度
1. プロジェクト活動がSBSの実施に貢献する。	<u>達成済み</u> モニタリングシステムを含む改定版 SBS はプロジェクトの支援により作成された。また、プロジェクトは、保護区に隣接する現地コミュニティと効果的な協力活動を試験的に実施することで SBS の実施に貢献している。
2. SBSの進捗状況が定式化された手法でモニターされ、Biodiversity Council及びChief Ministerに報告される。	<u>達成予定</u> モニタリングシステムは開発されているので、今後、SBS の進捗状況はモニターされ、モニタリング結果は、適宜、報告される予定である。
3. 生物多様性・生態系保全に関するサバ州の知見が国内的・国際的に良い事例として参照される。	<u>達成済み</u> 「マレーシア国家生物多様性政策」（2016-2025）は SBS を保護区指定にかかる法制化計画として言及している。また、「タガール」は生物多様性を保全しながら持続的に使用する伝統的制度として言及している。一方、サバ州政府は IPSI のアジア地域会合を 2017 年 4 月に開催し、サバ州の経験と知識を共有する予定である。
4. 生物多様性保全に関する国際的な枠組みの下で、新規サイトが少なくとも 1 カ所登録される、もしくは既存サイトが拡張される。	<u>達成済み</u> CRBR は 2014 年 6 月に UNESCO の MAB 計画の一つである生物圏保存地域（BR）に国際調整委員会（ICC）によって認定され、コタキナバル湿地はラムサール条約湿地への登録を待っている。

3-5 上位目標

現時点での上位目標の達成状況を下表に示した。

上位目標：サバ州が生物多様性保全と持続可能な開発のアジアにおける中核的拠点として国内的・国際的に知られる。	
指標	達成度
1. (協力終了後) 5年以内に少なくとも20名の研究者が生物多様性及び持続可能な開発の研究のためにサバ州を訪問する。	指標 1 から指標 3 に関しては、プロジェクト終了後 5 年以内に必要な情報を収集することで達成度を測定するようにデザインされている。
2. (協力終了後) 5年以内に、少なくとも五つのメディアが生物多様性保全と持続可能な開発の報道のためにサバ州を訪れる。	
3. (協力終了後) 5 年以内に、少なくとも 5 編の生物多様性保全と持続可能な開発に関するサバ州の経験・取組に係る論文が、国際的な専門誌に掲載される。	
4. マレーシア政府が作成する愛知目標の達成に関する報告書にサバ州の貢献が目に見える形で記載される。	愛知目標の達成に対するサバ州の貢献は、特に目標 11 に関し、2016 年にメキシコで開催される生物多様性条約第 13 回締約国会議 (CBD-COP13) のマレーシア政府の報告書で言及されることが期待されている。

3-6 実施プロセス

(1) プロジェクト管理体制

2013年6月14日に署名されたR/Dに基づくプロジェクト運営委員会 (Project Steering Committee : PSC) 及びプロジェクト管理委員会 (Project Management Committee : PMC) の体制と機能を次頁の図に整理した。

<u>プロジェクト運営委員会 (PSC)</u>		<u>プロジェクト管理委員会 (PMC)</u>	
(プロジェクトの全般的な運営管理と実施に係る責任)		(プロジェクト活動の進捗モニタリング)	
議長	プロジェクトダイレクター (サバ州官房長官)	議長	プロジェクトマネージャー (NRO長官)
副議長	副プロジェクトダイレクター (サバ大学副学長)	書記	NRO
書記	プロジェクトマネージャー (NRO長官)		
<u>メンバー</u>		<u>メンバー</u>	
マレーシア側	連邦政府 サバ州政府	マレーシア側	ITBC-UMS、サバ州政府機関、郡事務所
日本側	チーフアドバイザー及び業務調整員 JICAマレーシア事務所	日本側	全ICA専門家

PSC 会合はこれまで、2013年12月17日、2014年10月24日、2015年6月30日の3回開催された（年に1回のペース）。PMC 会合は R/D に記載されているように3カ月毎に開催されてきた。PSC 会合及び PMC 会合において、プロジェクトの進捗と改善すべき課題が共有され 各委員会のメンバーで議論された。さらに、プロジェクトは、情報共有のために、月1回、月例活動報告書を作成し、関係機関に配布している。

(2) プロジェクト実施体制

本プロジェクトの実施機関は、郡事務所を含むサバ州政府機関及びITBC/UMSである。サバ州政府機関にはNRO、SaBC、SPs、SFD、SWD、DID、EPD、DOA、STB、LSD、FiA等の各機関が含まれる。中間レビュー調査において、プロジェクト活動における C/P 機関の担当が明確化され合意された。プロジェクトの主要活動の担当 C/P 機関を以下に要約した。

主要活動	主要担当機関
- SBS の実施に係る国際・国内の関係機関の調整 - LKSW 管理計画及び CRBR 管理計画の実施に係る関係機関の調整 - LKSW 地域のバッファー・ゾーンにおける活動の実施・管理、関係機関の調整 - CRBR 地域のバッファー・ゾーン、トランジションエリアにおける活動の実施・管理、関係機関の調整	NRO
- CRBR 地域のコアエリアにおける活動の実施・管理（環境教育活動を含む）	SPs
- LKSW 地域のコアエリアにおける活動の実施・管理（環境教育	SFD

活動を含む)	
- パイロット活動	DOA
- 情報発信・知見共有活動	NRO/ITBC

(3) プロジェクトの成果物

プロジェクト活動と成果産出の実施プロセスにおいて、多種多様な報告書や資料が作成され、ターゲットグループによって幅広く受け入れられている。プロジェクト成果物のリストは付属資料「合同評価調査報告書（英文）」の Appendix 6 に示した。

第4章 評価結果

4-1 妥当性

プロジェクトの妥当性は“高い”。

(1) マレーシア開発政策との整合性

プロジェクトは、マレーシアの国家開発計画、サバ州の開発計画及び生物多様性・生態系保全に関連した政策に合致している。

現行のマレーシアの国家開発計画である「第11次マレーシア計画」(11th Malaysia Plan) (2016年～2020年)において、国家を高所得経済へ転換するために六つの戦略的目的を特定しており、その一つが「持続性とレジリエンスのためのグリーン経済の推進」となっている。また、サバ州の開発計画である「サバ州開発及び発展の指針 (Way forward of Sabah State Development and Advancement)」では、六つのアジェンダ・柱が示され、その一つである「経済アジェンダ」において「ゾーニング」の概念が導入されており、経済開発を達成しながら、健全な生態系を支える自然資源保全のために特定の地域を保存することが示されている。この指針に則って SBS や SEEP 等を含む各種の生物多様性・生態系保全に関する政策やプログラムが打ち出されている。また、現在作成中の「サバ州の戦略的長期行動計画 (Sabah's Strategic Long Term Action Plan)」(2016年～2035年)において、サバ州の開発を経済、社会、環境面から推進すること及び SBS が同計画の実施ツールの一つとして位置づけられていることが明記されている。

(2) サバ州政府の開発ニーズとの整合性

上記の計画・政策の下、サバ州政府は生物多様性・生態系保全と利用に関する包括的政策として SBS の策定を図り、BBEC フェーズ2においてその策定を支援した。しかしながら、州政府は SBS を適切に実施・モニタリングするための能力強化を必要としており、本プロジェクトは州政府関係機関の調整実施能力強化を通して SBS の実施に貢献することを目指している。よって、本プロジェクトはサバ州政府の開発ニーズと合致している。

(3) 日本の対マレーシア ODA 政策との整合性

本プロジェクトは、日本の対マレーシア援助政策にも合致している。

日本政府の「対マレーシア国別援助方針」(2012年4月策定)及び JICA の「国別分析ペーパー」の双方において、援助の基本方針として「協力パートナーとしての関係構築」「東アジアの地域協力の推進」が掲げられており、重点分野の一つとして「先進国入りに向けた均衡のとれた発展の支援」が挙げられている。このように、プロジェクトは日本政府の政策と JICA の方針に沿っている。

(4) ターゲットグループのニーズとの整合性

プロジェクトのターゲットグループは、R/D 及び現行 PDM において、関係州政府機関の職員、パイロット・サイトの地域住民、UMS の研究者、ローカル NGO と定義されており、プロジェクトの目的と活動は彼らのニーズに合致するように計画されている。

(5) 方法論としての適切さ

プロジェクトは、持続的開発のための生物多様性と生態系保全を推進する上で課題となっているターゲットグループの能力開発に対応している。また、現行の PDM (Version 4) に適切にも反映されている。

4-2 有効性

プロジェクトの有効性は“中程度より高い”。

(1) プロジェクト目標達成の見込み

モニタリングシステムを含む SBS と CRBR の管理計画/年次事業計画の策定が遅れたにも関わらず、プロジェクトは両計画が閣議承認される前から、前倒しして活動を実施してきた。その結果、プロジェクトの三本柱と位置づけられる(i) SBS 実施の支援、(ii) 持続的開発のためのパイロットプロジェクト活動を含む CRBR 管理計画の策定、(iii) 第三国研修などを通じた外国とのサバ州の経験の共有をおおむね実現している。

プロジェクト目標：国内的・国際的認知のもとにサバ州における持続可能な開発のための生物多様性・生態系保全が推進される。	
指標	現状
1. プロジェクト活動がSBSの実施に貢献する。	達成済み
2. SBSの進捗状況が定式化された手法でモニターされ、Biodiversity Council及びChief Ministerに報告される。	達成予定
3. 生物多様性・生態系保全に関するサバ州の知見が国内的・国際的に良い事例として参照される。	達成済み
4. 生物多様性保全に関する国際的な枠組みの下で、新規サイトが少なくとも1カ所登録される、もしくは既存サイトが拡張される。	達成済み
達成の見込み	
現状の各指標の達成度から、プロジェクト目標はプロジェクト終了までにおおむね達成されることが予想される。	

(2) 論理的整合性とプロジェクト目標達成のための外部条件

中間レビューによる提言を受けて PSC で承認された PDM (Version 4) の変更により、成

果とプロジェクト目標の関係は論理的に整合性が取れている。成果からプロジェクト目標への外部条件である「JICA の支援する関連プロジェクトが計画通り実施される」に関しては、サバ州東部での治安状況により外部条件に一時影響を与えた。関連する SATREPS プロジェクト「生物多様性保全のためのパーム油産業によるグリーン経済の推進プロジェクト」(2013年～2017年)のパイロット・サイトを NRO の全面的支援を受けてサバ州西部に移動した。しかし、外部条件は現在も有効であり、今後も満たされる可能性が極めて高い。

(3) プロジェクト目標達成のための貢献要因

以下がプロジェクト目標を達成する上での主要な貢献要因である。

- NRO の調整能力の強化と関係機関の間で認識されているリーダーシップ。
- プロジェクト活動（特に、第三国研修）の実施での UMS の計画・管理能力の高さ。
- 国際会議や研修に適切な高級官僚を戦略的に選出することで、リーダーシップ/イニシアティブの強化だけでなく、日本とのネットワークの構築を行ったこと。例えば、UMS の副学長（副プロジェクトダイレクター）の北海道への訪問がある。
- 本邦研修の実施が C/P 機関職員のモチベーションを高めたこと。
- 特に、サバ州国別研修に現地コミュニティが参加することで、生物多様性と生態系保全の意識と機能を強化したこと。

(4) プロジェクト目標達成のための阻害要因

以下がプロジェクト目標を達成する上での主要な阻害要因である。

- SBS の閣議承認が遅延したこと。
- LKSW 地域の治安状況の悪化。
- プロジェクト活動に関与する C/P 機関の限られた職員数。
- C/P 機関への限定的な予算配布（特に、C/P 機関の優先度が低いプロジェクト活動への職員の配置と予算の配分）。

4-3 効率性

プロジェクトの効率性は “高い”。

(1) 成果達成の見込み

成果達成の見込みについて下表に示した。

成果 1：サバ州における生物多様性・生態系保全の管理システムが強化される。	
指標	現状
1-1. CRBR の管理計画及び年次事業計画が州政府に承認され、(プロジェクトの)パイロット(サイトにおける)活動及び CEPA 活動の投入がなされる。 1-1-1 パイロット・サイトの裨益住民が、代替生計活動を含むプロジェクトによる人材育成活動に満足する。 1-1-2 CRBR における CEPA キット研修の対象者の、保全に対する意識が向上する。	達成予定
1-2. LKSW における CEPA キット研修の対象者の、保全に対する意識が向上する。	達成済み
1-3. 裨益グループの生物多様性・生態系保全に関する知識が高まる。	達成済み
1-4. SBS モニタリングシステムが構築される。	達成済み
達成の見込み	
CRBR 管理計画/年次事業計画は閣議承認のために提出される予定である。SBS モニタリングシステムは 2016 年 10 月 11 日に公式に設立し、プロジェクトはプロジェクト期間中、SBS モニタリングシステムの稼働状況を検査することとなっている。指標 1-1-1 に関しては、パイロット・サイトの裨益住民の満足度は十分に高いと推測できるものの、プロジェクトは、今後、彼らの満足度を査定する計画である。これらから判断して、成果 1 はプロジェクト終了までに達成することが期待できる。	

成果 2：生物多様性・生態系保全に関するサバ州の経験が国内的・国際的に共有される。	
指標	現状
2-1. サバ州の経験に関する文書が少なくとも 5 編作成される。	達成済み
2-2. 少なくとも二つの国内/国際セミナー、ワークショップ、会議を開催する。	達成済み
2-3. C/P 機関が少なくとも二つの国際セミナー、ワークショップ、会議に参加する。	達成済み
2-4. 少なくとも 50 名が海外から TCTP に参加する。	達成済み
2-5. 少なくとも 90% の参加者が TCTP に関して満足を表明する。	達成済み
2-6. 国内外のネットワークを通じて生物多様性・生態系保全のため知識が	達成済み

共有される。	
2-7. 2014年に作成されるマレーシアの National Biodiversity Strategy に SBS の概念が盛り込まれる。	達成済み
達成の見込み	
すべての指標が既に達成されており、成果2は達成している判断できる。	

(2) 投入と活用の状況

マレーシア側と日本側の双方からの投入は計画された活動を実施する上で、質、量、タイミングにおいておおむね適切であった。一方で、マレーシア側からの要望への対応として、プロジェクト後半から新業務調整専門家が環境教育も兼任している。供与機材や作成資料はプロジェクト活動実施のために適切に管理され活用されている。C/P 機関は本邦研修で習得した知識や技術を業務実施のために適用している。同時に、専門性、知識、情報などを含む現地資源はプロジェクト活動実施のために十分に活用されている。

(3) 成果達成のための外部条件

外部条件の実現状況は下表に記述した。

外部条件	実現状況
SBSが閣議了解される。	これらの外部条件は、中間レビュー調査において、前提条件として区分された。それ故に、実現状況を評価する必要がないと判断した。
UNESCO MAB計画ICCが最終的にCRBRのBR認定を行う。	
C/P機関への予算配分が大幅に減少しない。	外部条件は現在も有効であり、今後も満たされる可能性が極めて高い。
政府によって適当なC/Pが配置され、定期的に会議及びプロジェクト活動に従事する。	

(4) 実施プロセス

調査団は現行の PO と実際のプロジェクト活動の実施状況を比較した。プロジェクトは特にプロジェクト期間前半に数々の制約と困難に直面したが、サバ州側と日本側の双方の努力によりプロジェクト実施のためにこれらの課題を克服してきた。結果として、実施プロセスはおおむね順調であり、終了時評価までに、サバ州政府の行政手続きの遅れを除いて、著しいプロジェクト活動の遅延は確認されていない。

- PSC 会合は、終了時評価までに3回（1年に1回）開催されており、C/P 機関と協働して重要な決断を行ってきた。一方、PMC 会合は、プロジェクトの進捗をモニタリングするために3カ月ごとに開催されてきた。
- プロジェクトのモニタリングは定期的に行われ、プロジェクト作成の月例活動報告書は関連 C/P 機関に配布されている。このような定期的な情報共有は、プロジェクトの進捗

状況の共通理解を促進する上で効果的であった。

- プロジェクトが採用した手法や技術は C/P 機関に有効で適切であると考えられる。C/P 機関への技術移転は、本邦研修や短期専門家派遣を通じて、問題なく実施されてきた。こうした技術移転は C/P 機関の技術的能力の強化に大きく貢献している。

4-4 インパクト

プロジェクトのインパクトは“中程度より高い。”

(1) 上位目標達成の見込み

上位目標達成の見込みは、プロジェクト終了後に、設定された指標が達成されるかどうかを測定することで判断する。

上位目標： サバ州が生物多様性保全と持続可能な開発のアジアにおける中核的拠点として国内的・国際的に知られる。
指標
1. (協力終了後) 5 年以内に少なくとも 20 名の研究者が生物多様性及び持続可能な開発の研究のためにサバ州を訪問する。
2. (協力終了後) 5 年以内に、少なくとも五つのメディアが生物多様性保全と持続可能な開発の報道のためにサバ州を訪れる。
3. (協力終了後) 5 年以内に、少なくとも 5 編の生物多様性保全と持続可能な開発に関するサバ州の経験・取組に係る論文が、国際的な専門誌に掲載される。
4. マレーシア政府が作成する愛知目標の達成に関する報告書にサバ州の貢献が目に見える形で記載される。
達成の見込み
終了時評価時点での二つの成果とプロジェクト目標の達成状況を考慮すれば、指標 1、2、3 はプロジェクト終了後 5 年以内に達成できる見込みである。指標 4 に関して、2016 年にメキシコで開催される CBD-COP 13 のために作成されるマレーシア政府の報告書の中で、愛知目標の達成に対するサバ州の貢献が言及されることが期待されている。このような見通しから、上位目標はおおむね達成することが予想される。

(2) 上位目標達成のための外部条件

プロジェクト目標から上位目標への外部条件は「生物多様性・生態系保全に関するマレーシア及びサバ州の政策が都合の良い形で継続する」である。この外部条件は、「妥当性」の評価項目に記載しているように、現在も有効であり、今後も満たされる可能性が極めて高い。

(3) 正と負のインパクト

終了時評価時点までに以下の正のインパクトが観察されている。

- ITBC/UMS の調査研究プロジェクト “Environmental Conservation and Community Capacity Building at Kg. Tudan, Tuaran, Sabah: Utilizing Mulberry Tree in Tudan”は、パイロットプロジェクトのサイトでのプロジェクト活動の結果に基づき計画された。このプロジェクトは連邦政府より承認され、現地の生計向上のために桑に関する研究を行っている。
- Babagon 取水地域を水資源保護区と水資源保全区とするための法制化のプロセスは開始されている。これは NRO の取水管理プロジェクトの実施を通じたサバ州での初めてのケースである。保全の信託基金は閣議承認に基づく州レベルとして NRO の下に設置された。
- 生計向上活動のパイロット・サイトである Tudan 村は持続的コミュニティ開発の州のモデルとして注目されている。
- パイロットプロジェクト・サイトで行われた PRA は DOA の有効なツールとして認識し、他の村落に PRA を適用していく計画である。
- PSC 会合（2015 年 10 月 24 日）の決定に従い、SPs は REEP を業務の一環として制度化し、REEP 実施のリーダーシップを取ってきた。

他方、終了時評価時点までに負のインパクトは確認されていない。

(4) 正と負の予期されない効果

1) 正の予期されない効果

Tudan 村の女性グループのメンバーは、パイロットプロジェクト活動から習得した知識を近隣 3 村の他のメンバーと共有している。

2) 負の予期されない効果

負の予期されない効果は確認されていない。また、正と負の両面において、ジェンダー間、民族間、階級間のギャップの拡大は確認されていない。

4-5 持続性

プロジェクトの持続性は“中程度より高い”。

(1) 政策・制度的側面: 高い

マレーシアの国家開発計画「第 11 次マレーシア計画」（2016 年～2020 年）及びサバ州の開発計画「サバ州開発及び発展の指針」「サバ州の戦略的長期行動計画」（2016 年～2035 年）は生物多様性と生態系保全に積極的である。プロジェクト期間中の NRO の役割は関係者の間で良く認識されており、この制度的役割はプロジェクト終了後も継続することが期待できる。

上記から判断して、持続性の政策・制度的側面は“高い”とした。

(2) 組織的側面: 中程度

現在のサバ州政府の人員削減政策により、C/P 機関の職員数は減少している。サバ州政府の限定的な職員数はプロジェクト効果の持続性に影響を与えるかもしれない。これに加えて、プロジェクトから技術を習得した技術職員は、他の部局や地位に転任あるいは昇進することも考えられる。

こうしたことから、持続性の組織的側面は“中程度”と判断した。

(3) 財政的側面: 中程度

財政的持続性はプロジェクト効果の持続性の鍵である。最近の経済状況の悪化により、プロジェクトの持続性を確保するためにサバ州政府から十分な予算処置を期待することは困難である。PES に関しては、Babagon 取水地域を水資源保護区と水資源保全区するプロセスは開始されており、一般的な信託基金も設立された。しかしながら、現在のところ、管理計画と活動計画は策定されておらず、PES メカニズムは現実化していない。

上記から判断して、持続性の財政的側面は中程度と推定した。

(4) 技術的側面: 高い

前述したように、プロジェクトによって移転された技術と知識は C/P 機関に対して内容と手法の双方において適切であった。C/P 機関は本邦研修と JICA 専門家派遣(長期と短期)を通じて、問題なく技術を習得している。さらに、C/P 機関はこうした技術と知識を組織的に業務に活用している。また、C/P 機関はプロジェクト資料が作成した文書や資料によりプロジェクト効果を更に普及するために活用できる。

したがって、持続性の技術的側面は“高い”と推測した。

第5章 結論と提言

5-1 結論

プロジェクト期間前半に数々の制約と困難に直面したものの、プロジェクト活動は着実に進捗し、プロジェクト終了時までにはプロジェクト目標がおおむね達成できることを確認した。プロジェクトは、サバ州住民の生物多様性と生態系保全に関する意識を向上し、C/P機関がサバ州の持続的開発という共通目標に向けて協働する上で重要な役割を果たした。

プロジェクトは、現地における調整の役割、及び、本邦研修と短期専門家等現地投入の有機的な支援を通じて、C/P機関の能力開発に大きく貢献した。その結果、C/P機関の技術的及び組織的能力は大きく向上した。

こうした結果は、C/P機関のプロジェクトと協力する強い意志に加えて、プロジェクト活動への積極的な関与によってもたらされたものであることは特筆されるべきである。

5項目評価による終了時評価の結果を以下に要約した。

評価項目	評価	要約
妥当性	高い	プロジェクトは、マレーシア/サバ州の開発政策と日本の援助政策に適合しており、また、ターゲットグループのニーズにも対応している。
有効性	中高	プロジェクト目標はおおむね達成されることが予想される。中間レビュー調査時の変更により、現行PDM (Version 4) において、成果とプロジェクト目標の間の論理的整合性は確保されている。
効率性	高い	成果は達成することが期待できる。プロジェクト活動の決定的な遅れは生じていなく、技術移転も問題なく実施され、コスト・パフォーマンスは高い。
インパクト	中高	上位目標はおおむね達成されることが予想される。具体的な効果はC/P機関の能力開発とパイロットプロジェクト活動の成果において確認できる。負のインパクトや予期できない負のインパクトは確認されていない。
持続性	中高	政策・制度的持続性及び技術的持続性は高い。しかしながら、組織的持続性及び財政的持続性については、予算、人員、資源の確保に関し、予測が困難なことから“中中”と評価した。

* 5段階評価（高い、中高、中中、中低、低い）によってランク付けを行った。

上記の評価結果から、調査団は、プロジェクトは当初の計画通り2017年6月30日をもって終了すべきと判断する。プロジェクト終了後のプロジェクト効果の持続性を確保するために、マレーシア側と日本側の双方は、プロジェクト終了後に5-2節の提言を考慮すべきである。

5-2 提言

上記の調査結果を踏まえて、調査団は以下の事項を提言する。

(1) C/P 機関

- プロジェクト関係機関は、知的拠点として、サバ州の引き続き生物多様性・生態系保全に従事し、国内外にサバ州の知識・経験を普及する。
- プロジェクト関係機関は、サバ州の生物多様性・生態系保全とともにグリーン経済・開発を促進する上で、民間との連携を強くする。
- 持続的に資金を確保するために、プロジェクト関係機関は、州政府予算に依存せず、引き続き外部資金動員に努める。

(2) DOA

- DOA は、他の機関と協力し、引き続きパイロット・サイトの活動を支援する。
- DOA は、地域住民の意見をくみ上げられるようなツール（例 PRA）を活用し、他地域においても生計向上活動を推進する。また、同局は、入手可能な資源や地域特有の文化を活用し、多様な農産物や付加価値をつけた製品の開発を地域住民に指導する。

(3) JICA

- JICA は、知的拠点としてのサバ州の経験・情報の発信を支援するとともに、サバ州と日本の地方政府や地域が生物多様性保全について共に学べるネットワークが築かれるよう引き続き支援する。
- JICA は、生物多様性保全分野において、引き続きサバ州のパートナーとしてさまざまなスキームを通し側面的に支援をしていく。

5-3 教訓（他の JICA プロジェクト/プロジェクト形成）

調査団は終了時評価調査から以下の教訓を得た。

(1) プロジェクトフレームワークとプロジェクト管理

- プロジェクトの投入規模と期間を考慮して、達成可能かつ具体的なプロジェクト目標を設定する。さらに、必要に応じ、柔軟にプロジェクト目標を含めた PDM の見直し・修正をする。
- プロジェクト活動・指標はプロジェクトがコントロールできるものとする。例えば、プロジェクトは国際的枠組みでの登録申請のプロセスを支援できるが、それ以降のプロセスである当該機関による登録承認を支援できない。
- 多数の C/P を対象としかつ活動分野・地域が多岐にわたる場合は、詳細 PO を作成し、

具体的な PO（実施主体者、活動内容及び活動時期）を明確にし、プロジェクト調整委員会において各自の進捗情報を共有・確認、調整する。

(2) 研修・短期専門家派遣の活用及び留意点

- 本邦研修と専門家を有機的に連携させる。例えば、研修員が研修で習得した技術・経験を、専門家が現地適用のための指導をする、短期専門家が本邦研修で受入支援する等の連携により、大きな成果が発現された。
- 研修員が研修期間中に作成するアクションプランに関し、プロジェクトの活動に有効な計画を作成するよう事前に指導し、帰国後プロジェクトがその実施を支援する。
- 行政官のみならず、地域住民代表者が本邦研修に参加する機会を設ける。本邦研修を通し、地域住民が知識・経験を得るとともに、行政官と地域住民のお互いの理解が深められる。ただし、より高い効果のためには、現地語（マレー語）通訳の配置が望ましい。

付 属 資 料

ミニッツ（M/M）及び合同評価報告書


MINUTES OF MEETINGS
ON
THE PROJECT ON SUSTAINABLE DEVELOPMENT
FOR BIODIVERSITY AND ECOSYSTEMS CONSERVATION IN SABAH
BETWEEN
THE JAPAN PROJECT TERMINAL EVALUATION TEAM
AND
AUTHORITIES CONCERNED OF THE GOVERNMENT OF MALAYSIA

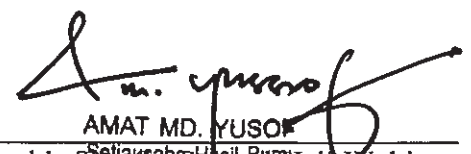
The Japanese Project Terminal Evaluation Team (hereinafter referred to as “the Team”) organized Japan International Cooperation Agency (hereinafter referred to as “JICA”) and headed by Ms. Misa KEMMIYA visited Malaysia from 30 October 2016 to 16 November 2016 for the purpose of conducting a Terminal Evaluation of “The Project on Sustainable Development for Biodiversity and Ecosystems Conservation in Sabah” (hereinafter referred to as “the Project”).

During its stay, the Team exchanged views and had a series of discussion with the Malaysian authorities concerned in order to evaluate the achievements of the Project.

As a result of the discussions, the Team and Malaysian authorities concerned agreed on the matters referred to in the documents attached hereto.

Kota Kinabalu, 16 November 2016


 Ms. Misa KEMMIYA
 Team Leader
 Terminal Evaluation Team,
 Japan International Cooperation Agency


 AMAT MD. YUSOF
 Setiausaha Hasil Bumi
 Jabatan Ketua Menteri
 Sabah
 F His Honourable Tan Sri Steward Haji Wakiman
 State Secretary
 The State Government of Sabah



Terminal Evaluation Report
on
The Project
on
Sustainable Development for Biodiversity and
Ecosystem Conservation in Sabah
in
Malaysia

Kota Kinabalu

November 16, 2016

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List of Abbreviations

APO	Annual Plan of Operation
APC	Asia Park Congress
ASEAN	Association of Southeast Asian Nations
BBEC	Bornean Biodiversity and Ecosystems Conservation
BR	Biosphere Reserve
CEPA	Communication, Education ,Participatory and Awareness
C/P	Counterpart
CRBR	Crocker Range Biosphere Reserve
CSR	Corporate Social Responsibility
EPD	Environment Protection Department
EU	European Union
FRIM	Forest Research Institute Malaysia
GEF	Global Environmental Facility
IPSI	International Partnership for the Satoyama Initiative
ISCMW	International Symposium on Conservation and Management of Wetlands
ITBC-UMS	Institute for Tropical Biology and Conservation, University of Malaysia, Sabah
JPP	JICA Partnership Program
LKSW	Lower Kinabatangan and Segama Wetland
MBP	Man and Biosphere Programme
M/M	Minutes of Meeting
NRO	Natural Resources Office
PDM	Project Design Matrix
PES	Payment for Ecosystem Services
PMC	Project Management Committee
PO	Plan of Operation
PSC	Project Steering Committee
R/D	Record of Discussions
REDD+	Reducing Emissions from Deforestation and Forest Degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries
REEP	River Environment Education Programme
SATREPS	Science and Technology Research Partnership for Sustainable Development
SBC	Sabah Biodiversity Council
SBS	Sabah Biodiversity Strategy
SEEN	Sabah Environmental Education Network
SEEP	Sabah Environmental Education Policy
SWCS	Sabah Wetlands Conservation Society
SaBC	Sabah Biodiversity Centre
SPs	Sabah Parks
TCTP	Third Country Training Programme
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
WPC	World Park Congress

2.

[Handwritten signature]

1. Outline of The Terminal Evaluation

1.1 Background

Sabah is one of the few places on earth still blessed with mega-biodiversity, which is not only vital to sustainable socioeconomic development of the State, but also a treasure for all humankind. Conservation of its biodiversity and ecosystems is of utmost importance.

JICA supported the Malaysian Federal and Sabah State Governments through the “Programme for Bornean Biodiversity and Ecosystems Conservation (BBEC) Phase 1 and 2” as technical cooperation projects under Japan’s Official Development Assistance (ODA). The Programme Purpose of BBEC/Phase 1 (February 2002 – January 2007) was “Comprehensive and sustainable approach for conservation is established.” while BBEC/Phase 2 (October 2007 – September 2012) aimed “A system for biodiversity and ecosystem conservation in Sabah is strengthened and Sabah State becomes capable of extending knowledge and skills on biodiversity conservation to other states of Malaysia and foreign countries.”

The authorities concerned of the Government of Malaysia have set the implementation of Sabah Biodiversity Strategy as a next step to be taken and requested the Government of Japan for the “Project on Sustainable Development for Biodiversity and Ecosystems Conservation in Sabah (SDBEC).”

1.2 Objective

The objectives of the Terminal Evaluation are as follows.

- (1) To review the degree of achievements of the Project, in accordance with the original plan described in the Record of Discussions (R/D), current Project Design Matrix (PDM Version 4) and Plan of Operations (PO Version 2).
- (2) To evaluate the Project in terms of the five (5) evaluation criteria (Relevance, Effectiveness, Efficiency, Impact and Sustainability).
- (3) To make recommendations concerning the activities and progress to be taken by the Project after the termination of the Project.
- (4) To draw the lessons learned from the implementation of the Project.
- (5) To prepare the Terminal Evaluation Report and Minutes of Meeting (M/M) to be signed. .

1.3 Members of Terminal Evaluation Team

The Terminal Evaluation Team (hereinafter referred to as “the Team”) is composed of the members in the table below.

Name	Position	Affiliation
Ms. Misa KEMMIYA	Leader	Senior Deputy Director, Nature Environment Team 1, Forestry and Nature Conservation Group, Global Environment Department, JICA
Ms. Reiko IITSUKA	Cooperation Planning	Officer, Nature Environment Team 1, Forestry and Nature Conservation Group, Global Environment Department, JICA
Dr. Tetsuro HAMADA	Evaluation Analysis	Senior Consultant, A&M Consultant. Inc.

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1.4 Schedule and Major Interviewees

The field survey in Malaysia commenced on 30 October, 2016 and is scheduled to be completed on 17 November, 2016 as shown in Appendix 1 for the details. The list of the major survey interviewees is attached in Appendix 2.

1.5 Methodology of Terminal Evaluation

The Terminal Evaluation for the Project is carried out in accordance with "JICA Guideline for the Project Evaluation". The Team evaluates the Project from three sections, (i) implementation process, (ii) achievement and progress, (iii) review by the five (5) evaluation criteria, namely "Relevance", "Effectiveness", "Efficiency", "Impact" and "Sustainability".

The questions and the indicators for the Terminal Evaluation for the Project are presented in the Evaluation Grid as shown in Appendix 3.

For data collection, the Team conducts the literature survey, questionnaire surveys and interviews with the officials in the Sabah State government, Institute for Tropical and Conservation (ITBC) of University of Malaysia, Sabah (UMS), district offices, JKK (Jawatankuasa Kemajuan dan Keselamatan Kampung (Village Security and Development Committee) chairpersons in the pilot project sites and the Japanese experts. The Team also conducts the two field visits to the pilot project sites.

Based on the results of the survey, the Team evaluates the implementation process, achievements and progress of the Project, and evaluates and analyses the Project from the five (5) criteria described below.

Criterion	Definition
Relevance	Relevance of the Project is reviewed by validity of the Project Purpose and the Overall Goal in connection with the Government development policies and Japan as well as needs of the target group and/or the ultimate beneficiaries in Malaysia.
Effectiveness	Effectiveness is assessed to what extent the Project has achieved its Project Purpose, clarifying the relationship between the Project Purpose and Outputs.
Efficiency	Efficiency of the Project implementation is analyzed with emphasis on the relationship between Outputs and Inputs in terms of timing, quality and quantity.
Impact	Impact of the Project is assessed in terms of positive/negative, and intended/unintended influence caused by the Project.
Sustainability	Sustainability of the Project is assessed in terms of institutional, financial and technical aspects by examining the extent to which the achievement of the Project will be sustained after the Project is completed.

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2. Summary of the Project

2.1 Project Design Matrix (PDM)

The PDM is a document that presents the main contents of the Project. The latest PDM (version 4) was approved on 30 June, 2015 based on the results of the Mid-term Review Mission (11 June to 1 July, 2015). The Terminal Evaluation was conducted based on the PDM (version 4) as shown in Appendix 4.

2.2 Framework of the Project

Duration	1 July 2013 to 30 June, 2017 (four years)
Project Sites (State of Sabah)	Core and Buffer Zones of Lower Kinabatangan and Segama Wetlands – Ramsar Site and its River Basin (approximately 3,000,000 Ha)
	Core, Buffer and Transition Zones of Croker Range Biosphere Reserve under UNESCO Man and Biosphere Programme (approximately 350,000 Ha)
Target Group	Staff members of concerned State Government agencies
	Local population (pilot site)
	Researchers of UMS and local NGOs
Implementation Agency	Sabah State Government (NRO, SaBC, SFD, SP, SWD, EPD, DID, LSD, DOA, DFS, STB, UPEN, District Offices (Tuaran, Tambunan, Penampang and Keningau District Offices)
	Institute for Tropical and Conservation (ITBC), University of Malaysia, Sabah (UMS)

2.3 Outline of the Project

(1) Overall Goal

Description	Sabah is known as the Asian Centre of Excellence for biodiversity conservation and sustainable development ¹ nationally and internationally
Indicators	1. At least 20 researchers visit Sabah for studies on biodiversity conservation and sustainable development in 5 years.
	2. At least 5 visitors visit Sabah for media coverage on biodiversity conservation and sustainable development in 5 years.
	3. At least 5 articles are published at international scientific journals regarding Sabah's experiences/ initiatives on sustainable development and biodiversity conservation in 5 years.
	4. Visible evidence is observed in the report to be prepared by the Malaysian Government regarding Sabah's contribution to the achievement of Aichi Target

1. "Sustainable Development" in this context is the promotion of sustainable socio-economic activities of the people in particular areas for the conservation of biodiversity and ecosystem.

(2) Project Purpose

Description	Biodiversity and ecosystem conservation for sustainable development in Sabah is promoted with national and international recognition.
Indicators	1. The project activities contribute to SBS implementation.
	2. The progress of SBS is monitored in the formalized way and reported to the Biodiversity Council / Chief Minister
	3. Sabah's experience and knowledge on biodiversity and ecosystem conservation are referred as good practices nationally and internationally
	4. At least 1 additional site is registered under international initiatives on biodiversity conservation and/or existing site(s) is expanded.
Important Assumptions for Overall Goal	Malaysia's and Sabah's policies on biodiversity and ecosystems conservation remain favorable to the project.

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(3) Outputs

Description	Indicators	Important Assumptions for Project Purpose
1. Management system of biodiversity and ecosystem conservation in Sabah is strengthened.	1-1. Management plan for CRBR and its annual plan are approved by the State Government with inputs from the pilot activities and CEPA activities.	The related projects supported by JICA are implemented as planned.
	1-1-1 Local beneficiaries in the pilot sites are satisfied with the capacity building including alternative livelihood activities under the project.	
	1-1-2 The level of awareness among the CEPA beneficiaries on conservation is improved in CRBR.	
	1-2. The level of awareness among the CEPA beneficiaries on conservation is improved in LKSW	
1-3. The knowledge on biodiversity and ecosystem conservation is enhanced in target group.		
1-4. The SBS monitoring system is established.		
2. The Sabah's experiences in biodiversity and ecosystem conservation are shared nationally and internationally.	2-1. At least 5 documents are generated regarding the Sabah's experiences.	
	2-2. At least 2 national / international seminars, workshops or conferences are organised.	
	2-3. Counterpart agencies participate in at least 2 international seminars, workshops or conferences	
	2-4. At least 50 persons from overseas countries participate in TCTP (Third Country Training Programme).	
	2-5. At least 90% of participants express their satisfaction regarding the TCTP	
	2-6. Knowledge is shared through national / international network(s) for biodiversity and ecosystem conservation.	
	2-7. Ideas of Sabah Biodiversity Strategy are incorporated into National Biodiversity Strategy in Malaysia to be prepared in 2014.	

(4)Activities

Outputs	Activities	Important Assumptions for Outputs
1. Management system of biodiversity and ecosystem conservation in Sabah is strengthened.	1-1. To support necessary revision / amendment of SBS	Sabah Biodiversity Strategy is approved by the cabinet
	1-2. To develop the monitoring system of SBS (format, reporting, and feedback)	
	1-3. To support preparation and monitoring of CRBR management plan / annual plan	Final MAB application for CRBR is approved by UNESCO.
	1-4. To synergize all the green technology / nature conservation projects ² in Sabah supported by JICA through the continuous engagement of counterpart agencies and other stakeholders and facilitate meetings and knowledge sharing regularly	
	1-5. To collaborate with other programmes and donor agencies for resource mobilisation in the implementation of management plan (e.g. UNDP/GEF, EU funded REDD+, etc.)	Budget allocation to the C/P organisations does not decrease largely.
	1-6. To support concerned agencies for mobilising necessary technical and financial resources of federal, state	Proper C/P personnel

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	and local governments and international frameworks for livelihood promotion and poverty alleviation	are designated by the Government and regularly dispatched for meetings and project works.
	1-7. To pilot livelihood improvement for community-based conservation through agriculture improvement, sustainable landuse, ecotourism and private business participation in marketing in collaborations with local government units, NGOs and concerned agencies	
	1-8. To support relevant agencies for the enforcement of relevant regulations to mitigate negative environmental impacts caused by large scale development projects	
	1-9. To organise trainings on CEPA for the local communities, local government agencies, NGOs and concerned agencies.	
	1-10. To support the monitoring of SEEP	
	1-11. To provide recommendations for improved regulatory framework for river administration and law enforcement for conservation and non-disruptive economic activities.	
2. The Sabah's experiences in biodiversity and ecosystem conservation are shared nationally and internationally.	2-1. To compile the Sabah's experiences into documents and literatures to consolidate the Sabah's experiences and to undertake additional research when necessary	Preconditions: (No major preconditions)
	2-2. To undertake study on possible sustainable financing mechanisms for biodiversity (i.e. the payment for ecological services (PES), biodiversity accounting, rationalisation of incentives and taxes for sustainable development, REDD+, CSR and strengthening of the Biodiversity Centre Fund, etc.)	
	2-3. To plan, implement, monitor, evaluate and follow up TCTP	
	2-4. To participate in, and/or host national and international conference / symposium / seminar/ training courses/ other activities for the knowledge sharing on Sabah's experiences, with collaboration of the Federal government when necessary	
	2-5. To share Sabah's experiences to policy formulation process at national level	
	2-6. To support the concerned agencies for active publicity and media strategy	

2. Those projects are:

1) Science and Technology Research Partnership for Sustainable Development Programme (SATREPS) "Creation of Green Innovative Industry from Oil Palm Plantation for the Bornean Bio-diversity Conservation" by Kyushu Institute of Technology, University Putra Malaysia & UMS (2013-2017)

2) JICA Partnership Programme (JPP) "A Training Programme for Biomass Carbonisation by the Yamasen Pool-type Oven" by City of Yame & Bamboo Techno Co. Ltd. (2012-2015)

3) JICA Partnership Programme (JPP) "Biodiversity Conservation through Community-based Rural Development around the Lower Kinabatangan River" by Rakuno Gakuen University" (2012-2016)

3. Achievements of the Project

3.1 Inputs

The detailed Inputs contributed from Malaysia and Japanese sides are described in Appendix 5.

(1) Inputs from Malaysia Side

Summary of Inputs from Malaysia side is shown in the table below.

Personnel Assignment	Project Director		Sabah State Secretary
	Deputy Project Director		Vice Chancellor, UMS
	Project Manager		Secretary, Natural Resources Office
	C/P agencies (Approx.15)		Several agencies of Sabah State government
Office Space	Project office in NRO		
Operational Cost of NRO (Total: USD 3,602)	2013	USD 571.61	<In-kind Contribution>: office space, equipment, and other office maintenance etc.
	2014	USD 1,100.24	
	2015	USD 1214.01	
	2016*	USD 716.21	

* Up to September 2016

(2) Inputs from Japanese Side

Summary of Inputs from Japanese side is shown in the table below.

Expert Dispatch	Long-term Expert (4 Persons in total)	2 Chief Advisor	
		1 Project Coordinator	
		1 Project Coordinator/Environmental Education	
	Short-term Expert (36 Persons in total)	CRBR management (4)	Soil Analysis (3)
		Satoyama Technology (3)	Soil Profile Development (2)
		Community Development (4)	Mt. Kinabalu Trail Safety Survey (3)
		Sustainable leadership (2)	Biodiversity Strategy Monitoring (1)
Sustainable Land Management (2)	Environmental Education (1)		
	Ramsar Management Plan Monitoring (1)	Assembly of Elephant Skelton and Museum Exhibition (1)	
Training in Japan (62 persons in total)	2013	20 persons	
	2014	18 persons	
	2015	17 persons	
	2016	7 persons (as of September 2016)	
Equipment Provided	22,248 Malaysia Ringgit (RM) in total (3x Laptop Computer, 1x GPS, 1x Soil Analysis) (600,696 JPY, 1RM =27 JPY)		
Operational Cost (JPY 49,033,901)	2013	RM 364,801.75 (JPY 11,301,558)	
	2014	RM 514,286.00 (JPY 16,626,866)	
	2015	RM 556,180.95 (JPY 16,746,608)	
	2016	RM 163,314.64 (JPY 4,358,8678) (as of September 2016)	

3.2 Activities

For production of Output 1 and Output 2, eleven (11) activities and six (6) activities were planned to be implemented respectively. At the time of the Terminal Evaluation, out of eleven (11) activities for Output 1, six (6) activities were completed and five (5) activities are on-going. Out of six (6) activities

for Output 2, three (3) activities were completed, one activity has been mostly completed and two (2) activities are on-going.

The status and situation of each activity for Output 1 and Output 2 are described in the table below.

(1) Activities for Output 1

The implementation stages of the activities to achieve Output 1 are indicated in the table below.

Output 1: Management system of biodiversity and ecosystem conservation in Sabah is strengthened.	
Activities	Status and Situation
1-1. To support necessary revision / amendment of SBS	<u>Completed</u> The revised SBS, which includes monitoring system, was prepared by ERE Consulting Group contracted by the Project. Official Launching of the revised SBS was held on 11 October 2016.
1-2. To develop the monitoring system of SBS (format, reporting, and feedback)	
1-3. To support preparation and monitoring of CRBR management plan / annual plan	<u>Completed</u> The Management Plan/Annual Plan was finalized will be approved by the Cabinet by the end of the Project.
1-4. To synergize all the green technology /nature conservation projects in Sabah supported by JICA through the continuous engagement of counterpart agencies and other stakeholders and facilitate meetings and knowledge sharing regularly	<u>Progressing</u> The Project and other JICA projects (SATREPS and JPP) shared each project's progress to seek collaboration. For example, REEP activities were carried out in Papar in 2014, Sandakan in 2013 and Penampang in 2016.
1-5. To collaborate with other programmes and donor agencies for resource mobilisation in the implementation of management plan (e.g. UNDP/GEF, EU funded REDD+, etc.)	<u>Progressing</u> NRO organized meetings focusing on PES in Babagon with UNDP in 2016. The Project, through NRO, will communicate with UNDP-GEF to look for collaboration to establish a PES mechanism.
1-6. To support concerned agencies for mobilising necessary technical and financial resources of federal, state and local governments and international frameworks for livelihood promotion and poverty alleviation	<u>Progressing</u> The concerned agencies through the Project such as DoA and SPs have provided technical support to the groups in Tudan village. The Project has been collaborating with the research-based livelihood improvement project of ITBC/UMS in Tudan village, which has been approved by the Federal Government.
1-7. To pilot livelihood improvement for community-based conservation through agriculture improvement, sustainable land use, ecotourism and private business participation in marketing in collaborations with local government units, NGOs and concerned agencies	<u>Progressing</u> The Project has piloted livelihood improvement activities for community-based conservation in Tudan and Sintuong-Tuong/Kiporing such as PRA (Participatory Rural Appraisal) and mulberry cultivation.
1-8. To support relevant agencies for the enforcement of relevant regulations to mitigate negative environmental impacts caused by large scale development projects	<u>Progressing</u> The Project has been supporting the C/Ps to monitor any negative impacts on biodiversity conservation in the project area. No development projects have been identified by the time of the Terminal Evaluation.
1-9. To organise trainings on CEPA for the local communities, local government agencies, NGOs and concerned agencies.	<u>Completed</u> The Project organized country-focused trainings for Sabah. The Project co-organized CEPA kit trainings with relevant organizations.
1-10. To support the monitoring of SEEP	<u>Completed</u> EPD has assigned a consultant to monitor SEEP (Sabah Environmental Education Policy), and submitted recommendations prepared by the consultant.

<p>1-11. To provide recommendations for improved regulatory framework for river administration and law enforcement for conservation and non-disruptive economic activities.</p>	<p style="text-align: center;"><u>Completed</u></p> <p>Some recommendations for the future regulatory framework were provided based on the study of "Economics of River Basin Management toward Sustainable Development for Biodiversity and Ecosystems Conservation in Sabah". An example is the introduction of conservation fees for water usages.</p>
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(2) Activities for Output 2

The implementation situation of the activities to produce Output 2 is indicated in the table below.

<p>Output 2: The Sabah's experiences in biodiversity and ecosystem conservation are shared nationally and internationally.</p>	
Activities	Status and Situation
<p>2-1. To compile the Sabah's experiences into documents and literatures to consolidate the Sabah's experiences and to undertake additional research when necessary</p>	<p style="text-align: center;"><u>Mostly Completed</u></p> <p>The Project has compiled 14 documents and materials up to date and will compile other four (4) documents and materials by the end of the project.</p>
<p>2-2. To undertake study on possible sustainable financing mechanisms for biodiversity (i.e. the payment for ecological services (PES), biodiversity accounting, rationalisation of incentives and taxes for sustainable development, REDD+, CSR and strengthening of the Biodiversity Centre Fund, etc.)</p>	<p style="text-align: center;"><u>Completed</u></p> <p>The Project organized a study trip on PES to Costa Rica. The Project has prepared "Study on Economics of River Basin Management for Sustainable Development on Biodiversity and Ecosystems Conservation in Sabah". Four (4) officials engaged in PES attended in the training courses, "Training for Realizing a Society in Harmony with Nature" in Japan.</p>
<p>2-3. To plan, implement, monitor, evaluate and follow up TCTP</p>	<p style="text-align: center;"><u>Completed</u></p> <p>The Project and all relevant organizations cooperated to design, implement and evaluate TCTP, and develop modules (training programme). Follow-up studies were conducted in Uganda and Tanzania in October 2013, Sri Lanka in 2014, and Vietnam and Cambodia in 2015.</p>
<p>2-4. To participate in, and/or host national and international conference / symposium / seminar/ training courses/ other activities for the knowledge sharing on Sabah's experiences, with collaboration of the Federal government when necessary</p>	<p style="text-align: center;"><u>Progressing</u></p> <p>The Project organized CRBR Seminar in December 2015 and co-organized with Sabah Wetlands Conservation Society 1st (Oct. 2014) and 2nd (Sep. 2016) International Symposium of Wetlands. The Project has participated in more than 16 conferences/symposium/seminars/etc. before the Terminal Evaluation. The Project will support NRO to host an Asian regional workshop for IPSI in April 2017</p>
<p>2-5. To share Sabah's experiences to policy formulation process at national level</p>	<p style="text-align: center;"><u>Progressing</u></p> <p>NRO organized two workshops (stakeholder workshop and draft strategy workshop), and presented outline of SBS on 12 December, 2014 at the occasion of MY BioD Seminar (theme: Mainstreaming biodiversity: Challenges and Opportunities) in KL.</p>
<p>2-6. To support the concerned agencies for active publicity and media strategy</p>	<p style="text-align: center;"><u>Completed</u></p> <p>The Project supported EPD to make "Environmental Education in Sabah" video to showcase Sabah's initiatives in environmental education programmes.</p>

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3.3 Outputs

The achievement of each Output is measured by the degree of fulfillment of the indicators for respective Outputs. Most of the Indicators for Output 1 have been fulfilled and the assessment of the degree of achievements of Indicators such as Indicator 1-1-1 is to be conducted by the Project. Almost all indicators for Output 2 have been fulfilled except for Indicator 2-5 of the assessment of satisfaction level of TCTP participants.

The achievements for Output1 and Outputs 2 are presented below.

Output 1: Management system of biodiversity and ecosystem conservation in Sabah is strengthened.	
Indicators	Status and Achievement
1-1. Management plan for CRBR and its annual plan are approved by the State Government with inputs from the pilot activities and CEPA activities.	<u>To be achieved</u> The technical meetings for annual plan/management plan for CRBR were organized since 2015 and those plans were finalised in November 2016. The plans are to be presented to the Sabah Water Resource Council and to be approved by the Cabinet by the end of the Project.
1-1-1 Local beneficiaries in the pilot sites are satisfied with the capacity building including alternative livelihood activities under the project.	In respect to Indicator 1-1-2, according to questionnaire in the REEP TOT (Training Of Trainers) programs, the majority of the participants obtained knew knowledge and improved their awareness.
1-1-2 The level of awareness among the CEPA beneficiaries on conservation is improved in CRBR.	In respect to Indicator 1-1-1, the level of satisfaction is to be assessed.
1-2. The level of awareness among the CEPA beneficiaries on conservation is improved in LKSW.	<u>Achieved</u> According to the questionnaire survey on the participants in CEPA kit training, the majority of them confirmed to be more concerned about environment and changed their behaviour.
1-3. The knowledge on biodiversity and ecosystem conservation is enhanced in target group.	<u>Achieved</u> Their knowledge has been enhanced by the project activities.
1-4. The SBS monitoring system is established.	<u>Achieved</u> The revised SBS including monitoring system was prepared and launched on 11 October 2016.

Output 2: The Sabah's experiences in biodiversity and ecosystem conservation are shared nationally and internationally.	
Indicators	Status and Achievement
2-1. At least 5 documents are generated regarding the Sabah's experiences.	<u>Achieved</u> More than five (5) documents have been prepared based on the Sabah's experiences such as inclusion of CUZ in the first Asia Parks Congress (Japan) in 2013 and World Parks Congress (Australia) in 2014.
2-2. At least 2 national/international seminars, workshops or conferences are organised.	<u>Achieved</u> Two international symposiums on Conservation and Management of Wetlands (ISCMW) in 2014 and 2016 were co-organized with Sabah Wetlands Conservation Society. CRBR Seminar was organized in December 2015.

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2-3. Counterpart agencies participate in at least 2 international seminars, workshops or conferences	<u>Achieved</u> The C/Ps have participated in more than two international seminars, workshops or conferences such as Asian Parks Congress in Japan in 2013 and Asian Conference on bio-cultural diversity in Japan in 2016.
2-4. At least 50 persons from overseas countries participate in TCTP.	<u>Achieved</u> 70 persons in total (13 in 2013, 20 in 2014, 17 in 2015 and 20 in 2016) have participated in the TCTP.
2-5. At least 90% of participants express their satisfaction regarding the TCTP	<u>To be achieved</u> According to the results of questionnaire survey, 92-95% of participants showed their satisfaction to TCTP. The level of satisfaction in 2016 is to be assessed by the end of the Project.
2-6. Knowledge is shared through national / international network(s) for biodiversity and ecosystem conservation.	<u>Achieved</u> NRO became the first official IPSI member in Malaysia. The IPSI regional meeting for Asia will be hosted by Sabah State Government in April 2017. The National Committee of wetlands in Malaysia is formed under MoNRE.
2-7. Ideas of Sabah Biodiversity Strategy are incorporated into National Biodiversity Strategy in Malaysia to be prepared in 2014.	<u>Achieved</u> SBS formulated in 2014 has been incorporated in the National Policy on Biological Diversity (2016-2025) in Malaysia, which referred to a statutory plan for gazetted protected areas and introducing the Tagal (indigenous system for sustainable use of biodiversity).

3.4 Project Purpose

The achievement level of Project Purpose is measured by the degree of fulfillment of the established four (4) indicators. Indicator 1, Indicator 3 and Indicator 4 have been achieved, and Indicator 2 is to be fulfilled in due course. The level of accomplishment of Project Purpose is presented in the table below.

Project Purpose: Biodiversity and ecosystem conservation for sustainable development in Sabah is promoted with national and international recognition.	
Indicators	Level of Achievement
1. The project activities contribute to SBS implementation.	<u>Achieved</u> The revised SBS including monitoring system was prepared through support from the Project. The Project has been contributing to the implementation of SBS by piloting effective collaboration with local communities living adjacent to protected areas.
2. The progress of SBS is monitored in the formalized way and reported to the Biodiversity Council / Chief Minister	<u>To be achieved</u> The monitoring system has been developed so that the progress of SBS will be monitored and reported to accordingly.
3. Sabah's experience and knowledge on biodiversity and ecosystem conservation are referred as good practices nationally and internationally	<u>Achieved</u> The National Policy on Biological Diversity (2016-2025) in Malaysia refers to SBS as a statutory plan for gazetted protected areas. The Tagal is introduced as an indigenous system contributing to sustainable use of biodiversity. Sabah State Government will host IPSI regional workshop for Asia in April 2017 and will share its experience and knowledge accordingly.
4. At least 1 additional site is registered under international initiatives on biodiversity conservation and/or existing site(s) is expanded.	<u>Achieved</u> CRBR was declared by ICC for MAB programme under UNESCO in June 2014. KK Wetland is waiting for designation as a Ramsar convention site.

3.5 Overall Goal

The current accomplishment level of Overall Goal is presented in the table below.

Overall Goal: Sabah is known as the Asian Centre of Excellence for biodiversity conservation and sustainable development nationally and internationally.	
Indicators	Level of Achievement
1. At least 20 researchers visit Sabah for studies on biodiversity conservation and sustainable development in 5 years.	The indicators of 1 to 3 are designed to measure the degree of fulfillment by collecting necessary information in 5 years after the end of the Project.
2. At least 5 visitors visit Sabah for media coverage on biodiversity conservation and sustainable development in 5 years.	
3. At least 5 articles are published at international scientific journals regarding Sabah's experiences/initiatives on sustainable development and biodiversity conservation in 5 years.	
4. Visible evidence is observed in the report to be prepared by the Malaysian Government regarding Sabah's contribution to the achievement of Aichi Target	It is expected that Sabah's contribution to the achievement of Aichi Target, particularly Objective 11, will be mentioned in the report for CBD-COP 13 in Mexico in 2016.

3.6 Implementation Process

(1) Project Management Structure

The structure and function of the Steering Committee (PSC) and Project Management Committee (PMC) based on the Record of Discussion (R/D) on 14 June 2013 are described in the figure below.

<u>Project Steering Committee (PSC)</u>		<u>Project Management Committee (PMC)</u>	
(Responsible for overall administration and implementation of the Project)		(Monitoring progress of the Project activities)	
Chairperson	Project Director (State Secretary of Sabah)	Chairperson	Project Manager (Secretary of NRO)
Vice Chairperson	Deputy Project Director (Vice Chancellor of UMS)	Secretary	NRO
Secretary	Project Manager (Secretary of NRO)		
<u>Members</u>		<u>Members</u>	
Malaysia Side	Federal Government Sabah State Government	Malaysia Side	ITBC-UMS, Sabah State Government and District Offices
Japanese Side	Chief Advisor and Project Coordinator JICA Malaysia Office	Japanese Side	All JICA experts

PSC was held on 17 Dec, 2013, 24 October, 2014 and 30 June, 2015, three times up to date (once a year). PMC was held every 3 months in accordance with the R/D. In meetings of PSC and PMC, the progress and issues to be improved of the Project have been shared and discussed by the committee members. Also, the Project monthly activity reports prepared by the Project have been distributed to all relevant stakeholders for information sharing.

(2) Project Implementation Structure

The Project's implementing agencies consist of several agencies of the Sabah State government as well as ITBC, UMS. At the time of the Mid-term Review, their responsibilities for the Project implementation were demarcated among these C/P agencies. They are summarized as follows.

- Management and coordination activities (Secretariat) of SBS, LKSW Management Plan, and CRBR Management Plan	NRO
- Activities conducted in the buffer zones of CRBR and LKSW areas	
- Activities including CEPA conducted in the core zone of CRBR area	Sabah Parks
- Activities including CEPA conducted in the core zone of LKSW area	Sabah Forestry Department
- Pilot activities	Department of Agriculture
- Knowledge sharing activities	NRO/ITBC

(3) Project Products

On the process of implementation of the Project activities, various types of reports and materials have been prepared and widely accepted by the target group. A list of the Project products is shown in Appendix 6.

4. Evaluation Results

4.1 Relevance

Relevance of the Project is “High”.

(1) Consistency with Malaysian Development Policy

The Project is consistent with the National Development Plan as well as policies on biodiversity conservation of Malaysia and the Sabah State. The current National Development Plan of Malaysia is the “11th Malaysia Plan” (2016-2020) that indicates six (6) strategic thrusts to transform the nation into a high-income economy, one of which is “Pursuing green growth for sustainability and resilience.” The Sabah State also has the State Development Plan named “Halatuju Pembangunan Dan Kemajuan Negeri Sabah (Way forward of Sabah State Development and Advancement)”, which states that certain areas should be reserved for conservation of natural resources to support healthy ecosystems with introducing the concept of zoning, in addition to the policies on environment and biodiversity conservation such as the Sabah Biodiversity Strategy (SBS) and Sabah Environmental Education Policy. The “Sabah’s Strategic Long Term Action Plan (2016 -2035)” specifies that the development in Sabah State should include economic, social and environmental aspects and SBS is placed of implementation tools for this Plan.

(2) Development Needs of Sabah State Government

Based on the above plan and policy, the Sabah State Government developed SBS as a comprehensive policy on biodiversity conservation and utilization. BBEC/Phase2 supported formulation of SBS and the Project (SDBEC) has been developing necessary capacity to implement and monitor the SBS. In addition to that, SDBEC itself was designed to contribute to the implementation of the SBS.

(3) Consistency with Japan’s ODA Policy for Malaysia

The Project is consistent with Japan’s ODA policy for Malaysia. Both the “Country Assistance Policy for Malaysia”(April 2012) of Japanese Government and “Country Analysis Paper” of JICA place “Supporting a balanced development towards Malaysia becoming a high-income nation,” “Response to common issues in East Asian region,” and “Japan-Malaysia Development Partnership beyond the East Asian region” as priority areas. The Project is in line with the policy of the Japanese Government and JICA.

(4) Needs of Target Group

The target group of the Project is stated as staff members of concerned State Government agencies, local population at the pilot sites, researchers of UMS and local NGOs in the R/D and the latest PDM. The Project objectives and activities were designed to meet their needs.

(5) Methodology

The Project was designed and responded to necessity of capacity development of the target group which was considered issues of promotion of biodiversity and ecosystems conservation for sustainable

development. Their needs are appropriately reflected in the current PDM (version 4).

4.2 Effectiveness

Effectiveness of the Project is “Medium high”.

(1) Expectation of Achievement of Project Purpose

Even though preparation of SBS including its monitoring system and the annual plan/management plan for CRBR was delayed, the Project had initiated the activities in advance before they were approved by the Cabinet. As a result, the three pillars of the Project, namely (i) support for implementation of SBS, (ii) formulation of management plan of CRBR including pilot project activities for sustainable development, and (iii) sharing Sabah’s experiences with foreign countries such as through TCTP, have been mostly realized.

Project Purpose: Biodiversity and ecosystem conservation for sustainable development in Sabah is promoted with national and international recognition.	
Indicators	Present Status
1. The project activities contribute to SBS implementation.	Achieved
2. The progress of SBS is monitored in the formalized way and reported to the Biodiversity Council / Chief Minister	To be achieved
3. Sabah’s experience and knowledge on biodiversity and ecosystem conservation are referred as good practices nationally and internationally	Achieved
4. At least 1 additional site is registered under international initiatives on biodiversity conservation and/or existing site(s) is expanded.	Achieved
Expectancy of Achievement	
Taking into consideration current level of fulfillment of each indicator, Project Purpose is likely to be attained by the end of the Project.	

(2) Logical Sequence and Important Assumption

The relationship between Outputs and Project Purpose is logically connected due to adjustment of PDM (version 4) approved by the PSC following recommendations by the Mid-Term Review. Regarding to Important Assumption from Outputs to Project Purpose of “The related projects supported by JICA are implemented as planned”, it has been affected due to the security situation in the eastern parts of Sabah. Although the related SATREPS project (Creation of Green Innovative Industry from Oil Palm Plantation for the Bornean Bio-diversity Conservation) changed its pilot project site to the western part with full support of NRO, Important Assumption is still effective and highly likely to be met.

(3) Contributing Factors for Project Purpose

The followings are the major contributing factors in achieving Project Purpose.

- Enhancement of NRO's coordination capacity and its recognized leadership among the stakeholders.
- High capacity of planning and management of UMS in implementation of the Project activities, particularly implementation of TCTP.
- Strategic selection of appropriate senior officials for trainings and international meetings for enhancing their leaderships and initiatives as well as developing networks in Japan, for example

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- the visit of Vice-chancellor of UMS (Deputy Project Director) to Hokkaido in Japan.
- Extension of technical trainings in Japan as motivation for staffs of the C/P agencies.
 - Involvement of local communities in Regional-focused trainings for Sabah, which enhanced their empowerment and awareness for biodiversity and ecosystem conservation.

(4) Hampering Factors for Project Purpose

The followings are the major hampering factors in achieving Project Purpose.

- Delay in obtaining approval of SBS from the Cabinet.
- Unfavorable security situation in the LKSW area.
- Limited number of staffs in the C/P agencies involving in the Project activities.
- Limited financial allocation to the C/P agencies (Particularly the Project activities that are not the C/P agencies' prioritized activities).

4.3 Efficiency

Efficiency of the Project is "High".

(1) Expectancy of Achieving of Outputs

The expectation of achievement of Outputs is described in table below.

Output 1: Management system of biodiversity and ecosystem conservation in Sabah is strengthened.	
Indicators	Present Status
1-1. Management plan for CRBR and its annual plan are approved by the State Government with inputs from the pilot activities and CEPA activities.	To be achieved
1-1-1 Local beneficiaries in the pilot sites are satisfied with the capacity building including alternative livelihood activities under the project.	
1-1-2 The level of awareness among the CEPA beneficiaries on conservation is improved in CRBR.	
1-2. The level of awareness among the CEPA beneficiaries on conservation is improved in LKSW.	Achieved
1-3. The knowledge on biodiversity and ecosystem conservation is enhanced in target group.	Achieved
1-4. The SBS monitoring system is established.	Achieved
Expectancy of Achievement	
Annual plan/management plan for CRBR are to be submitted for the approval of the Cabinet. The SBS monitoring system was officially established on 11 October 2016 and the Project will examine the SBS monitoring system within the Project period. In respect to Indicator 1-1-1, the assessments of degree of satisfaction will be conducted by the Project even though it is estimated to be more than satisfactory level. Judging from these, Output 1 is expected to be attained by the end of the Project.	

Output 2: The Sabah's experiences in biodiversity and ecosystem conservation are shared nationally and internationally.	
Indicators	Present Status
2-1. At least 5 documents are generated regarding the Sabah's experiences.	Achieved
2-2. At least 2 national / international seminars, workshops or conferences are organised.	Achieved
2-3. Counterpart agencies participate in at least 2 international seminars, workshops or conferences	Achieved

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2-4. At least 50 persons from overseas countries participate in TCTP.	Achieved
2-5. At least 90% of participants express their satisfaction regarding the TCTP	Achieved
2-6. Knowledge is shared through national/international network(s) for biodiversity and ecosystem conservation.	Achieved
2-7. Ideas of Sabah Biodiversity Strategy are incorporated into National Biodiversity Strategy in Malaysia to be prepared in 2014.	Achieved
Expectancy of Achievement	
All Indicators have been already achieved. Consequently, Output 2 has been achieved.	

(2) Input Delivery and Utilization

Inputs from both Malaysian and Japanese sides have been generally appropriate in terms of quantity, quality and timeline to contribute to the implementation of planned activities. Based on the request from the Malaysian Government, the present Project Coordinator has been playing a role of environmental education expert. The provided equipment and prepared materials have been managed and utilized properly for the Project activities. The C/P agencies have applied technologies and knowledge obtained in training courses in Japan to their own work. At the same time, local resources including expertise, knowledge, and information have been utilized adequately for the Project activities.

(3) Important Assumption from Activities to Outputs

The situation of fulfillment of Important Assumption is described in the table below.

Important Assumption	Situation of Fulfilment
Sabah Biodiversity Strategy is approved by the cabinet Final MAB application for CRBR is approved by UNESCO	They were categorized as the Pre-Conditions of the Project during the Mid-term Review. Thus, it was not necessary to evaluate the situation of fulfillment.
Budget allocation to the C/P organisations does not decrease largely.	They are still effective and highly likely to be met.
Proper C/P personnel are designated by the Government and regularly dispatched for meetings and project works	

(4) Implementation Process

The Team compared actual implementation of the Project activities with the current PO. Even though the Project has faced several constraints and had difficulties particularly in the first half of the Project period, Sabah and Japanese sides have made efforts to overcome these issues for implementation of the Project. As a result, implementation process has been generally satisfactory and the significant delay of the Project activities have not been identified till the time of the Terminal Evaluation, except for delay in the State Government's administrative procedures.

- The PSC meeting has been conducted three (3) times (once a year) before the Terminal Evaluation and made important decisions with collaboration of the C/P agencies. The PMC meeting has been organized every three (3) month for monitoring the Project progress.
- The Project monitoring has been conducted periodically and monthly activity reports prepared by the Project have been distributed to the concerned C/P agencies. The periodically information sharing

has contributed effectively to facilitate common understanding on progress of the Project.

- The methods and techniques of the Project are considered useful and applicable to the C/P agencies. Technology transfer to the C/P agencies has been conducted without any difficulties through the short-term experts and technical trainings in Japan. The technical transfer has greatly contributed to enhancement of their technical capacities.

4.2 Impact

Impact of the Project is "Medium high"

(1) Expectancy of Achieving Overall Goal

The expectancy of achievement of Overall Goal is measured by the degree of fulfillment of Indicators after the end of the Project.

Overall Goal: Sabah is known as the Asian Centre of Excellence for biodiversity conservation and sustainable development ¹ nationally and internationally.
Indicators
1. At least 20 researchers visit Sabah for studies on biodiversity conservation and sustainable development in 5 years. 2. At least 5 visitors visit Sabah for media coverage on biodiversity conservation and sustainable development in 5 years. 3. At least 5 articles are published at international scientific journals regarding Sabah's experiences/initiatives on sustainable development and biodiversity conservation in 5 years. 4. Visible evidence is observed in the report to be prepared by the Malaysian Government regarding Sabah's contribution to the achievement of Aichi Target
Expectancy of Achievement
Taking consideration the situation of achievements of two Outputs and Project Purpose at the time of Terminal Evaluation, Indicator 1, 2 and 3 are likely to be achieved in 5 years after the end of the Project. In respect to Indicator 4, it is expected that Sabah's contribution to the achievement of Aichi Targets will be referred in the report to be prepared by the Malaysian Government in the occasions like CBD-COP 13 in Mexico in 2016. From this perspective, Overall Goal is most likely to be achieved.

(2) Important Assumption from Project Purpose to Overall Goal

Important Assumption from Project Purpose to Overall Goal is "Malaysia's and Sabah's policies on biodiversity and ecosystems conservation remain favorable to the project." This is still effective and highly likely to be met as mentioned in the evaluation criteria of "Relevance".

(3) Positive and Negative Impact

The following positive impacts have been observed at the time of the Terminate Evaluation.

- ITBC/UMS research project named "Environmental Conservation and Community Capacity Building at Kg. Tudan, Tuaran, Sabah: Utilizing Mulberry Tree in Tudan" is designed based on the result of the Project's activities at one of the pilot project sites. It was approved by the Federal Government and has been conducting studies on mulberry for the improvement of local livelihood.
- Process to gazettment of Babagon water catchment area as a water protected area and water conservation area has started. It is the first case in Sabah through implementation of NRO's water

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catchment management project. The trust fund for conservation was established in NRO at the state level based on the approval by the Cabinet.

- Tudan village, one of pilot site for livelihood improvement activities, has been referred as a state model for sustainable community development.
- The PRA, which was conducted at the pilot project sites, is recognized as an effective tool for DoA. DoA intends to apply the PRA to other villages.
- Sabah Parks (SPs) institutionalized REEP into their own task and has been taking a leadership in implementing REEP in accordance with the decision by the PSC (24 October, 2015).

On the other hand, no negative impacts have been found by the time of the Terminal Evaluation.

(4) Positive and Negative Unexpected Effects

1) Positive Unexpected Effect

The members of women group of Tudan village have shared their knowledge obtained from the pilot project activities with the other members in the neighboring three (3) villages.

2) Negative Unexpected Effects

No negative unexpected effects have been observed and no widening gaps have been found in gender, ethnicity, or classes, either positive or negative.

4.3 Sustainability

Sustainability of the Project is “Medium high”

(1) Policy and Institutional Aspect: High

The “11th Malaysia Plan” (2016-2020) of Malaysia Government as well as the State Development Plan “ Way forward of Sabah State Development and Advancement” and “Sabah’s Strategic Long Term Action Plan (2016 2035)” are favorable for biodiversity and ecosystem conservation. The role of NRO in the Project period has been well recognized among the stakeholders and this institutional arrangement is expected to be continued after the end of the Project.

Judging from the above, it is assumed that policy and institutional aspects of the sustainability are high.

(2) Organizational Aspect: Medium

The number of staff in the C/P agencies has been decreasing due to the current policy of downsizing of the number of staff in the Sabah State Government. The limited number of the State Government staff may affect the sustainability of the Project effects. In addition to that, technical officers who have obtained technologies through the Project may be transferred or promoted to the other position/section.

To this end, the organizational aspect of the sustainability is considered “medium”.

(3) Financial Aspect: Medium

The financial sustainability is a key for sustainability of the Project effects. Due to the recent economic climate, it is difficult to prospect the sufficient budget allocation from the Sabah State

Government in order to secure the Project sustainability. In respect to PES, process to gazette Babagon water catchment area as water protected area and water conservation area has been started, and the general trust fund was set up. However, its management plan and action plan have not been formulated and PES mechanism has not been yet actualized.

Judging from the above, financial aspect of the sustainability is presumed to be “medium”.

(4) Technical Aspect: High

As mentioned already, techniques and knowledge transferred by the Project are appropriate to the C/P agencies in terms of contents and methods, which were obtained through technical trainings in Japan and inputs from JICA experts without any difficulties. The C/Ps have utilized these techniques and knowledge well in their own tasks systematically. The documents and materials prepared by the Project can be utilized for further dissemination of the Project effects.

Therefore, technical aspect of the sustainability is prospected to be “high”.



5. Conclusion and Recommendations

5.1 Conclusion

The Team confirmed that the Project has been carried out satisfactory and it is most likely to achieve Project Purpose by the end of the Project even though the Project encountered several constraints and difficulties in the first half of the Project period. The Project has improved awareness of peoples in Sabah for biodiversity and ecosystem conservation, and played an important role to encourage various C/P agencies to collaborate towards the common goal of sustainable development in Sabah State.

The Project has greatly contributed to capacity development of the C/P agencies particularly through technical trainings in Japan and inputs from short-term experts. Accordingly, the C/P agencies have sufficiently improved their technical and institutional capacities.

It should be noted that these results are attributed to the strong willingness of the C/P agencies to cooperate with the Project and their initiatives for the Project activities.

Results of Terminal Evaluation by the five (5) evaluation criteria are summarized below.

Criteria	Evaluation	Summary
Relevance	High	The Project coincides with development policies of Malaysia, Sabah State and Japan and has been responding to needs of Target Group.
Effectiveness	Medium high	Project Purpose is most likely to be achieved. The relationship between Outputs and Project Purpose is logically connected in the current PDM (version 4) due to adjustment by the Mid-Term Review.
Efficiency	High	Outputs are expected to be achieved. The significant delay of the Project activities is not identified and technology transfer is conducted without any difficulties. Cost-performance is high.
Impact	Medium high	Overall Goal is most likely to be achieved. The tangible effects are observed on capacity development of C/P agencies and outcome of the pilot project activities. No negative impact and unexpected negative impact are identified.
Sustainability	Medium high	Policy/institutional aspects and Technical aspect are "high". Organizational aspect and Financial aspect are "medium" due to uncertainty of budget, manpower and resources.

* Ranking according to the five-grade evaluation, High, Medium high, Medium, Medium low and Low.

Judging from the above findings, it is concluded that the Project should be terminated on 30 June, 2017 as planned. To ensure sustainability of Project effects after the end of the Project, both Malaysian/Sabah State side and Japanese side should take into consideration the recommendations stated under 5.2 after the end of the Project.

5.2 Recommendations

On the ground of the above results, the Term made the following recommendations.

- (1) Counterpart Agencies
 - C/P Agencies will continue to engage in the conservation of biodiversity and ecosystems in Sabah as the Asian Centre of Excellence for biodiversity conservation and sustainable development. They will

also continue to disseminate and share such knowledge and experience nationally and internationally especially through NRO and UMS.

- C/P agencies are expected to strengthen collaboration with private sector in order to promote Green Development and Economy for conservation of biodiversity and ecosystems in Sabah.
- For sustainable financing, C/P agencies will continue to make efforts to mobilize external financial resources rather than relying on the State Government budget.

To Department of Agriculture

- DoA will continue to support activities at the pilot sites under collaboration with other relevant C/Ps.
- By utilizing tools such as PRA, DoA will promote the livelihood improvement activities to other villages. For development and value-add of agricultural products, DOA will guide the local communities to diversify the products based on the available local resources and cultures.

(2) JICA

- JICA will continue to be a partner of Sabah for the conservation of biodiversity and ecosystems.
- JICA will continuously support Sabah as COE to disseminate their information and experiences as well as to facilitate Sabah's network with Japanese sites, areas, local governments for mutual learning on biodiversity conservation.

5.3 Lessons Learned for other JICA project/ project formulation

The Project has the following lessons learned.

(1) Project Framework and Project Management

- To set a concrete and achievable project purpose and review/revise the PDM if necessary:

Although original Project Purpose was not well designed, the revision of PDM including Project Purpose at the Mid-term Review enabled this Project to be evaluated as satisfactory with appropriate Project Purpose.

- To design project activities and indicators which C/Ps and JICA experts can directly engage or/and support:

The Project included activities and indicators which C/Ps could not directly engage. For example, the Project can only support application process for registration under international framework but the approval of the registration will be made by the responsible organizations. It is also recommended to remove activities in the areas with high security concern based upon mutual agreement among the concerned agencies when the Project encounters security restriction during the project period.

- To develop and share a detailed Plan of Operation among C/Ps:

It is important to develop a detailed PO (ex. Activity 1-1-1), which clearly states each C/P's responsibility, activities, and their timeline, especially for any projects with many C/Ps involved and various activities in various targeted areas. Based on this detailed PO, progress of each activity is monitored during Joint Coordination Committee (JCC) and accordingly the project can be appropriately managed with mutual

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understanding of all C/Ps.

(2) Utilization of trainings in Japan and JICA short-term experts

- To utilize trainings in Japan and short-term experts to maximize impact:

The Project designed some trainings and some short-term experts to supplement each other (for instance, short-term experts accept trainers in Japan, and these experts support trainees in Malaysia to apply the techniques and knowledge obtained during trainings in Japan).

- To utilize action plans of JICA trainees to the Project implementation:

The Project instructed the trainees in advance to prepare action plans to be aligned to the Project activities. By doing so, the Project effectively supported those trainees to implement their action plans in Sabah.

- To include the representatives of local communities in trainings with the government officials:

Not only the government officers or NGO staff, representatives of local communities could obtain knowledge and techniques from trainings in Japan. Such trainings also create opportunities for the representatives from Governments and local communities to deepen their mutual understanding. However, it should be noted that trainings in local language be organized to increase understanding of the trainees from the communities and produce effective results.

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-End-



Appendix 1 Schedule for Terminal Evaluation

As of November 16, 2016

			Japanese Terminal Evaluation Team		
			Ms. Kemmiya (Leader)	Ms. Iitsuka (Cooperation Planning)	Dr. Hamada (Evaluation Analysis)
1	Oct 30	Sun			Tokyo to KL
2	Oct 31	Mon			Meeting at JICA Malaysia Office Meeting at EU delegate in Malaysia Move KL to KK by air
3	Nov 1	Tue			Meeting with the Project team Meeting with NRO (management)
4	Nov 2	We d			Meeting with Dep of Agriculture Meeting with Land and Survey Dep Meeting with Sabah Parks Meeting with SaBC
5	Nov 3	Thu		Arival in KK	Site Visit to Sintuong Tuong Village Meeting with Tambuong District
6	Nov 4	Fri			Meeting with NRO (water resources) Site Visit to Tudan village
7	Nov 5	Sat			Preparation of the Report
8	Nov 6	Sun			Preparation of the Report
9	Nov 7	Mon			Meeting with Sabah Tourism Board Meeting with Dep of Wildlife Meeting with Department of Fisheries Meeting with DID Meeting with Green Spider (UNDP-GEF) and UNDP PES
10	Nov 8	Tue			Meeting with Town and Regional Planning Meeting with EPD Meeting with ITBC/UMS and skelton assembly check
11	Nov 9	We d			Meeting with SFD in KK at HoB Meeting with Sabah Wetland Conservation Society
12	Nov 10	Thu	Arival in KK		Meeting with NGO CLEAR Internal Meeting of the Terminal Evaluation Team
13	Nov 11	Fri			Meeting with the project team Countesy call to NRO Secretary Meeting with NRO Meeting with key CPs for a discussion on the draft report
14	Nov 12	Sat			Site visit to Tudan Village (Community hall)
15	Nov 13	Sun			Preparation of the Report
16	Nov 14	Mon			Mission meeting Discusson with NRO on the draft report Meeting with key CPs for discussiun on the draft report Revise the draft report and distribution it to C/Ps
17	Nov 15	Tue			Finalization of the evaluation report Meeting with NRO to share the finalized report Briefing to Secretary from Jerald
18	Nov 16	We d			Steering Committee, Sign on MM Courtesy call to Consular Office of Japan
19	Nov 17	Thu			Departure from KK airport Arrival in Tokyo

Appendix 2 List of Major Survey Interviewees

As of 16 November 2016

1. Japanese Side

SN	Name	Affiliation
1	Mr. Hiroyuki Hatori	Chief Advisor
2	Ms. Akemi Yoda	Project Coordinator/Environmental Education
3	Mr. Shinsaku Fukazawa	Senior Representative, JICA Malaysia Office
4	Ms. Tomoko Miyagawa	Representative, JICA Malaysia Office
5	Ms. Hiroko Matsuo	Consular Office of Japan
6	Mr. Kunihiko Kato	Second Secretary/Vice-Consul

2. Malaysia Side

SN	Name	Position/Title
1	Mr. Gerald Jetony	Senior Geologist, Natural Resources Office (NRO)
2	Ms. Datin Elizabeth Malangig	Chief Ass. Director (Research), Dep of Agriculture
3	Mr. Freddy Kou	Ass. Director, Land Enquiry and Mining Section, Land and Survey Dep
4	Mr. Ludi Apin	Assistant Director, Sabah Parks Board of Trustees
5	Dr. Abdul Fatah Amir	Director, SaBC
6	Mr. Anthony	JKK chairman of Sintuong Tuong
7	Ms. Luvita Koisun	Assistant Tambueng District Officer
8	Mr. Thomas Logijin	Tambunan District Officer
9	Mr. Awang Shaminan Datuk Hj. Awang Sahari	Chief Water Resources Unit, NRO
10	Ms. Emmylice Sirinus	JKK chairman of Tudan Village
11	Mr. Julinus J. Jimit	Senior Manager, Tourism Product Division, Sabah Tourism Board
12	Mr. Peter Malim	Ass. Director II, Dep of Wildlife
13	Dr. Hjh. Norasmah Dacho	Ass. Director, Department of Fisheries
14	Mr. Miklin Ationg	Ass. Director, Department of Irrigation and Drainage
15	Mr. Denny Malinggi	Planning officer, (Research and Development), Department of Town and Regional Planning
16	Ms. Daisy Aloysius	Principal Ass. Director (Development), Environment Protection Department
17	Prof. Charles S. Vairappan	Inst. for Tropical Biology and Conservation (ITBC-UMS)
18	Mr. Hussin Tukiman	District Forestry officer, SFD
19	Mr. Abdul Samah Sapni	Assistant District Forestry Officer, SFD
20	Mr. Mohd Amzari Moh Yusof	Planning Officer (legal), SFD
21	Ms. Yong Szu Cherng	Planning Officer (tourism), SFD
22	Ms. Rita Ignatius	Manager/Executive Secretary, Sabah Wetland Conservation Society (SWCS)
23	Ms. Jane Joimin	Environmental Education Officer, SWCS
24	Ms. Winnie Jimis	Chairperson, NGO CLEAR
25	Tn. Hj. Amat Md. Yusof	Director, Natural Resources Office (Project Manager)

3. Other

SN	Name	Position/Title
1	Ms. Shamala Joachim	Trade Officer of Trade Section, EU Delegation to Malaysia
2	Mr. Alfonso Pino	Trade Officer of Trade Section, EU Delegation to Malaysia
3	Ms. Gan Pek Chuan	UNDP KL Office
4	Mr. Lee Kian Foh	Green Spider Consultant (UNDP-GEF)
5	Mr. Jeflus. S. Sinajin	UNDP-GEF Project Manager

Appendix 3 Evaluation Grid for Terminal Evaluation

1. Achievement of the Project

Items		Indicators	Necessary Data	Data Source/ Data Collection Methods
Overall goal	Sabah is known as the Asian Centre of Excellence for biodiversity conservation and sustainable development nationally and internationally.	1. At least 20 researchers visit Sabah for studies on biodiversity conservation and sustainable development in 5 years.	Number of researchers who visit Sabah	- State gov. interview
		2. At least 5 visitors visit Sabah for media coverage on biodiversity conservation and sustainable development in 5 years.	Number of media who visits to cover biodiversity conservation and sustainable development	- State gov. interview
		3. At least 5 articles are published at international scientific journals regarding Sabah's experiences/ initiatives on sustainable development and biodiversity conservation in 5 years.	Number of articles that are published at international scientific journals.	- State gov. interview
		4. Visible evidence is observed in the report to be prepared by the Malaysian Government regarding Sabah's contribution to the achievement of Aichi Target.	Number of visible evidence which are observed in the report to be prepared by the Malaysian Government.	- State gov. interview
Project purpose	Biodiversity and ecosystem conservation for sustainable development in Sabah is promoted with national and international recognition.	1. The project activities contribute to SBS implementation.	Monitoring reports of SBS and the Project activities.	- State gov. interview - Project
		2. The progress of SBS is monitored in the formalized way and reported to the Biodiversity Council / Chief Minister.	Monitoring reports on SBS.	- State gov. interview (Biodiversity Council / Chief Minister.)
		3. Sabah's experience and knowledge on biodiversity and ecosystem conservation are referred as good practices nationally and internationally	International and national scientific journals. Also international and national seminars, workshops or conferences.	- State gov. interview
		4. At least 1 additional site is registered under international initiatives on biodiversity conservation and/or existing site(s) is expanded.	Registration on additional site or expansion of existing site	- State gov. interview - Project
Outputs	1. Management system of biodiversity and ecosystem	1-1 Management plan for CRBR and its annual plan are approved by the State Government	Approved management plan and annual plan for CRBR as well as level of satisfaction with	- Project - State gov. interview

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Items	Indicators	Necessary Data	Data Source/ Data Collection Methods
conservation in Sabah is strengthened	with inputs from the pilot activities and CEPA activities. 1-1-1 Local beneficiaries in the pilot sites are satisfied with the capacity building including alternative livelihood activities under the project. 1-1-2 The level of awareness among the CEPA beneficiaries on conservation is improved in CRBR.	Project activities of local beneficiaries in pilot sites and level awareness of CEPA beneficiaries in CRBR.	
	1-2 The level of awareness among the CEPA beneficiaries on conservation is improved in LKSW.	Improvement of level of awareness of local beneficiaries in LKSW	- Project - State gov. interview
	1-3 The knowledge on biodiversity and ecosystem conservation is enhanced in target group.	Enhanced level of target group to knowledge on biodiversity and ecosystem conservation.	- Project - State gov. interview
	1-4 The SBS monitoring system is established.	Monitoring reports on SBS	- State gov. interview
2. The Sabah's experiences in biodiversity and ecosystem conservation are shared nationally and internationally.	2-1 At least 5 documents are generated regarding the Sabah's experiences.	Number of documents generated regarding the Sabah's experiences	- Project reports & references review
	2-2 At least 2 national seminars, workshops or conferences are organized.	Number of national seminars, workshops or conferences organized	- Project reports & references review
	2-3 Counterpart agencies participate in at least 2 international seminars, workshops or conferences.	International seminars, workshops or conferences in which counterpart agencies participated	- Project reports & references review
	2-4 At least 50 persons from overseas countries participate in TCTP.	Number of TCTP participants who participated in TCTP.	- Project reports & references review
	2-5 At least 90% of participants express their satisfaction regarding the TCTP.	Satisfaction level of participants to TCTP.	- Project reports & references review - ITBC/UMS interview
	2-6 Knowledge is shared through national / international network(s) for biodiversity and ecosystem conservation	National / International network on biodiversity established with Sabah	- Project reports & references review
	2-7 Ideas of Sabah Biodiversity Strategy are incorporated into National Biodiversity Strategy in Malaysia to be prepared in 2014.	Ideas of Sabah Biodiversity Strategy incorporated into National Biodiversity Strategy in Malaysia	- Project reports & references review

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Items		Indicators	Necessary Data	Data Source/ Data Collection Methods
Inputs	Inputs from Malaysian side	Planned inputs 1. Personnel - Project Director - Deputy Project Director - Project Manager - Counterpart personnel 2. Office Space - Necessary facilities for the project (office space, equipment, telephone line and other office maintenance) 3. Operation costs - Local program cost - Expenditure for Malaysian counterpart personnel	Actual inputs including unplanned ones	- Project reports & references review
	Inputs from Japanese side	Planned inputs 1. Personnel <Long-term experts> - Chief advisor - Project coordinator <Short-term experts> - CRBR Management - SATOYAMA technology - CEPA - Community Development and livelihood 2. Machinery and Equipment - Equipment necessary upon mutual agreement 3. Training - Training in Japan 4. Operation costs - Local program cost	Actual inputs including unplanned ones	- Project reports & references review
Important assumptions	Important assumptions towards overall goal	1. Malaysia's and Sabah's policies on biodiversity and ecosystems conservation remain favorable to the project.	Important assumptions that are likely to give influence on the project	- Project reports & references review

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Items		Indicators	Necessary Data	Data Source/ Data Collection Methods
	Important assumptions towards project purpose	1. The related projects supported by JICA are implemented as planned.	Important assumptions that have given influence on the project	- Project reports & references review
	Important assumptions towards outputs	1. Sabah Biodiversity Strategy is approved by the cabinet. 2. Final MAB application for CRBR is approved by UNESCO. 3. Budget allocation to the C/P organizations does not decrease largely. 4. Proper C/P personnel are designated by the Government and regularly dispatched for meetings and project works.	Important assumptions that have given influence on the project	- Project reports & references review

2. Implementation Process

Evaluation Questions		Criteria for Judgment	Necessary Data	Data Source/ Data Collection Methods
Survey Items	Sub-Survey Items			
Implementation of activities	Have the project activities been implemented as planned?	- Comparison of the planned activities indicated in PDM with the actual activities implemented - Existence of added or stopped activities and their reasons	- PO - Implementation status of the planned activities	- Project reports & references review
Project management system	Is there no problem in the project management system?	- Whether the project implementation system is appropriate for managing the project effectively and efficiently. - Whether the project is managed properly.	- Project implementation structure/system - Situation of project management	- Experts interview - State gov. interview
	Is the monitoring system for the project managed appropriately?	- Whether meetings of PSC and PMC are regularly held and the project progress is shared among the committee members. - Whether the project is monitored properly.	- PSC and PMC meetings held - Project's monitoring situation	- Experts interview - State gov. interview
	Is there no problem in the communication between experts and C/P?	Whether regular and enough communication between experts and C/P is taken.	Frequency of communication between experts and C/P	- Experts interview - State gov. interview
Degree of participation of C/P	Has the degree of participation/ownership of C/P in the project been high?	- Whether C/P fully understand the objectives, progress and issues to be improved of the project. - Whether C/P takes the initiative in getting	- C/P's level of understanding to the project - C/P's level of participation to the project activities	- Experts interview - State gov. interview

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Evaluation Questions		Criteria for Judgment	Necessary Data	Data Source/ Data Collection Methods
Survey Items	Sub-Survey Items			
		engaged in the project activities.		
	Are appropriate post/personnel allocated as C/P?	Whether appropriate organization, department and personnel are allocated as C/P.	Existence of other organization, department and personnel necessary to cooperate in the project	- Experts interview - State gov. interview
	Has the degree of participation/ownership of the target group in the project been high?	Whether Tuaran district officers and local residents of Kg. Tudan and Sintuong Tuong / Kiporing have fully participated in the project activities.	local residents' level of participation to the project activities	- Tuaran DO interview - Tudan & Sintuong Tuong / Kiporin locals interview
Problems in the process of implementation	Are there any factors that have inhibited the smooth implementation of the project? If any, what is the cause?	- Existence of obstructive factors in the implementation of the project - Whether any correspondence to the obstructive factors is taken or not.	- Examples of obstructive factors in the implementation of the project - Examples of correspondence to the obstructive factors	- Experts interview - State gov. interview - ITBC/UMS interview - Tuaran DO interview - Tudan /Sintuong Tuong / Kiporin locals interview

3. Five Evaluation Criteria

Relevance

Evaluation Questions		Criteria for Judgment	Necessary Data	Data Source/ Data Collection Methods
Survey Items	Sub-Survey Items			
Necessity	Does the project meet local development needs?	Whether there have been no changes in local development needs in Sabah state after the project has started.	Needs on the biodiversity and ecosystems conservation in Sabah state	- Preliminary Survey Reports review
Priority	Is the project in line with the development policy of Malaysia/Sabah?	Whether there have been no changes in the Malaysia and Sabah's national or state development policy after the project has started.	Malaysia and Sabah's national or state development plan and related policies on biodiversity and ecosystems conservation - 11 th Malaysia Plan (2016-2020) - Direction of Sabah State Development and Advancement (Halatuju) (2006-2013)	- Preliminary Survey Reports review
	Is the project in line with the Japan's ODA policy?	Whether there have been no changes in the Japan's ODA policy towards Malaysia after the project has started.	Japan's ODA policy towards Malaysia - Country Assistance Policy for Malaysia (April 2012) - Rolling Plan for Malaysia (April 2014)	- Preliminary Survey Reports review - Japan's ODA policy review
Appropriateness of project means	Is the project appropriate as a strategy for producing an effect to the development issues in	- Whether the project approach/design is appropriate as the means of achieving the project purpose and overall goal.	- Evaluation to the project approach/design by stakeholders - Malaysia and Sabah's national or state	- Experts interview - State gov. interview

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Evaluation Questions		Criteria for Judgment	Necessary Data	Data Source/ Data Collection Methods
Survey Items	Sub-Survey Items			
	Malaysia/Sabah?	- Existence of inconsistency and problems of PDM in framework of Malaysia and Sabah's national or state development plan	development plan and PDM	
	Is the selection of target area/group appropriate?	Whether the selection of pilot site/target group are appropriate.	Opinions of relevant persons	- Experts interview - State gov. interview
	Can the project become widespread to other areas/groups?	Whether the project activities can be spread to other areas/groups.	Opinions of relevant persons	- Experts interview - State gov. interview

Effectiveness

Evaluation Questions		Criteria for Judgment	Necessary Data	Data Source/ Data Collection Methods
Survey Items	Sub-Survey Items			
Prospect for achieving project purpose	Is there any prospect for achieving project purpose by the end of the project?	Indicators of project purpose	Results of Indicators of project purpose	Same as "1. Achievement of the Project"
Causal relationship	Are outputs enough to achieve project purpose?	- Whether project purpose will be achieved as a result of the achievement of outputs. - Existence of contributive factors to the achievement of project purpose other than outputs	- Achievement level of outputs - Examples of contributive factors	- Experts interview - State gov. interview
	Are there any obstructive factors against the achievement of project purpose?	- Existence of negative factors that inhibit the achievement of project purpose - Whether any correspondence to the obstructive factors is taken.	- Examples of obstructive factors - Examples of correspondence to the obstructive factors	- Experts interview - State gov. interview
	Will the important assumptions towards project purpose not give influence on the project?	Existence of important assumptions that have given influence on project purpose	Important assumptions that gave influence on the project	Same as "1. Achievement of the Project"

Efficiency

Evaluation Questions		Criteria for Judgment	Necessary Data	Data Source/ Data Collection Methods
Survey Items	Sub-Survey Items			
Achievement of outputs	Is the achievement level of outputs favorable?	Indicators of outputs	Results of Indicators of outputs	Same as "1. Achievement of the Project"
Causal relationship	Are inputs and activities appropriate in achieving outputs?	- Whether activities are necessary and sufficient conditions in just proportion for achieving	- Actual inputs - Actual activities implemented	Same as "1. Achievement of the Project" and "2.

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Evaluation Questions		Criteria for Judgment	Necessary Data	Data Source/ Data Collection Methods
Survey Items	Sub-Survey Items			
		outputs. - Whether inputs are necessary in just proportion for implementing the project activities.		Implementation Process”
	Are there any obstructive factors against the achievement of outputs?	- Existence of negative factors that inhibit the achievement of outputs - Whether any correspondence to the obstructive factors is taken.	- Examples of obstructive factors - Examples of correspondence to the obstructive factors	- Experts interview - State gov. interview - ITBC/UMS interview - Tuanan DO interview
	Is there any influence by the important assumptions towards outputs?	Existence of important assumptions that have given influence on outputs	Important assumptions that gave influence on the project	Same as “1. Achievement of the Project”
Appropriateness of inputs from Malaysian side	Are the number, placement and skills of C/P appropriate?	Existence of problems in the number, placement and skills of C/P	Problems in the number, placement and skills of C/P	Same as “2. Implementation Process”
	Are the facilities from Malaysian side appropriate?	Existence of problems in facilities provided by Malaysian side	Facilities provided by Malaysian side	- Project reports & references review
	Are the local costs from Malaysian side appropriate?	Existence of problems in local costs from Malaysian side	Local costs from Malaysian side	- Project reports & references review
Appropriateness of inputs from Japanese side	Are the number of experts dispatched, their fields of expertise, and timing and period of dispatch appropriate?	Existence of problems in the number of experts dispatched, their fields of expertise, and timing and period of dispatch	- PO - Allocation and assignment of experts	- Experts interview - State gov. interview
	Are the number of trainees, their fields, training contents, training period and timing of training in Japan appropriate?	Existence of problems in the number of trainees, their fields, training contents, training period and timing of training in Japan.	Past record of overseas training	- Project reports & references review - State gov. interview
	Are the type, quantity and timing of the installation of equipment appropriate?	Existence of problems in the type, quantity and timing of the installation of equipment	List of equipment provided	- Project reports & references review - State gov. interview
	Are the project budget and local costs appropriate?	Existence of problems in the project budget and local costs	Local costs from Japanese side	- Project reports & references review - State gov. interview

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Impact

Evaluation Questions		Criteria for Judgment	Necessary Data	Data Source / Data Collection Methods
Survey Items	Sub-Survey Items			
Prospect for achieving overall goal	Is there any prospect for achieving overall goal after the project?	Indicators of overall goal	Current Results of indicators of overall goal	Same as "1. Achievement of the Project"
Causal relationship	Does overall goal not lose touch with project purpose?	Whether the setting level of overall goal is appropriate.	Opinions of relevant persons	- Experts interview - State gov. interview
	Are there any obstructive factors against the achievement of overall goal?	Existence of negative factors that inhibit the achievement of overall goal	Examples of obstructive factors	- Experts interview - State gov. interview
	Will the important assumption towards overall goal not give influence on the project?	Existence of important assumptions that is likely to give influence on overall goal	Important assumptions that is likely to give influence on the project	Same as "1. Achievement of the Project"
Other impacts	Are there any project impacts on policies and systems of Malaysia?	Existence of project impacts on national policies and systems of Malaysia	National policies and systems newly made or revised by the project	- Project reports & references review - State gov. interview
	Are there any positive or negative impacts that are not planned at the time of planning but have been produced by the project?	Existence of positive or negative impacts that are not planned at the time of planning but have been produced by the project	Examples of positive and negative impacts	- Experts interview - State gov. interview - Tuaran DO interview - Tudan /Sintuong Tuong / Kiporin locals interview

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Sustainability

Evaluation Questions		Criteria for Judgment	Necessary Data	Data Source / Data Collection Methods
Survey Items	Sub-Survey Items			
Policy and institutional aspect	Will the political support by the Sabah state government and Malaysia government be carried on?	- Whether biodiversity and ecosystems conservation will be continuously placed as an important issue in Sabah state and Mlaysia. - Whether SBS will be surely implemented with support of Sabah state government.	Opinions of relevant persons	- State gov. interview
	Will the project effects be disseminated to other areas?	Whether there is any practical plan for introducing and adopting the achievements and lessons learned in the pilot site to other internal and external regions of Sabah state.	Plan for introducing and adopting the achievements and lessons learned in the pilot site to other regions/districts	- State gov. interview
Organizational	Will the organizational support by	- Whether the inter-agency coordination to	Opinions of relevant persons	- State gov. interview

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Evaluation Questions		Criteria for Judgment	Necessary Data	Data Source / Data Collection Methods
Survey Items	Sub-Survey Items			
aspect	Malaysian side be carried on?	implement SBS by NRO or SaBC will be reinforced. - Whether the appropriate allocation of roles and responsibilities between NRO and SaBC will be made.		
Financial aspect	Will the Sabah state government allocate the budget for sustaining the project effects?	Whether Sabah state government will secure the budget for implementing SBS.	Budget plan related to SBS in Sabah state	- State gov. interview
	Will the Sabah state government get funds for the SBS implementation from outside resources.	Whether Sabah state government will secure the funds from outside resources for implementing SBS.	Agreement of funds with outside donors.	- State gov. interview
Technical aspect	Does target group have enough skills for sustaining the project effects?	- Whether officials of Sabah state gov. have management skills to appropriately implement the activities for SBS. - Whether district officers and local residents of pilot site are able to conduct and disseminate what they learned at the training provided by the project.	Opinions of relevant persons	- Experts interview - State gov. interview - ITBC/UMS interview - Tuaran DO interview - Tudan/ Sintuong Tuong / Kiporin locals interview

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Appendix 4 Project Design Matrix (PDM) and Plan of Operation (PO)

Project Title: Project on Sustainable Development¹ for Biodiversity and Ecosystems Conservation in Sabah

Project Duration: 1 July 2013 to 30 June, 2017 (four years)

Version Number: Version 4

Project Sites: State of Sabah, especially Core and Buffer Zones of Lower Kinabatangan and Segama Wetlands – Ramsar Site and its River Basin (approximately 3,000,000 Ha) and Core, Buffer and Transition Zones of Croker Range Biosphere Reserve under UNESCO Man and Biosphere Programme (approximately 350,000 Ha)

Date: 30 June, 2015

Target Group: Staff members of concerned State Government agencies, Local population (pilot site), Researchers of UMS and local NGOs

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal: Sabah is known as the Asian Centre of Excellence for biodiversity conservation and sustainable development nationally and internationally.	<ol style="list-style-type: none"> At least 20 researchers visit Sabah for studies on biodiversity conservation and sustainable development in 5 years. At least 5 visitors visit Sabah for media coverage on biodiversity conservation and sustainable development in 5 years. At least 5 articles are published at international scientific journals regarding Sabah's experiences/ initiatives on sustainable development and biodiversity conservation in 5 years. Visible evidence is observed in the report to be prepared by the Malaysian Government regarding Sabah's contribution to the achievement of Aichi Target. 	<ol style="list-style-type: none"> Research licence issued by SaBC Record of visitors Copies of journals Reports of Malaysian Government on the achievements of Aichi Targets 	
Project Purpose: Biodiversity and ecosystem conservation for sustainable development in Sabah is promoted with national and international recognition.	<ol style="list-style-type: none"> The project activities contribute to SBS implementation. The progress of SBS is monitored in the formalized way and reported to the Biodiversity Council / Chief Minister. Sabah's experience and knowledge on biodiversity and ecosystem conservation are referred as good practices nationally and internationally. At least 1 additional site is registered under international initiatives on biodiversity conservation and/or existing site(s) is expanded. 	<ol style="list-style-type: none"> Project documents SBS monitoring report Project documents Registration certificate(s) 	Malaysia's and Sabah's policies on biodiversity and ecosystems conservation remain favourable to the project.
Outputs: <u>Output 1:</u> Management system of biodiversity and ecosystem conservation in Sabah is strengthened.	<ol style="list-style-type: none"> 1-1 Management plan for CRBR and its annual plan are approved by the State Government with inputs from the pilot activities and CEPA activities. <ol style="list-style-type: none"> 1-1-1 Local beneficiaries in the pilot sites are satisfied with the capacity building including alternative livelihood activities under the project. 1-1-2 The level of awareness among the CEPA beneficiaries on conservation is improved in CRBR. 1-2 The level of awareness among the CEPA beneficiaries on conservation is improved in LKSW. 1-3 The knowledge on biodiversity and ecosystem conservation is enhanced in target group. 1-4 The SBS monitoring system is established. 	<ol style="list-style-type: none"> 1-1 CRBR Management plan and Annual plan <ol style="list-style-type: none"> 1-1-1 Questionnaire survey to the beneficiaries 1-1-2 Questionnaire survey to the beneficiaries 1-2 Questionnaire survey to the beneficiaries 1-3 Reports of JICA projects 1-4 Project documents 1-4 SBS monitoring report 	The related projects supported by JICA are implemented as planned.
<u>Output 2:</u> The Sabah's experiences in biodiversity and ecosystem conservation are shared nationally and internationally.	<ol style="list-style-type: none"> 2-1 At least 5 documents are generated regarding the Sabah's experiences. 2-2 At least 2 national / international seminars, workshops or conferences are organised. 2-3 Counterpart agencies participate in at least 2 international seminars, workshops or conferences. 2-4 At least 50 persons from overseas countries participate in TCTP. 2-5 At least 90% of participants express their satisfaction regarding the TCTP. 2-6 Knowledge is shared through national / international network(s) for biodiversity and ecosystem conservation. 2-7 Ideas of Sabah Biodiversity Strategy are incorporated into National Biodiversity Strategy in Malaysia to be prepared in 2014. 	<ol style="list-style-type: none"> 2-1 Documents 2-2 Reports on seminars, workshops or conferences 2-3 Reports on seminars, workshops or conferences 2-4 Report on TCTP and project progress reports 2-5 Questionnaire survey after the training 2-6 Project documents 2-7 National Biodiversity Strategy 	

¹ "Sustainable Development" in this context is the promotion of sustainable socio-economic activities of the people in particular areas for the conservation of biodiversity and ecosystem

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<p>Activities:</p> <p>1 <u>Output 01</u></p> <p>1-1 To support necessary revision / amendment of SBS</p> <p>1-2 To develop the monitoring system of SBS (format, reporting, and feedback)</p> <p>1-3 To support preparation and monitoring of CRBR management plan / annual plan</p> <p>1-4 To synergize all the green technology / nature conservation projects² in Sabah supported by JICA through the continuous engagement of counterpart agencies and other stakeholders and facilitate meetings and knowledge sharing regularly</p> <p>1-5 To collaborate with other programmes and donor agencies for resource mobilisation in the implementation of management plan (e.g. UNDP/GEF, EU funded REDD+, etc.)</p> <p>1-6 To support concerned agencies for mobilising necessary technical and financial resources of federal, state and local governments and international frameworks for livelihood promotion and poverty alleviation</p> <p>1-7 To pilot livelihood improvement for community-based conservation through agriculture improvement, sustainable landuse, ecotourism and private business participation in marketing in collaborations with local government units, NGOs and concerned agencies</p> <p>1-8 To support relevant agencies for the enforcement of relevant regulations to mitigate negative environmental impacts caused by large scale development projects.</p> <p>1-9 To organise trainings on CEPA for the local communities, local government agencies, NGOs and concerned agencies.</p> <p>1-10 To support the monitoring of SEEP</p> <p>1-11 To provide recommendations for improved regulatory framework for river administration and law enforcement for conservation and non-disruptive economic activities</p>	<p>Input (Malaysian side):</p> <p>Personnel</p> <ul style="list-style-type: none"> -Project Director -Deputy Project Director -Project Manager -Counterpart personnel <p>Office Space</p> <ul style="list-style-type: none"> -Necessary facilities for the Project (office space, equipments, telephone line and other office maintenance) <p>Operation costs</p> <ul style="list-style-type: none"> -Local programme cost -Expenditure for Malaysian counterpart personnel -Necessary logistic and policy support 	<p>Input (Japanese Side):</p> <p>Personnel</p> <p><Long-term experts></p> <ul style="list-style-type: none"> -Chief advisor -Project coordinator -Project coordinator / Environmental Education <p><Short-term experts></p> <ul style="list-style-type: none"> -CRBR Management -SATOYAMA technology -CEPA -Community Development and livelihood <p>Machinery and Equipment</p> <ul style="list-style-type: none"> -Equipment necessary upon mutual agreement <p>Training</p> <ul style="list-style-type: none"> -Training in Japan <p>Operation costs</p> <ul style="list-style-type: none"> -Local programme cost 	<p>Sabah Biodiversity Strategy is approved by the cabinet</p> <p>Final MAB application for CRBR is approved by UNESCO.</p> <p>Budget allocation to the C/P organisations does not decrease largely.</p> <p>Proper C/P personnel are designated by the Government and regularly dispatched for meetings and project works.</p> <p>Preconditions:</p> <p>(No major preconditions)</p>
<p>1 <u>Output 02</u></p> <p>2-1 To compile the Sabah's experiences into documents and literatures to consolidate the Sabah's experiences and to undertake additional research when necessary</p> <p>2-2 To undertake study on possible sustainable financing mechanisms for biodiversity (i.e. the payment for ecological services (PES), biodiversity accounting, rationalisation of incentives and taxes for sustainable development, REDD+, CSR and strengthening of the Biodiversity Centre Fund, etc.)</p> <p>2-3 To plan, implement, monitor, evaluate and follow up TCTP</p> <p>2-4 To participate in, and/or host national and international conference / symposium / seminar/ training courses/ other activities for the knowledge sharing on Sabah's experiences, with collaboration of the Federal government when necessary</p> <p>2-5 To share Sabah's experiences to policy formulation process at national level</p> <p>2-6 To support the concerned agencies for active publicity and media strategy</p>			

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² Those projects are: 1) Science and Technology Research Partnership for Sustainable Development Programme "Creation of Green Innovative Industry from Oil Palm Plantation for the Bornean Bio-diversity Conservation" by Kyushu Institute of Technology, University Putra Malaysia & UMS, 2) JICA Partnership Programme "A Training Programme for Biomass Carbonisation by the Yamasen Pool-type Oven" by City of Yame & Bamboo Techno Co. Ltd, and 3) JICA Partnership Programme "Biodiversity Conservation through Community-based Rural Development around the Lower Kinabatangan River" by Rakuno Gakuen University.



Project Title: Project on Sustainable Development for Biodiversity and Ecosystems Conservation

As of 22 Apr. 2016

Project Duration: July 2013 to June 2017 (four years)

Ver.01 (revised based on PDM ver.4)

Activity	2013			2014			2015			2016			2017															
	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Output 1: Management system of biodiversity and ecosystem conservation in Sabah is strengthened																												
1-1 To support necessary revision / amendment of SBS																												
1-2 To develop the monitoring system of SBS (format, reporting, and feedback)																												
1-3 To support preparation and monitoring of CRBR management plan / annual plan																												
1-4 To synergize all the green technology / nature conservation projects in Sabah supported by JICA through the continuous engagement of counterpart agencies and other stakeholders and facilitate meetings and knowledge sharing regularly																												
1-5 To collaborate with other programmes and donor agencies for resource mobilisation in the implementation of management plan (e.g. UNDP/GEF, EU funded REDD+, etc.)																												
1-6 To support concerned agencies for mobilising necessary technical and financial resources of federal, state and local governments and international frameworks for livelihood promotion and poverty alleviation																												
1-7 To pilot livelihood improvement for community-based conservation through agriculture improvement, sustainable landuse, ecotourism and private business participation in marketing in collaborations with local government units, NGOs and concerned agencies																												
1-8 To support relevant agencies for the enforcement of relevant regulations to mitigate negative environmental impacts caused by large scale development projects.																												
1-9 To organise trainings on CEPA for the local communities, local government agencies, NGOs and concerned agencies																												
1-10 To support the monitoring of SEEP																												
1-11 To provide recommendations for improved regulatory framework for river administration and law enforcement for conservation and non-disruptive economic activities																												
Output 2: The Sabah's experiences in biodiversity and ecosystem conservation are shared nationally and internationally																												
2-1 To compile the Sabah's experiences into documents and literatures to consolidate the Sabah's experiences and to undertake additional research when necessary																												
2-2 To undertake study on possible sustainable financing mechanisms for biodiversity (i.e. the payment for ecological services (PES), biodiversity accounting, rationalisation of incentives and taxes for sustainable development, REDD+, CSR and strengthening of the Biodiversity Centre Fund, etc.)																												
2-3 To plan, implement, monitor, evaluate and follow up TCTP																												
2-4 To participate in, and/or host national and international conference / symposium / seminar/ training courses/ other activities for the knowledge sharing on Sabah's experiences, with collaboration of the Federal government when necessary																												
2-5 To share Sabah's experiences to policy formulation process at national level																												
2-7 To support the concerned agencies for active publicity and media strategy																												

Project start

Mid-Term Review

Terminal Evaluation

Appendix 5 Inputs Provided

A fiscal year starts in April and ends in March in Japan, and starts in January and ends in December in Malaysia.

1. Inputs from Japan

1-1. List of Experts

Long-term Experts

Name	Title and Term
Mr. Kazunobu Suzuki	Chief Advisor (2013. 3. ~ 2016. 3)
Mr. Hiroyuki Hatori	Chief Advisor (2016.3 ~)
Mr. Ryotaro Takano	Project Coordinator (2013.6 ~ 2015. 6)
Ms. Akemi Yoda	Project Coordinator / Environmental Education (2015.6 ~)

Short-term Experts

JFY2013

No.	Name	Period	Days	Responsible Activities
1.	Dr. Masaaki Yoneda Dr. Motohiro Hasegawa,	23-30 July 28 July – 3 Aug	7	CRBR Management
2.	Dr. Mitsuru Osaki, Dr. Nobuyuki Tsuji, Dr. Yoshiki Sato	8-15 Sep	8	Satoyama technology Community Development Community Development

JFY2014

No.	Name	Period	Days	Responsible Activities
1.	Dr. Mitsuru Osaki, Dr. Nobuyuki Tsuji	19 – 24 May	6	Satoyama technology, Community Development
2.	Dr. Masaaki Yoneda	21 – 26 July	6	CRBR Management
3.	Dr. Mitsuru Osaki, Dr. Nobuyuki Tsuji	16 – 20 Dec	5	Satoyama technology Community Development
4.	Dr. Makoto Tamura, Dr. Nobuyuki Tsuji	8 – 14 Feb 2015	7	Sustainable leadership Sustainable leadership

JFY2015

No.	Name	Period	Days	Responsible Activities
1.	Dr. Mitsuru Osaki, Dr. Masayuki Tani	11 – 16 July	6	Sustainable Land Management Soil Analysis
2.	Mr. Koji Tagi	15 - 22 August	8	CRBR Management
3.	Dr. Mitsuru Osaki Dr. Masayuki Tani, Dr. Nobuhide Fujitake,	12-18 November	7	Sustainable Land Management Soil Analysis, Soil Profile Development
4.	Mr. Kei Jinnai Mr. Iida Mr. Furuhata	6 – 13 September	8	Mt. Kinabalu Trail Safety Survey

5.	Dr. Masayuki Tani Dr. Nobuhide Fujitake	12 – 18 November	7	Soil Analysis Soil Profile Development
6.	Dr. Hiroyuki Matsuda, Mr. Wataru Suzuki	8 – 13 December	6	CRBR Seminar
7.	Mr. Tsunao Watanabe	14 – 18 January 2016	5	Biodiversity Strategy Monitoring
8.	Mr. Koji Tagi	14 - 21 January 2016	8	Environmental Education
9.	Mr. Yoshihiro Natori	18 – 23 February 2016	6	Ramsar Management Plan Monitoring

JFY2016

	Name	Period	Days	Responsible/Activities
1.	Dr. Hiroshi Sawamura,	20 – 30 June	11	Assembly of Elephant Skelton and Museum Exhibition
2.	Dr. Masayuki Tani Dr. Nobuhide Fujitake Dr. Mitsuru Osaki,	10 – 20 Oct 2016	11	Soil Analysis
		13 - 20 Oct 2016	8	Soil Profile Development
			8	Sustainable Land Management

1-2. List of Equipment

No	Item	Specification	Quantity	Price (RM)	Location
1	Laptop computer	S550C	1	2,399	NRO
2	Laptop computer	S550C	1	2,399	NRO
3	Portable GPS	GPSmap 62SC	1	1,900	NRO, Kg. Tudan
4	Spectrophotometer spectroquant (Soil Analysis)	Pharo 100	1	14,000	ITBC, UMS
5	Laptop computer	ASUS X455-LJ	1	1550	NRO
Total				RM 22,248	

1-3. Local Operational Cost

Unit: RM

	Item	JFY2013	JFY2014	JFY2015	JFY2016*	Total
1	Air Fare	80,812.00	26,236.00	42,311.80	17,610.00	166,969.80
2	Contract	N/A	N/A	9,500.00	4,884.80	14,384.80
3	Travel Allowance	28,733.80	24,442.70	36,259.05	140,819.84	89,435.55
4	Fees and Honorarium	105,140.53	200,696.17	179,968.86		485,805.56
5	Refreshment	2,074.00	2,362.50	870.00		5,306.50
6	Communication	4,568.05	7,083.55	8,571.70		20,223.30
7	Miscellaneous	143,473.37	253,465.08	278,699.54		816,457.83
Total in local currency		364,801.75	514,286.00		163,314.64	879,087.75
Total in JPY**		11,301,558	16,626,866	16,746,608	4,358,868	49,033,901

*Up to September 2016.

** Exchange Rate: 1MR=30.98 in 2013, JPY 32.33 in 2014, 30.11 in 2015, 26.69 in 2016 Sep.

1-4. List of Participants of Training in Japan

JFY2013

No.	Name	Position/ Organization at the time of training	Training Period	Title of Training Course
1.	ABD. RAHIMIN@ABD. RAHIM AG. YAHYA	Officer in Charge (Padang Taratak Wildlife Sanctuary, Beaufort, Sabah) Sabah Wildlife Department	May, 21 – July, 9 2013	Conservation and Sustainable Use of Biodiversity to the Wetland Ecosystems on Community Base
2.	SITI ZUBAIDAH A. ABDULLAH	Planning Officer (Corporate Affairs) Sabah Forestry Department	May, 21 – July, 9 2013	Conservation and Sustainable Use of Biodiversity to the Wetland Ecosystems on Community Base
3.	ASLINA BAHARUM	Resigned – Lecturer in one of Malaysia Local University Forest Research Institute Malaysia (FRIM)	August, 4 – September 13 2013	Biodiversity Information System
4.	JABI BIN TANANAK	Senior Research Officer Agriculture Research Station, Dept. Agriculture Sabah	September, 17 – October, 19 2013	Regional Development by Sustainable of Biodiversity
5.	CHUNG CHING YIAN	Administrative Officer Sabah Biodiversity Centre	September, 18 – November, 6 2013	Remote Sensing of Forest Resources
6.	BERNEDINE PRIDIN	Engineer (Water Resources Management Section)Department of Irrigation and Drainage, Sabah	September, 2 – November, 2 2013	Integrated Basin Management for Lake Environment
7.	RODIUS TIMBUONG	Assistant Director - Extension Department of Agriculture Sabah	October, 20 – November, 30 2013	Integrated Agriculture and Rural Development through the Participation of Local Farmers
8.	DR. CHACHO BULAH	(Retired) Natural Resources Office	October, 20 – October, 26 2013	JICA Partnership Program (JPP) on Biomass Carbonization by Yamasean Pool-Type Oven
9.	MASRI PUDIN	Head of Sawit Plantations Sawit Kinabalu	October, 20 – October, 26 2013	JICA Partnership Program (JPP) on Biomass Carbonization by Yamasean Pool-Type Oven
10.	YASSIN MIKI	Park Manager Sabah Parks	October, 29 – December, 7 2013	Collaborative Management of Protected Area
11.	LICHIT IDEK	Senior Mill Manager Sawit Kinabalu	November, 11 – November, 16 2013	JICA Partnership Program (JPP) on Biomass Carbonization by Yamasean Pool-Type Oven
12.	MELVAN EALVIN LIEW	Assistant Engineer Sawit Kinabalu	November, 11 – November, 23 2013	JICA Partnership Program (JPP) on Biomass Carbonization by Yamasean Pool-Type Oven
13.	BERNADETTE JOEMAN	Manager, Rainforest Discovery Centre (RDC) Sabah Forestry Department	November, 13 – November, 17 2013	The First Asia Parks Congress

14.	LUDI APIN	Assistant Director (Park Management & Operation) Sabah Parks	November, 13 – November, 17 2013	The First Asia Parks Congress
15.	GERALD JETONY	Senior Geologist Natural Resources Office	November, 13 – November, 17 2013	The First Asia Parks Congress
16.	HUSSIN TUKIMAN	District Forestry Officer (Kinabatangan) Sabah Forestry Department	November, 13 – November, 17 2013	The First Asia Parks Congress
17.	GEORGE GAING	Deputy Director Sabah Biodiversity Centre	November, 13 – November, 17 2013	The First Asia Parks Congress
18.	AUGUSTINE TUUGA	Deputy Director Sabah Wildlife Department	November, 13 – November, 17 2013	The First Asia Parks Congress
19.	PROF. DR. CHARLES SANTHANARAJU VAIRAPPAN	Director Institute for Tropical Biology and Conservation (ITBC), UMS	February, 3 – February, 8 2014	Development of Green Economy
20.	DR. AWANGKU HASSANAL BAHAL PENGIRAN BAGUL	Senior Lecturer/Researcher, Faculty of Business, Economics and Accountancy Institute for Tropical Biology and Conservation (ITBC), UMS	February, 3 – February, 8 2014	Development of Green Economy

JFY2014

No.	Name	Position/Organization	Training Period	Title of Training Course
1.	ELNE BETRECE JOHNLEE	Research Officer Sabah Forestry Department	May, 20 – July, 9 2014	Conservation and Sustainable Use of Biodiversity to the Wetland Ecosystems on Community Base
2.	AMAT MOHD. YUSOF	Secretary, Natural Resources Office	August, 17 – August, 23 2014	Community Development Towards a Society in Harmony with Nature
3.	IDRUS SHAFIE	Director Department of Agriculture Sabah	August, 17 – August, 23 2014	Community Development Towards a Society in Harmony with Nature
4.	ABD. MOHD. IBNU HJ. ABDUL KADIR BABA	District Officer District Office of Tuaran	August, 17 – August, 23 2014	Community Development Towards a Society in Harmony with Nature
5.	ROYSTON TIAM	Assistant Administrative Officer Sabah Parks	September, 23 – October, 25 2014	Improvement of Environmental Education Technique for Biodiversity Conservation
6.	BAHAR MOHAMMAD SAPIRE	Teacher SK. Tansau Putatan, Sabah Education Department	September, 23 – October, 25 2014	Improvement of Environmental Education Technique for Biodiversity Conservation
7.	AWANG SHAHMINAN SAHARI	Head of Water Resources Unit Natural Resources Office	October, 13 – November, 15 2014	Promotion of SATOYAMA Initiative
8.	POSIN MOHD. ALI	Assistant Administrative Natural Resources Office	October, 13 – November, 15 2014	Promotion of SATOYAMA Initiative

9.	SADIB MIKI	Chairman, Development and Safety Village Committee of Kg. Kiau Nuluh Ecolinc, Sabah Parks	January 10 – January 31 2014	Sabah Focused Training: Communication, Education, Participation and Awareness (CEPA) for Biodiversity Conservation and Sustainable Development
10.	PANGERAN SELUTAN	Chairman, FORMADAT Long Pasia	January 10 – January 31 2014	Sabah Focused Training: Communication, Education, Participation and Awareness (CEPA) for Biodiversity Conservation and Sustainable Development
11.	ATILIN DONIU	Assistant District Officer (Administrative) District Office of Tambunan	January 10 – January 31 2014	Sabah Focused Training: Communication, Education, Participation and Awareness (CEPA) for Biodiversity Conservation and Sustainable Development
12.	NAINIE PASA	Education Officer (English Literacy Officer) Papar District Education Office, Sabah Education Department	January 10 – January 31 2014	Sabah Focused Training: Communication, Education, Participation and Awareness (CEPA) for Biodiversity Conservation and Sustainable Development
13.	JENIUS GADIMAN	Local community (representative from Kg. Tudan, Tuaran also a teacher) Kg. Tudan, Tuaran	January 10 – January 31 2014	Sabah Focused Training: Communication, Education, Participation and Awareness (CEPA) for Biodiversity Conservation and Sustainable Development
14.	JAMES GILUK	Engineer Department of Irrigation and Drainage	January 10 – January 31 2014	Sabah Focused Training: Communication, Education, Participation and Awareness (CEPA) for Biodiversity Conservation and Sustainable Development
15.	VIRUS MALITAM	Assistant District Officer (Administrative) District Office of Keningau	January 10 – January 31 2014	Sabah Focused Training: Communication, Education, Participation and Awareness (CEPA) for Biodiversity Conservation and Sustainable Development
16.	DALIMAH BAHAN	Senior Administrative Assistant Natural Resources Office	January 10 – January 31 2014	Sabah Focused Training: Communication, Education, Participation and Awareness (CEPA) for Biodiversity Conservation and Sustainable Development
17.	ALESSANDRA MARKOS	Project Officer (Environmental Education and Communication) SDBEC Office	January 10 – January 31 2014	Sabah Focused Training: Communication, Education, Participation and Awareness (CEPA) for Biodiversity Conservation and Sustainable Development
18.	PRISCA THOMAS	Assistant Director Department of Irrigation and	Jan 25 – Feb 28 2015	Sustainable Natural Resources Management Through

		Drainage		Collaborative Management of Protected Areas
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JFY2015

No	Name	Position/Location at the time of training	Training Period	Title of Training Course
1.	MICHELLE YAP SUE SEM	Planning Officer, Sabah Forestry Department	May 19 – July 8 2015	Sustainable Use of Wetland Resources for Local Benefit
2.	JIMLI PERJIN	Officer in Charge (Lower Kinabatangan Wildlife Sanctuary), Sabah Wildlife Department	June 1 – August 7, 2015	GIS and Remote Sensing Utilized for Biodiversity Information System and Participatory Approach toward Biodiversity Conservation Actions
3.	ALEXANDER PHAN	Assistant Forest Officer, Sabah Forestry Department	August 2 – September 17, 2015	Remote Sensing of Forest Resources
4.	JANE JOIMIN	Environmental Education Officer, Kota Kinabalu Wetlands, Sabah Wetlands Conservation Society	August 31 – October 3, 2015	Improvement of Environmental Education Technique for Biodiversity Conservation
5.	ZALEHA ROSE PANDIN	Commissioner of Law Reprint & Acting Deputy Attorney General, State Attorney General's Chambers, Chief Minister Department	September 6 – 12, 2015	Training for Realizing a Society in Harmony with Nature
6.	THOMAS LOGIJN	District Officer, District Office of Tambunan	September 6 – 12, 2015	Training for Realizing a Society in Harmony with Nature
7.	NORLINA MOHD DIN	Project Manager, Kinabalu Ecolinc, Sabah Parks	October 12 – November 14 2015	Promotion of SATOYAMA Initiative
8.	ARIFIN GADAIT	Deputy Secretary, Natural Resources Office	November 8 – 28, 2015	Training on Enhancing Environmental Communication towards a Society in Harmony with Nature
9.	CLARENCE KINAJIL	Committee Member, Kg. Babagon	November 8 – 28, 2015	Training on Enhancing Environmental Communication towards a Society in Harmony with Nature
10.	DARING BIN LABAN	Assistant Director, (Administration, Finance & Human Resources), Sabah Parks	November 8 – 28, 2015	Training on Enhancing Environmental Communication towards a Society in Harmony with Nature
11.	JASLE BIN DINGLE	Agriculture Officer, Department of Agriculture	November 8 – 28, 2015	Training on Enhancing Environmental Communication towards a Society in Harmony with Nature
12.	JOHRY BAKRI	Research Assistant, Sabah Forestry Department	November 8 – 28, 2015	Training on Enhancing Environmental Communication towards a Society in Harmony with Nature
13.	JULINUS JEFFERY	Senior Manager,	November 8 –	Training on Enhancing

	JIMIT	Sabah Tourism Board	28, 2015	Environmental Communication towards a Society in Harmony with Nature
14.	MOHD JABRI BIN ROSDI	Representative of Kg. Kiporing	November 8 – 28, 2015	Training on Enhancing Environmental Communication towards a Society in Harmony with Nature
15.	PUIN CLARENCE NNT PINDURN	Assistant District Officer, District Office of Tenom	November 8 – 28, 2015	Training on Enhancing Environmental Communication towards a Society in Harmony with Nature
16.	RIO PETER GATULIK	Forester, Sabah Forestry Department	November 8 – 28, 2015	Training on Enhancing Environmental Communication towards a Society in Harmony with Nature
17.	WILLIAM AHLAN	Assistant District Officer, District Office of Papar	November 8 – 28, 2015	Training on Enhancing Environmental Communication towards a Society in Harmony with Nature

JFY2016 (As of the Terminal Evaluation)

No	Name	Position/Organization at the time of training	Training Period	Title of Training Course
1.	NOEL SEANUNDU KELY JITILON	Technical Coordinator, Community-Led Environmental Awareness for our RIVER (CLEAR)	May 17 – July 6 2016	Sustainable Use of Wetland Resources for Local Benefit
2.	AWANG SHAHMINAN SAHARI	Head of Water Resources Unit, Natural Resources Office	July 31 – August 6, 2016	Training for Realizing a Society in Harmony with Nature
3.	MIKLIN ATIONG OSMOND	Senior Assistant Director, Water Resources Management Section, Department of Irrigation and Drainage Sabah	July 31 – August 6, 2016	Training for Realizing a Society in Harmony with Nature
4.	HENRY NG SAU CHAN	Executive Engineer, Operation and Maintenance, Sabah State Water Department	July 31 – August 6, 2016	Training for Realizing a Society in Harmony with Nature
5.	DOREEN BENJAMIN	Acting General Manager, Management, Corporate Dynamics Sdn Bhd	July 31 – August 6, 2016	Training for Realizing a Society in Harmony with Nature
6.	THOMAS YUSSOP	Park Manager, Crocker Range Park, The Board of Trustees of Sabah Parks	September 11 – October 14, 2016	Sustainable Natural Resources Management through Collaborative Management of Protected Areas
7.	JESSIE BELIKU	Contract Researcher, Conservation and International Division, Department of Fisheries Sabah	October 2 – November 5, 2016	Promotion of SATOYAMA Initiative

2. Inputs from Malaysia

2-1. List of Counterpart

Name	Title and Organization
YB Tan Sri Datuk Seri Panglima Sukarti bin Wakiman	Sabah State Secretary (Project Director)
Prof. Datuk Dr. Mohd Harun Abdullah	Vice Chancellor, University of Malaysia, Sabah (Deputy Project Director)
Tn. Hj. Amat Md. Yusof	Director, Natural Resources Office (Project Manager)
Mr. Gerald Jetony	Natural Resources Office
Organization	
1.Sabah Biodiversity Centre	
2.Sabah Parks	
3.Sabah Forestry Department	
4.Sabah Wildlife Department	
5.Department of Irrigation and Drainage	
6.Environment Protection Department	
7.Department of Agriculture	
8.Land and Survey Department	
9.Department of Fisheries	
10.Town and Regional Planning	
11.Sabah Tourism Board	
12.State Economic Planning Unit	
13.Department of Environment	
14.Institute for Tropical Biology and Conservation, University of Malaysia, Sabah	
15.District Offices (Tambunan and Penampang)	

2-2. Local Operational Cost for SDBEC activities by NRO

Unit: US dollars

Fiscal Year*	FY2013	FY2014	FY2015	FY 2016**	Total
Amount	571.61	1,100.24	1214.01	716.21	3,602.07

* From January to December

**up to September 2016

-End-

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Appendix 6 Project Products

No.	Title	Sub Title	Author/Editor	Year	ISBN	Remarks
1	Guidebook of Project on Sustainable Development for Biodiversity and Ecosystems Conservation (SDBEC) in Sabah	The Basic Concept, Strategies and Plan	SDBEC Secretariat	2013	978-983-3108-22-0	
2	An Innovative Approach Towards a Society in Harmony with Nature	Practices and Lessons on Collaborative Resources Management in Sabah, Malaysia, Case Study of Ulu Senegang Mongol Baru	SDBEC Secretariat	2014		
3	Community-Based Conservation Survey at Kg. Tudan, Sabah	Final Report	JICA, ERE Consulting Group Sdn	2014		
4	Pemeliharaan Berasaskan Komuniti, Kg. Tudan, Sabah	Laporan Akhir	JICA, ERE Consulting Group Sdn Bhd	2014		No.3 translated in Malaysian
5	REPORT MARCH 2015	Economics of River Basin Management toward Sustainable Development for Biodiversity and Ecosystems Conservation In Sabah.	SDBEC Secretariat	2015	978-983-3108-23-7	
6	Community-Based Conservation Survey at Kg. Tudan, Sabah (Consultation Stage)	Final Report	JICA, ERE Consulting Group Sdn	2015		
7	Tinjauan Pemeliharaan Berdasarkan Komuniti Di Kg. Tudan, Sabah (Peringkat Konsultasi)	Laporan Akhir	JICA, ERE Consulting Group Sdn Bhd	2015		No. 6 translated in Malaysian
8	Community-Based Conservation Survey at Kg. Tudan, Sabah (Integration Stage)	Final Report	JICA, ERE Consulting Group Sdn	2015		
9	Tinjauan Pemeliharaan Berdasarkan Komuniti Di Kg. Tudan, Sabah (Peringkat Integrasi)	Laporan Akhir	JICA, ERE Consulting Group Sdn Bhd	2015		No. 8 translated in Malaysian
10	Livelihood Improvement and Community-Based Conservation Survey at Kg. Sintuung-Tuong and Kg. Kiporing	Final Report	JICA, ERE Consulting Group Sdn Bhd	2016		
11	Kajian Peningkatan Sumber Pendapatan Dan Pemeliharaan Berasaskan Komuniti Di Kg. Sintuung-Tuong Dan Kg. Kiporing	Laporan Akhir	JICA, ERE Consulting Group Sdn Bhd	2016		No. 10 translated in Malaysian
12	Sabah Biodiversity Strategy : A Review of the First Implementation Phase and Way Forward	Final Report	JICA, ERE Consulting Group Sdn	2016		
13	Review of the Sabah Biodiversity Strategy 2012-2022		NRO, JICA	2016		
14	Environmental Education Sabah (video)		Environment Protection Department, Sabah	2016		
15	Crocker Range Biosphere Reserve Management Plan 2016-2024		Sabah Parks, NRO, SDBEC	(2016)		finalised by Sabah Parks
16	Towards a Society in Harmony with Nature	Pilot Project at Tudan Village, Tuaran District,	SDBEC Secretariat	(2016)		(drafted)
17	River Environmental Education booklet		SDBEC Secretariat	(under editing)		(under editing)
18	Assembled Borneo elephant skeleton		JICA expert, ITBC/UM	2017		to be placed at ITBC

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