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1. 調査日程

APPP終了時評価調査日程

評価分析 分析団員	本体	月日	曜日	本体調査団(永友次長、金子)	コンサルタント団員(評価分析、鹿嶋団員)	宿泊地
1		8/31	日		成田→ブノンベン	Phnom Penh Goldiana Hotel
2		9/1	月		8:00- 8:30 JICA事務所打合せ、 9:00-10:30 第1回合同評価会議(MAFF側評価員との打合せ) 10:30-12:30 Kampong Chhnang州へ移動 14:00-15:00 デモ農家ヒヤリング (D129) (於:農家宅) 15:30-17:00 PDA 局長、C/P(2名) & 普及員(1名)ヒヤリング(於:PDA)	K. Chhnang Sovann Phum Hotel
3		9/2	火		(コンボンチュナン続き) 8:00- 9:30 種子生産グループ(K.C SGG)ヒヤリング(於:グループ長宅) 10:00-11:30 パイロットグループ (PG14) ヒヤリング(於:グループ長宅) 13:00-15:00 Pursat州へ移動 15:00-17:00 PDA 局長 & C/P(2名) & 普及員(6名)ヒヤリング(於:PDA)	Pursat Century Hotel
4		9/3	水		(ブルサット続き) 8:00- 9:30 パイロットグループ(PG7.11.13) ヒヤリング(*TSC3連携地区) 10:00-11:30 パイロットグループ(PG5)ヒヤリング (於:グループ長宅) 14:00-15:00 デモ農家ヒヤリング (D128) (於:DF農家宅) 15:30-16:00 PDA付属種子農場(TAS)視察	
5		9/4	木		7:00- 8:00 Battambang州、Moung Russei郡へ移動 8:00- 9:30 M.Russei SGGヒヤリング(於:グループ長宅) 9:45-11:30 PorCanal TSC3連携地区D20.63卒業デモ農家&DSG ヒヤリング 12:45-14:00 Battambang市へ移動 14:00-15:00 PDA局長ヒヤリング (於:PDA) 15:00-16:30 Battambang C/P(4名) ヒヤリング (於:PJ事務所)	
6		9/5	金		7:30- 8:00 Banan郡へ移動 8:00- 9:30 BananSGG ヒヤリング(於:グループ長宅) 9:45-11:00 Banan PGヒヤリング (PG1) (於:グループ長宅) 11:00-11:30 Battambang市へ移動 14:00-15:30 普及員ヒヤリング(代表4名) (於:PJ事務所) 15:30-17:00 専門家ヒヤリング(於:PJ事務所)	Battambang Stung Sangke Hotel
7		9/6	土		8:30- 9:30 デモ農家ヒヤリング (D87) (於:農家宅) 10:00-11:30 デモ農家ヒヤリング (D108) (於:農家宅) (PM) 取りまとめ作業	
8		9/7	日		資料取りまとめ、中間報告資料作成	
9	1	9/8	月	成田→ブノンベン	ブノンベン へ移動	Phnom Penh HIMAWARI Hotel
10	2	9/9	火	8:30 JICA事務所表敬・打合せ 10:30-14:00 MAFF表敬(MAM Amnot長官 & 農業総局 総局長(DG) SO Khan Rithykun)、MAFF 総局長(DG)SO Khan Rithykunへのヒヤリング		Phnom Penh HIMAWARI Hotel
11	3	9/10	水	9:00-12:00 第2回合同評価会議(於:MAFF?) * 評価分析団員中間報告 15:00 コンボンチャム州種子生産農家グループ(K.ChhnangSGG)視察		K. Chhnang Sovann Phum Hotel
12	4	9/11	木	9:30-10:30 ブルサット州パイロットグループ園場視察 (PG13) (*ダムナック・アンビル→TSC3モデル灌漑連携地区) 10:50-11:20 ブルサット州農業局付属種子園場(TAS)視察 12:30-13:30 バッタンバン州ムンルセイ州郡へ移動 13:30-14:45 種子生産グループ(ムンルセイSGG)視察 (*SGGリーダー農家は2013年度種子生産技術部門全国最優秀農家賞受賞) 15:00-16:00 ボルキャナルTSC3モデル灌漑地区(PJ連携地区)園場視察		Battambang Stung Sangke Hotel
13	5	9/12	金	8:00 - 8:30 バッタンバン州農業局次長表敬 8:30-10:00 JICA本部側評価団員による専門家へのヒヤリング(プロジェクト事務所) MAFF側評価団員による3州C/P(9名)&BTB普及員(代表4名)へのヒヤリング (PDA会議室) 14:00 円借款事業「トンレサップ西部流域灌漑施設改修事業」のサイト(ダムナックアンビル地区)を視察		
14	6	9/13	土	10:00 好適環境水実証試験サイト(タケオ州) 14:00 有償資金協力CP-P14サイト(タケオ州、カンダル州)の視察		
15	7	9/14	日	資料整理		Phnom Penh HIMAWARI Hotel
16	8	9/15	月	09:00 流域水資源利用プロジェクト(MOWRAM) 13:30 MAFF農協プロジェクト訪問 14:00 合同評価委員会(評価報告書ドラフト作成)		
17	9	9/16	火	10:00 MAFF Rithykun総局長 & Amnot長官への評価報告書ドラフトの説明 16:00 合同評価報告書署名		
18	10	9/17	水	09:00 USAID訪問 PM: 調査団内作業(評価結果のJCCプレゼン資料作成)		
19	11	9/18	木	9:00-11:30 JCC開催(前半:APPP活動報告+後半:評価報告会)、調査団ミニッツ署名(永友団長×JCC委員長Amnot長官) 14:30 大使館報告		-

2. 主要面談者リスト

カンボジア農林水産省

- H.E. Mam Amnot (Secretary of State)
[農業総局 (General Directorate of Agriculture : GDA)]
 - H.E. So Khan Rithykun (Director General/ Project Director)

在カンボジア日本国大使館

- 隈丸 優次 (大使)
- 鵜沢 和弘 (二等書記官)

プロジェクト専門家 (APPP)

- 萩原 知 (チーフアドバイザー/農業普及)
- 園山 英毅 (コミュニティ活動/流通改善)
- 下川 浩二 (業務調整/研修/農業普及)
- 藤田 達夫 (営農/種子生産)

バットアンバン州農業局

- Chhim Vachira (Director/ Project Manager)
- Long Phorn (Deputy Director)
- Siea Kimnay (Deputy Chief, Agricultural Extension Office / C/P)
- Ouch Hoeun (Chief, Agronomy Office / C/P)
- Ros Ratha (Officer, Agronomy Office / C/P)
- Pov Lina (Officer, Agronomy Office / C/P)
- Pa Boreak (Deputy Chief, Agro-industrial Office / C/P)

プルサット州農業局

- Lay Viseth (Director/ Project Manager)
- Leng Chandamony (Officer, Agricultural Extension Office/ C/P)
- Hov Chandara (Officer, Agronomy Office/ C/P)

コンボンチュナン州農業局

- Heng Kimsreany (Deputy Director)
- El Yoeurn (Chief, Agricultural Extension Office/ C/P)
- Ly Samol (Officer, Agronomy Office/ C/P)

USAID Cambodia

- William Bradley (Agriculture Officer, Office of Food Security & Environment)
- Sambath Sak (Agriculture Economist, Office of Food Security & Environment)

JICA 関連プロジェクト

- 平岩 昌彦 (流域水資源利用プロジェクト、チーフアドバイザー)
- 松田 昌裕 (ビジネスを志向したモデル農協構築プロジェクト、チーフアドバイザー)
- 関島 建志 (灌漑排水政策アドバイザー、個別専門家)

JICA カンボジア事務所

- 伊藤 隆司 次長
- 木梨 陽子 所員
- 外山 晴子 所員

カンボジア国トンレサップ西部地域農業生産性向上プロジェクト終了時評価調査
評価グリッド（案）

2014 年 9 月

1. プロジェクトの実績と目標達成の見込み

評価項目		必要なデータ・資料	情報源	データ収集方法
大項目	小項目			
上位目標の達成見込み	上位目標はプロジェクト終了後3-5年程度で達成される見込みか。 上位目標: トンレサップ西部3州の対象地域において農家の生産性及び所得が向上する。	<ul style="list-style-type: none"> 上位目標の指標達成度に係わるデータ、情報及び報告書 <ol style="list-style-type: none"> 対象地域の農家のインディカ米の単収が2.75 トン/ha（2010年時点）から3.00 トン/haにまで増加する。 対象地域の農家のインディカ米の総生産量（販売価格換算）が増加する。 上位目標の達成見込みに係わる専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> 各種資料 <ul style="list-style-type: none"> 聴き取り調査 農水省・州農業局の年次報告書 既存統計資料 専門家、C/P、プロジェクト関係者（普及員、デモ農家、種子生産農家グループ、パイロットグループ等） 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
プロジェクト目標の達成見込み	プロジェクト終了までに、プロジェクト目標は達成される見込みか。 プロジェクト目標: トンレサップ西部3州においてプロジェクト活動に参加した農家の生産性及び所得が向上する。	<ul style="list-style-type: none"> プロジェクト目標の指標達成度に係わるデータ、情報及び報告書 <ol style="list-style-type: none"> デモ農家のインディカ米の単収が2.75 トン/ha（2010年時点）から4.00 トン/haにまで増加する。 研修に参加した農家のインディカ米の単収が2.75 トン/ha（2010年時点）から3.50 トン/haにまで増加する。 デモ農家のインディカ米の総生産量（販売価格換算）が増加する。 研修に参加した農家のインディカ米の総生産量（販売価格換算）が増加する。 プロジェクト目標の達成見込みに係わる専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> 各種資料 <ul style="list-style-type: none"> 聴き取り調査 農水省・州農業局の年次報告書 既存統計資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
成果の達成度	成果1はどの程度達成されたか。 成果1: 普及員の普及実施能力が向上する。	<ul style="list-style-type: none"> 成果1の指標達成度に係わるデータ、情報及び報告書 <ol style="list-style-type: none"> カウンターパートの支援の下、22名の普及員がデモ農家と参加農家に対して880回以上の研修を実施できる。 種子生産グループの担当普及員が圃場審査や種子検査技術を身につける。 普及員による普及サービスに対するデモ農家の満足度が平均80%以上となる。 成果1の達成度に係わる専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト報告書 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート

カンボジア国トンレサップ西部地域農業生産性向上プロジェクト終了時評価調査
グリッド（案）

評価項目		必要なデータ・資料	情報源	データ収集方法
大項目	小項目			
成果の達成度	成果 2 はどの程度達成されたか。 成果 2: 対象コミュニティによる営農改善のための活動が促進される。	<ul style="list-style-type: none"> 成果 2 の指標達成度に係わるデータ、情報及び報告書 2-1 80%以上の研修実施計画が実行される。 2-2 対象コミュニティの半数以上において、コミュニティ投資計画に農業関連活動が含まれる。 成果 2 の達成度に係わる専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト報告書 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	成果 3 はどの程度達成されたか。 成果 3: 参加農家の農業生産技術が改善される。	<ul style="list-style-type: none"> 成果 3 の指標達成度に係わるデータ、情報及び報告書 3-1. 研修参加農家のうち半数以上が研修活動において示される農業生産技術のうち少なくとも 1 種類を利用できる。 成果 3 の達成度に係わる専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト報告書 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	成果 4 はどの程度達成されたか。 成果 4: 優良種子の生産・配布が促進される。	<ul style="list-style-type: none"> 成果 4 の指標達成度に係わるデータ、情報及び報告書 4-1 保証種子が 2014 年までに年間 100 トン以上生産されるようになる。 4-2 優良原種が 2014 年までに年間 1 トン以上生産されるようになる。 4-3 優良種子を利用する農家が 1,000 名以上となる。 成果 4 の達成度に係わる専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト報告書 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	成果 5 はどの程度達成されたか 成果 5: 州政府、民間セクター、農家等の協働により、受益農家のインディカ米の流通が改善される。	<ul style="list-style-type: none"> 成果 5 の指標達成度に係わるデータ、情報及び報告書 5-1. 優良種子を利用して生産されたインディカ米の市場流通量の合計が 2014 年までに年間 2,000 トン以上になる。 5-2. 対象 3 州において 18 以上の農家グループが以下の様な共同作業を行う：農業資材の共同購入、プロジェクトにより導入されたインディカ米の生産技術の統一、価格情報の共有、共同出荷もしくは共同販売を行う。 成果 5 の達成度に係わる専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト報告書 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
投入の達成度	日本側の投入は計画通り実施されたか。	<ul style="list-style-type: none"> 日本側の投入実績 1) 専門家派遣 2) 機材供与 3) C/P 研修 	<ul style="list-style-type: none"> プロジェクト報告書 専門家及び C/P 	<ul style="list-style-type: none"> 資料レビュー 現地踏査
	カンボジア側の投入は計画通り実施されたか。	<ul style="list-style-type: none"> カンボジア側の投入実績 1) オフィススペース（プノンペン・バタンバン）の提供 2) カウンターパートの配置 	<ul style="list-style-type: none"> プロジェクト報告書 専門家及び C/P 	<ul style="list-style-type: none"> 資料レビュー 現地踏査

カンボジア国トンレサップ西部地域農業生産性向上プロジェクト終了時評価調査
グリッド（案）

2. 実施プロセス

評価項目		必要なデータ・資料	情報源	データ収集方法
大項目	小項目			
活動の実施状況	どの程度活動は予定通りに実施されたか。	● プロジェクト活動の進捗状況	● プロジェクト関連資料 - 詳細活動計画（PO）	● 資料レビュー
プロジェクト管理	プロジェクト内のコミュニケーション（専門家、C/P、普及員、デモ農家、種子生産農家グループ等）は緊密かつ適切ですか	● 専門家、C/P、プロジェクト関係者の認識	● プロジェクト報告書 ● 専門家及び C/P	● 資料レビュー ● インタビュー
	ターゲットグループ（農林水産省 [MAFF] 農業総局職員、対象州農業局 [PDA] 職員及び普及員）のプロジェクト活動実施に対するやる気は十分か。C/P や普及員は、主体性をもって活動を実施しているか。	● 専門家、C/P、プロジェクト関係者の認識	● プロジェクト報告書 ● 専門家及び C/P	● 資料レビュー ● インタビュー
	JICA の他の案件（「流域灌漑管理及び開発能力改善プロジェクト」や「トンレサップ西部流域灌漑施設改修事業」）との連携や他の援助機関の協力プログラムとの協力体制は適切であったか。	● 専門家、C/P、プロジェクト関係者の認識	● プロジェクト報告書 ● 専門家及び C/P	● 資料レビュー ● インタビュー
技術移転	技術移転方式/方法は適切だったか。	● 専門家、C/P、プロジェクト関係者の認識	● プロジェクト報告書 ● 専門家及び C/P	● 資料レビュー ● インタビュー
中間レビューのフォローアップ	中間レビューの提言で指摘された提言に対し十分な対応が行われたか。 1) インディカ米の流通改善に関するプロジェクトへの提言 1-1 農家グループが生産するインディカ米の品質向上の促進 1-2 農家グループと精米業者との関係構築の支援 1-3 共同集出荷及び販売の支援 2) 持続性強化に関するプロジェクトへの提言 2-1 できるだけ多くのデモ農家への研修実施 2-2 種子生産農家グループの業計画作成や市場ニーズの事業への反映に関わる支援実施 2-3 関連機関を通じた種子生産のノウハウの普及 3) カンボジア MAFF への提言 3-1 「トンレサップ西部流域灌漑施設改修事業」への本プロジェクトでの成果や教訓の反映 3-2 本プロジェクトで技術移転を受けた C/P や普及員を当該灌漑プロジェクトの受益地に配置	● 中間レビューの提言への対応 ● 専門家、C/P、プロジェクト関係者の認識	● プロジェクト報告書 ● 専門家及び C/P	● 資料レビュー ● インタビュー
その他	プロジェクト実施に影響を与えたその他の要因はあるか。	● 専門家、C/P、プロジェクト関係者の認識	● プロジェクト報告書 ● 専門家及び C/P	● 資料レビュー ● インタビュー ● アンケート

3. 5 項目評価

5 項目	評価項目		必要なデータ・資料	情報源	データ収集方法
	大項目	小項目			
妥当性	カンボジアの開発計画との整合性	本プロジェクトはカンボジア政府の重点政策に合致しているか。	<ul style="list-style-type: none"> 農業セクターにおけるカンボジア政府の開発政策 <ul style="list-style-type: none"> 四辺形戦略フェーズ III（2014 年～2018 年） 国家戦略開発計画（2014 年～2018 年） コメ増産及びコメの輸出促進に係る政策等 	<ul style="list-style-type: none"> カンボジア政府 	<ul style="list-style-type: none"> 資料レビュー インタビュー
	日本の援助事業としての妥当性	本プロジェクトと日本の対カンボジア援助政策等との整合性は十分にあるか。	日本の対カンボジア王国 国別援助方針（2012 年）	<ul style="list-style-type: none"> 日本国政府 	<ul style="list-style-type: none"> 資料レビュー インタビュー
	裨益者のニーズとの整合性	プロジェクトは社会経済的ニーズに合致しているか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> カンボジアの農業セクターに関わる資料・報告書 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー
		プロジェクトはターゲットグループのニーズに合致しているか。また、そのニーズは高いか	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	手段としての適切性	プロジェクトのアプローチはカンボジアの農家の生産性及び所得を向上する手段として適切だったか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	その他	中間レビュー以降のプロジェクトをとりまく環境（政策、経済、社会等）の変化はあったか？	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー
有効性	プロジェクト目標の達成見込み	プロジェクト目標の指標はどの程度達成されたか。	<ul style="list-style-type: none"> 「プロジェクトの実績と目標達成の見込み」を参照 		
		プロジェクト目標は達成される見込みか。	<ul style="list-style-type: none"> 「プロジェクトの実績と目標達成の見込み」を参照 		

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5 項目	評価項目		必要なデータ・資料	情報源	データ収集方法
	大項目	小項目			
有効性	プロジェクト目標の達成見込み	JICA の他の案件や他の援助機関の関連案件との協力による相乗効果があったか。	<ul style="list-style-type: none"> 連携の実績 連携により生じたプロジェクト目標達成を高める効果 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	因果関係	プロジェクト目標の達成は成果の産出によって引き起こされるものか。（計画されている5つの成果を産出することによりプロジェクト目標が達成されるというロジックは終了時時点でも成り立っているか。）	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
		成果からプロジェクト目標達成に至るまでの外部要因は現在も適切か。外部条件の影響はあったか。 <u>外部条件</u> - インディカ米の物価水準が維持される。 - 激しい天候不順がない。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
		プロジェクト目標の達成を促進（または阻害）する要因や他にあるか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
効率性	成果の産出	成果の指標はどの程度達成されたか。	<ul style="list-style-type: none"> 「プロジェクトの実績と目標達成の見込み」を参照 		
	因果関係	成果を産出するために十分な活動が実施されたか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家及びC/P 	<ul style="list-style-type: none"> 資料レビュー インタビュー
		プロジェクト活動実施から成果産出に至るまでの外部条件の影響はあったか。 <u>外部条件</u> - 研修を受けた普及員が該当職務に従事し続ける。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
		プロジェクト活動を実施するための前提条件は十分に満たされたか。 <u>前提条件</u> - 対象コミュニティに普及員が配置される。 - 対象コミュニティに紛争が起きない。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート

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グリッド（案）

5 項目	評価項目		必要なデータ・資料	情報源	データ収集方法
	大項目	小項目			
効率性	投入の実施方法	活動を計画通り実施するための日本側の投入が、量、質、タイミングの面で、適切に実施されたか。 1) 専門家派遣 2) 機材供与 3) C/P 研修	<ul style="list-style-type: none"> 日本投入の実績 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家及び C/P 	<ul style="list-style-type: none"> 資料レビュー 現地踏査 インタビュー
		活動を計画通り実施するためのカンボジア側の投入が、量、質、タイミングの面で、適切に実施されたか。 1) 施設の提供 2) カウンターパートの派遣	<ul style="list-style-type: none"> カンボジア側の投入の実績 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家及び C/P 	<ul style="list-style-type: none"> 資料レビュー 現地踏査 インタビュー
	効率性を向上または阻害した要因	効率性を向上・阻害したその他の要因はあったか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
インパクト	上位目標達成の見込み	終了時評価の時点で、どの程度上位目標が達成されたか。	<ul style="list-style-type: none"> 「プロジェクトの実績と目標達成の見込み」を参照 		
		上位目標はプロジェクト終了後 3-5 年程度で達成される見込みはあるか。	<ul style="list-style-type: none"> 卒業デモ農家による農家間技術普及に係る現状及び課題 PDA による普及活動計画 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	上位目標とプロジェクト目標の因果関係	プロジェクト目標から上位目標に至るまで外部要因は現在も適切か。今後、上位目標の達成が外部条件の影響を受ける可能性があるか。 <u>上位目標:</u> 1. 対象地域において普及活動が継続される。 2. 対象地域において優良種子の生産が継続される。 3. 対象地域においてインディカ米の流通促進が継続される。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	その他	当初予想しなかった正負の影響はあるか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー アンケート インタビュー

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5 項目	評価項目		必要なデータ・資料	情報源	データ収集方法
	大項目	小項目			
持続性	制度面	稲作振興に係る政策の方向性が変わる見通しはあるか。	<ul style="list-style-type: none"> 稲作振興に関する政策 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> 政策資料 プロジェクト関連資料 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> 資料レビュー インタビュー
		デモ農家による農家間普及（farmer to farmer extension：FTF）を促進する持続的なインセンティブ制度が構築されているか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	組織面	プロジェクト終了後も圃場研修(Farmers Field School:FFS)を実施する組織能力(人材配置やモニタリング体制等)が MAFF 及び PDF に備わっているか。	<ul style="list-style-type: none"> 人材配置状況 モニタリング体制 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
		プロジェクト終了後も生産や流通改善活動を継続するための組織能力(意思決定、財務管理)がパイロットグループや SGG に備わっているか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	財務面	プロジェクト終了後も、普及活動を継続していくための予算が十分に確保されるか。	<ul style="list-style-type: none"> 農業技術向上の予算確保の見通し（PDA の予算計画、コミュニン投資計画） 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
	技術面	MAFF 及び PDA（普及員も含む）において、プロジェクト終了後も FFS を実施・普及するために必要な技術と能力を有する人材は質量ともに十分に育成されたか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
		FFS による生産技術は、研修参加農家により受容されているか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート
		デモ農家が近隣農家に研修できるだけの農業生産技術を十分に習得したか。デモ農家による技術の定着と普及がどの程度期待できるか。	<ul style="list-style-type: none"> 専門家、C/P、プロジェクト関係者の認識 	<ul style="list-style-type: none"> プロジェクト関連資料 専門家、C/P、プロジェクト関係者 	<ul style="list-style-type: none"> 資料レビュー インタビュー アンケート

カンボジア国トンレサップ西部地域農業生産性向上プロジェクト終了時評価調査
グリッド（案）

5 項目	評価項目		必要なデータ・資料	情報源	データ収集方法
	大項目	小項目			
		本プロジェクトで作成された技術マニュアルや普及ツールプロジェクト終了後も継続して活用されるか（使い勝手はよいか）。	● 専門家、C/P、プロジェクト関係者の認識	● プロジェクト関連資料 ● 専門家、C/P、プロジェクト関係者	● 資料レビュー ● インタビュー ● アンケート
		本プロジェクトで供与された農業機械（耕運機、脱穀機、唐箕〔穀物選別機〕）の維持管理は、プロジェクト終了後も供与先である TAS や SGG により適切に行われるか。	● 専門家、C/P、プロジェクト関係者の認識	● プロジェクト関連資料 ● 専門家、C/P、プロジェクト関係者	● 資料レビュー ● インタビュー ● アンケート
	その他の持続性を促進または阻害する要因	その他に本プロジェクトの持続性を促進または阻害する要因はあるか。	● 専門家、C/P、プロジェクト関係者の認識	● プロジェクト関連資料 ● 専門家、C/P、プロジェクト関係者	● 資料レビュー ● インタビュー

Project Design Matrix (PDM)

プロジェクト名：カンボジア国トンレサップ西部地域農業生産性向上プロジェクト プロジェクト対象地域：バットアンバン州、プルサット州、コンポンチュナン州のターゲットコミュニティ（コミュニティ数：30+4+3=計 37）

プロジェクト期間：4.5 年間（54 ヶ月） 裨益者：農林水産省農業総局、州政府、州農業局の職員、普及員及び対象地域の農家

ターゲットグループ：農林水産省農業総局職員、対象州農業局職員及び普及員

作成日：2012 年 10 月 25 日：PDM 第 3 版

プロジェクトの要約	指標	指標入手手段	外部条件
上位目標 トンレサップ西部 3 州の対象地域において農家の生産性及び所得が向上する。	<ol style="list-style-type: none">対象地域の農家のインディカ米の単収が 2.75 トン/ha（2010 年時点）から 3.00 トン/ha にまで増加する。対象地域の農家のインディカ米の総生産量（販売価格換算）が増加する。	<ol style="list-style-type: none">聴き取り調査、農水省・州農業局の年次報告書、及び既存統計資料聴き取り調査及び既存統計資料	
プロジェクト目標 トンレサップ西部 3 州においてプロジェクト活動に参加した農家の生産性及び所得が向上する。	<ol style="list-style-type: none">デモ農家のインディカ米の単収が 2.75 トン/ha（2010 年時点）から 4.00 トン/ha にまで増加する。研修に参加した農家のインディカ米の単収が 2.75 トン/ha（2010 年時点）から 3.50 トン/ha にまで増加する。デモ農家のインディカ米の総生産量（販売価格換算）が増加する。研修に参加した農家のインディカ米の総生産量（販売価格換算）が増加する。	<ol style="list-style-type: none">プロジェクト報告書、農水省・州農業局の年次報告書同上プロジェクト報告書及び既存統計資料同上	<ol style="list-style-type: none">対象地域において普及活動が継続される。対象地域において優良種子の生産が継続される。対象地域においてインディカ米の流通促進が継続される。
成 果 <ol style="list-style-type: none">普及員の普及実施能力が向上する。対象コミュニティによる営農改善のための活動が促進される。参加農家の農業生産技術が改善される。優良種子の生産・配布が促進される。	<ol style="list-style-type: none">1-1. カウンターパートの支援の下、22 名の普及員がデモ農家と参加農家に対して 880 回以上の研修を実施できる。1-2. 種子生産グループの担当普及員が圃場審査や種子検査技術を身につける。1-3. 普及員による普及サービスに対するデモ農家の満足度が平均 80%以上となる。2-1. 80%以上の研修実施計画が実行される。2-2. 対象コミュニティの半数以上において、コミュニティ投資計画に農業関連活動が含まれる。3-1. 研修参加農家のうち半数以上が研修活動において示される農業生産技術のうち少なくとも 1 種類を利用できる。4-1. 保証種子が 2014 年までに年間 100 トン以上生産されるようになる。4-2. 優良原種が 2014 年までに年間 1 トン以上生産されるようになる。4-3. 優良種子を利用する農家が 1,000 名以上となる。	<ol style="list-style-type: none">1-1. プロジェクト報告書1-2. プロジェクト報告書1-3. プロジェクト報告書2-1. プロジェクト報告書2-2. プロジェクト報告書3-1. プロジェクト報告書4-1. プロジェクト報告書4-2. プロジェクト報告書4-3. プロジェクト報告書	<ol style="list-style-type: none">インディカ米の物価水準が維持される。激しい天候不順がない。

[illegible]

Questionnaire for Counterparts (C/Ps)**Joint Terminal Evaluation of
Agricultural Productivity Promotion Project in West Tonle Sap (APPP)**

Dear Madam/Sir,

This is a questionnaire for the joint terminal evaluation on the *Agricultural Productivity Promotion Project in West Tonle Sap (APPP)*. Since the end of the project period is approaching (March 2015), the joint terminal evaluation will be conducted from September 1, 2014 to September 18, 2014.

The objectives of the terminal evaluation are as follows:

- (1) To review the Project's achievements;
- (2) To identify factors that have facilitated or negatively affected the project implementation process;
- (3) To evaluate the Project from the viewpoints of five evaluation criteria - Relevance, Effectiveness, Efficiency, Impact and Sustainability; and
- (4) To identify measures to be taken for the Project's further improvement.

Your answers to this questionnaire will be used to analyze the Project's performance.

Thank you for your cooperation.

JICA Terminal Evaluation Team

Respondent's Information

Name:	
Position:	
Organization:	

Instructions: **Please answer the following questions based on your personal observations on and experiences in the Project. Please make your answers as specific as possible.**

- 1) Have you been able to proactively implement project activities?

☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ No, not at all

Please discuss factors that have made it easier or harder for you to be involved in project activities (e.g. communication with Japanese experts and extension workers, method of transfer of technical skills by Japanese experts, time constraint, budget constraint, etc.).

--

- 2) To what extent has the Project contributed to the strengthening of your professional skills in carrying out regular duties assigned to you as a PDA staff member?

☐ Highly ☐ To some extent ☐ Not so much ☐ Not at all

Please discuss positive changes in your professional performance that have occurred as a result of the Project (e.g. strengthening of your practical skills in rice cultivation and seed production and improvement of working relationship with extension workers and NGO workers). Also please list the skills and knowledge

you would like to further improve **in order to facilitate the improvement of the rice farmers' productivity and incomes** (e.g. monitoring skills, planning skills, and marketing).

[Positive changes in my performance]

a)

b)

[The skills and knowledge I would like to further improve **in order to facilitate the improvement of the rice farmers' productivity and incomes.**]

a)

b)

- 3) In your opinion, to what extent have extension workers' abilities to implement extension activities improved?

☐ Highly

☐ To some extent

☐ Not so much

☐ Not at all

Please discuss positive changes in their performance that you observed as a result of the Project. Please discuss the skills and knowledge that they need to further improve **in order to facilitate the improvement of the rice farmers' productivity and incomes.**

[Positive changes in their performance]

a)

b)

[The skills and knowledge that they need to further improve **in order to facilitate the improvement of the rice farmers' productivity and incomes.**]

a)

b)

- 4) In your opinion, are the technical manuals, guidelines, and extension tools (e.g. leaflets on rice production techniques, Drum Seeder Manual, "Step Up Your Knowledge on Rice Cultivation") developed by the Project user-friendly? Are they likely to be continued to be used after project completion?

☐ Yes

☐ Yes, to some extent

☐ No, not so much

☐ Not at all

Please provide comments (or areas of improvement) on technical manuals, guidelines, and extension tools developed in the Project.

- 5) **Questions to the C/Ps in charge of FFS Activities**

5-1. In your opinions, will the farmers that have participated in FFS (including demo-farmers) continue to use the rice cultivation techniques introduced to them in FFS after project completion?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please provide reasons for your answer above.

--

5-2. In your opinion, have demo-farmers been trained sufficiently to disseminate their knowledge on rice production techniques to neighboring farmers?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

5-3. In your opinion, will there be sufficient incentives for demo-farmers to disseminate rice production techniques to neighboring farmers after project completion?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please list 1) incentives available for demo-farmers to disseminate rice production techniques to neighboring farmers after project completion and discuss 2) any foreseeable challenges in expanding FTF dissemination of rice production techniques, and 3) measures that should be taken to overcome the challenges.

1) Incentives
2) Foreseeable challenges
3) Measures to be taken

6) **Questions to the C/Ps in charge of SGG Related Activities**

6-1. In your opinion, have SSG members been trained sufficiently in cultivating quality seeds and post-harvest handling of seeds?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

6-2. In your opinion, have SSG members been trained sufficiently in sales promotion (contacting and negotiating with rice millers, etc)?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

6-3. In your opinion, have SSG members been trained sufficiently to manage their group finances (i.e. book keeping skills)?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

6-4. In your opinion, are SSGs likely to continue their seed production and distribution activities after project completion?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please discuss any other foreseeable challenges for SSGs to continue and expand their seed production and distribution activities and measures that should be taken to overcome the challenges.

7) **[Questions to the C/Ps in charge of Pilot Group Related Activities]**

7-1. In your opinion, have pilot group members sufficiently gained the knowhow to cultivate quality rice through FFS and learned the importance of quality improvement?

☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

7-2. In your opinion, have pilot group members been trained sufficiently to manage their group finances (i.e. book keeping skills and handling of group funds)?

☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

7-3. In your opinion, are pilot group members likely to continue their production and marketing activities after project completion?

☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

7-4. In your opinion, are pilot group members likely to continue their collective purchase of seeds and fertilizers using the group fund after project completion?

☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please discuss any foreseeable challenges for pilot groups to continue and expand their activities and measures that should be taken to overcome the challenges.

8) **[Question to Battambang C/Ps in charge of Commune Activities]**

In your opinion, will agricultural activities continue to be included in the Commune Investment Plan after project completion?

☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please provide reasons for your answer above.

9) Please provide any other comments or suggestions on/about the Project.

Thank you very much for your time and cooperation.

Answering the questionnaire by the Project Counterparts (C/Ps)

Joint Terminal Evaluation of Agricultural Productivity Promotion Project in West Tonle Sap (APPP)									
Battambang, Provincial Department of Agriculture (PDA)									
A-Q No.	Name :	Sir Kimnay (Mrs)	Name :	Pov Lina (Mrs.)	Name :	Ros Ratha (Mss.)	Name :	Ouch Hoeun (Mr.)	Name :
	Position:	Counterpart (FFS普及担当)	Position:	Counterpart (種子生産担当)	Position:	Counterpart (普及担当)	Position:	Counterpart (普及、コミュニケーション活動担当)	Position:
	Organization:	Battambang PDA	Organization:	Battambang PDA	Organization:	Battambang PDA	Organization:	Battambang PDA	Organization:
1)	Yes		Yes, to some extent		Yes, to some extent		Yes, to some extent		Yes, to some extent
	Everything is going smoothly in terms of communication, method of transferring technical skill by experts. There is no any problem with budget and time.		The method of transferring technical skills, communication by experts are much better. Due to that Cambodia is the developing country so the adopting of techniques are still limited.		Good communication to each other.		*Communication with Janpanese experts is easy but just somehow the approval quite a bit late and sometimes need to remind. *Method of transfer of technical skill by experts is better and clear, and no time constraint. *Budget is abit late to delivery.		Everything is going smooth
2)	To some extent		Highly		Yes, to some extent		To some extent		To some extent
	[Positive changes in my performance] -Received clear knowledge and skill on rice cultivation throughout FFS.		[Positive changes in my performance] -Gaining the skill of making activity plan. Knowing more relevance INGOs &NGOs for exchange the knowledg on rice production.		[Positive changes in my performance] Gaining new experiences from agricultural technical work.		[Positive changes in my performance] a) Better relationship than before. Know more new techniques and integrated activity plan to Commune Investment Plan. b) Gaining new technique of seed treatment.		[Positive changes in my performance] a) How to manage the farmer gr finding marketing, joint purchas b) Strenthening the techniques c
	[The skill and knowledge I would like to further improve..] -Method of effectively transferring techniques from farmer to farmer.		[The skill and knowledge I would like to further improve..] -More concrete technique of post harvest because farmers tend not to care much about this technique. -Building more relationship between farmers and rice millers to offer better price to farmers and paddy requirement.		[The skill and knowledge I would like to further improve..] Skill of making plan and marketing for selling the products.		[The skill and knowledge I would like to further improve..] a) Push the farmers to be more concentrate on their farming such as weeding, remove different varieties. b) Prohibit the farmers not to use herbicide on rice.		[The skill and knowledge I would like to further improve..] a) Arrange commercial broadca production in order to increase i b) Push the farmers to use quali
	To some extent		Highly		To some extent		To some extent		To some extent
3)	[Positive changes in their performance] -Prepare method for each FFS step to attract more farmers to change their traditional mindset and practice on rice cultivation. -Analysis the expenditure and income record on rice production and disseminate this analysis to farmers on how much benefit that we gain by adopting techniques.		[Positive changes in their performance] -Encourage farmers to use quality seed to get high yield and better price. -Acknowledge how beneficial of practicing line transplanting, weeding and removing different varieties.		[Positive changes in their performance] -Conduct training on new agricultural techniques further more. -Know how to prepare plan for rice cultivation and lead the farmers for demonstration plots.		[Positive changes in their performance] -Raise up all issues when the face to Japanese experts. - During instruction to farmers, the use more examples to enable farmers understand. - During instruction to farmers, they are so flexible according to farmers' circumstances.		[Positive changes in their performance] a) They change their traditional b) Willing to push farmers to us high yield and price.
	[The skill and knowledge they need to further improve..] -More methods on how to effectively instruct the farmers to change their mindset and traditional practice.		[The skill and knowledge they need to further improve..] -Evaluation and monitoring method to identify the missing parts while transferring the techniques to farmers.		[The skill and knowledge they need to further improve..] -Skill of marketing communication in order improve the sale of rice production and get high price.		[The skill and knowledge they need to further improve..] -Use variety according to the marketing demand. -Provide training more in rice cultivation.		[The skill and knowledge they need to further improve..] Use pure seed and renew every a) Support extension staff to cor farmers.
4)	Yes to some extent				No, not so much		Yes		Yes, to some extent
	N/A		追加項目掲載要望(病害の種類をもっと多くとか)の意味だそうです(C/Pに確		include of post harvest techniques. include the technique how to control pests/insects and identification of disease symptoms which occurred on paddy.		No any comments because technical manuals are easy for farmers to understand and practice.		For technical manuals are usefu might be some problems becaus Battambang is mostly sticky and
5) -5-1.	Yes to some extent				Yes, to some extent		Yes, to some extent		
	Because some techniques are easy to practice by themselves and to adopt, such as seed treatment, fertilizer application (appropriate time and amount) but some techniques related to labor shortage are diifficult to practice such as line transplanting.				Some farmers have been adopting new technology and they are trying to change their mindset and traditional practice. By adopting new techniques, they recognize that receive the production yield higher than farmer's practice.		If there is sufficient water, the farmers would use all these techniques because they spend less input and receive more profit.		
5) -5-2.	Yes				Yes		Ye, to some extent		
5) -5-3.	Yes to some extent				Yes		Ye, to some extent		
	1). Incentives -Conduct farmers' exchange visit to other province. -Rewarding with things such as agricultural materials and certificates.				1). Incentives -Publish more technical manuals for providing to farmers to understand clearly.		1). Incentives -Rice seed, fertilizer		
	2). Foreseeable challenges. -Virus diseases -Shortage of irrigation system (draught)				2). Foreseeable challenges. -The knowledge of farmers are limited.		2). Foreseeable challenges. -Farmers have limited knowledge, it's easy to forget. -Irrigation system		

	3) Measure to be taken -Support some amount of diesel for pumping -Support some amount of seed for emergency cases.				3) Measure to be taken -Explain more to the farmers		3) Measure to be taken -Train the farmers more -Availability of irrigation system.		
6) -6-1.			Yes						
6) -6-2.			Yes, to some extent						
6) -6-3.			Yes, to some extent						
6) -6-4.			Yes						
			[Challenges] -Marketing problem [Measure] -Find out the marketing demand though contract farming/sale in order to ensure of selling and it's chances for groups to expand their production areas and members.						
7) -7-1.									Yes, to so
7) -7-2.									Yes, to so
7) -7-3.									Yes, to so
7) -7-4.									Yes, to so
									The main challenge of pilot gro
8)							Yes		
							Agricultural activities are still necessary to continuously integrate into Commune Investment Plan because it is good for agricultural technique extension to the farmers.		
9)	N/A		Create more chances for project officers (C/Ps & Extension Staff) to have exchange visit to abroad and within the coutry to exchange experience.		The project should arrange study visit at abroad for staff and counterparts to increase more new knowledge and skills. Conduct exchange visit within farmers to farmers to get more experience.		Next project should work more target communes and village rather than this project.		Request the project to extend an to strenthening the activity of pi

	Pursat, Provincial Department of Agriculture (PDA)				Kampong Chhnang, Provincial Department of Agriculture (PDA)			
Pa Boreak (Mr.)	Name :	Leng Chendanmony (Mr.)	Name :	Hov Chandara (Mr.)	Name :	Ly Sam Ol (Mr.)	Name :	Ei Yoeun (Mr.)
Counterpart (流通改善担当)	Position:	Counterpart (種子生産&普及担当)	Position:	Counterpart (普及&種子生産担当)	Position:	Counterpart (普及&種子生産担当)	Position:	Counterpart (普及&種子生産)
Battambang PDA	Organization:	Pursat PDA	Organization:	Pursat PDA	Organization:	Kampong Chhang, PDA	Organization:	Kampong Chhnang, PDA
<i>me extent</i>	<i>Yes</i>		<i>Yes</i>		<i>Yes</i>		<i>Yes</i>	
	1. Enough office materials for implementing the project activities. 2. Good communication between Japanese Experts and Government officials. 3. Method of transfer technical skills are easy to catch and understand. 4. Regular training to project officers.		1. Sufficient budget, transportation means, and materials for implementing the activities. 2. Good communication with Japanese Experts as well as transferring the technical skill is easy to understand and catch. 3. Good colaboration among experts to counterparts and extension.		1. Good communication among experts and project officers. 2. Enough materials and technical manuals for conducting training. 3. No any budget constraint.		1. Good communication among experts and project officers. 2. Enough materials and technical manuals for conducting training. 3. No any budget constraint.	
<i>2 extent</i>	<i>Highly</i>		<i>Highly</i>		<i>Highly</i>		<i>To some extent</i>	
<i>nance]</i> roups to work as groups, se and sale. f rice cultivation through FFS.	<i>[Positive changes in my performance]</i> a) Improve my technical knowledge and experience and the practice is so clear		<i>[Positive changes in my performance]</i> a) Improve my technical knowledge of rice cultivation, finding market for sale the product and clear of quality seed standard.		<i>[Positive changes in my performance]</i> a) Concrete technical skill and knowledge on rice cultivation through learning and actual practicing. b) Open mind of accepting new techniques by observing so much diferent benefit from farmer practice.		<i>[Positive changes in my performance]</i> a) Well understanding about rice cultivation techniques through on-job-training.	
<i>ld like to further improve..]</i> sting to extend the sale of income of farmers. ty seed.	<i>[The skill and knowledge I would like to further improve..]</i> a) Monitoring and evaluation skill. b) Financial Management skill. c) Planning and marketing skill.		<i>[The skill and knowledge I would like to further improve..]</i> a) Financial Management skill. b) Planning and marketing skill.		<i>[The skill and knowledge I would like to further improve..]</i> a) Financial Management skill. b) Planning and marketing skill.		<i>[The skill and knowledge I would like to further improve..]</i> a) Financial Management skill. b) Planning and marketing skill.	
<i>2 extent</i>	<i>To some extent</i>		<i>Highly</i>		<i>Highly</i>		<i>Highly</i>	
<i>rmance]</i> concept to technical concept. e quality seed which obtain	<i>[Positive changes in their performance]</i> a) The knowledge is better than before and more concentrate on working. b) Better collaboration.		<i>[Positive changes in their performance]</i> a) Change their own mindset and adopt new technology (high benefit). b) High understanding about rice cultivation techniques.		<i>[Positive changes in their performance]</i> a) More concentrate according to the plan set. b) Conduct training to farmers and let the farmers practice immediately at the demo plots.		<i>[Positive changes in their performance]</i> a) Making rice cultivation plan. b) More confident in teaching in front of farmers.	
<i>eed to further improve..]</i> 2-3 years. ntinue conducting training to	<i>[The skill and knowledge they need to further improve..]</i> a) Facilitation and communication skill. b) Planning and marketing skill		<i>[The skill and knowledge they need to further improve..]</i> a) Pest management skill b) Planning, accounting and marketing skill		<i>[The skill and knowledge they need to further improve..]</i> a) Pest management skill b) Planning, accounting and marketing skill		<i>[The skill and knowledge they need to further improve..]</i> a) How to maintain quality soil. b) How to make organic fertilizer.	
<i>me extent</i>	<i>Yes</i>		<i>Yes</i>		<i>Yes</i>		<i>Yes, to some extent.</i>	
I but for using drum seeder se the soil condition in d difficult to pull.	1. Include rice diseases identification (symtoms and countermeasures). 2.Include beneficial (predator) and unbeneficial insects/pest.		1. Include rice diseases identification (symtoms and countermeasures). 2.Include useful (predator) and unuseful insects/pest.		1. Include rice diseases identification (symtoms and countermeasures). 2.Include useful (predator) and unuseful insects/pest.		1. Include rice diseases identification (symtoms and countermeasures). 2.Include useful (predator) and unuseful insects/pest.	
	<i>Yes</i>		<i>Yes, to some extent</i>		<i>Yes, to some extent</i>		<i>Yes, to some extent</i>	
	1. Spending less inputs, getting more benefit. 2. Easy to manage the field, remove weeds, apply fertilizer and remove different variety. 3. Easy to sell because the buyers don't complain much.		1. Shortage of labor forces (migrate to neighboring country). 2. High cost of daily labors. 3. Natural disaster.		Some techniques will be continues and some techniques might not, like line transplanting (shortage of labor forces) and seed treatment.		Some techniques will be continues and some techniques might not, like line transplanting (shortage of labor forces) and seed treatment.	
	<i>Yes, to some extent</i>		<i>Yes, to some extent</i>		<i>Yes, to some extent</i>		<i>Yes, to some extent</i>	
	<i>Yes, to some extent</i>		<i>Yes, to some extent</i>		<i>Yes</i>		<i>Yes, to some extent</i>	
	1). <i>Incentives</i> - More motivate to implement their rice cultivation techniques. - Make them more interesting on the techniques.		1). <i>Incentives</i> - Provide incentives to regular attending FFS. - Active demo.farmers receive agricultural input materials.		1). <i>Incentives</i> - Recognition certificate offering, input materials distribution could motivate them to continue the techniques.		1). <i>Incentives</i> - Recognition certificate offering, input materials distribution could motivate them to continue the techniques.	
	2). <i>Foreseeable challenges.</i> - They are willing to disseminate but time constrain (self-busy). - Moreover, their adoption is awaiting to see the results (not so much trust).		2). <i>Foreseeable challenges.</i> - Not having enough time. - The living condition is still limited.		2). <i>Foreseeable challenges.</i> - Shortage of labor forces		2). <i>Foreseeable challenges.</i> - Shortage of labor forces	

	3) <i>Measure to be taken</i> - Conduct farmer field day for other farmers. - Through any gathering meeting, village ceremony or workshop etc.	3) <i>Measure to be taken</i> - When arrange any meeting, there should involve with village chief and commune chief). - After harvesting, the result should be shown to other farmers.	3) <i>Measure to be taken</i> - Establish the farmer groups for exchange labors.	3) <i>Measure to be taken</i> - Establish the farmer groups for exchange labors.		
	<i>Yes, to some extent</i>	<i>Yes</i>	<i>Yes, to some extent</i>			
	<i>Yes, to some extent</i>	<i>Yes, to some extent</i>	<i>Yes, to some extent</i>			
	<i>Yes, to some extent</i>	<i>Yes, to some extent</i>	<i>Yes, to some extent</i>			
	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>			
	1. Produce more seed but no contract sale with buyers. 2. Farmers need cash right after harvesting because they need to repay to money lenders. 3. Groups need sufficient capital for using within their groups. 4. Resolution is search partners for contract sale (such as rice millers, traders etc.).	1. Trustworthy to each other. 2. Resolution is arrange meeting every 3 month and keep good relationship between farmers and officers.	1. The marketing is not really stable. 2. The price of the seed is still low. 3. No contract sale/farming with rice millers and traders. 4. Resolution is strengthening the farmers to keep communication with rice millers or traders and keep aware of marketing demand.			
<i>me extent</i>	<i>Yes, to some extent</i>	<i>Yes</i>			<i>Yes, to some extent</i>	
<i>me extent</i>	<i>Yes, to some extent</i>	<i>Yes, to some extent</i>			<i>Yes, to some extent</i>	
<i>me extent</i>	<i>Yes</i>	<i>Yes, to some extent</i>			<i>No, not so much.</i>	
<i>me extent</i>	<i>Yes</i>	<i>Yes</i>			<i>Yes, to some extent</i>	
ups is shortage of labor forces.	1. Some members might drop out (change the resident, getting old, loss of labor forces). 2. Some groups might be disarmament. 3. Resolution is all extension officers start to strengthening the groups because PDA will convert the groups to be Agricultural Cooperatives in the future.	Challenges: - Marketing problem. - Natural disaster, disease occur, and pest/insect damages. - Wish to sell the product in different way. Resolution: - Find marketing for farmers. - Provide more technical knowledge to farmers. - Convert as Agricultural Cooperative which support by PDA.			Challenges: - The quality paddy is still in a low price as ordinary farmers. Resolution: - Keep inform the negotiate with rice millers or traders.	
	<i>No, not so much</i>					
	1. If there is budget package or other project, the activities will continue to integrate into Commune Investment Plan. 2. PDA will raise annual budget for supporting these activities.					
other 1-2 years more in order ilot groups.	Life insurance should be provided under duty to the project officers.	1. Project should more new techniques. 2. Project should continue another years for which target province that received less target commune such as Pursat province.	N/A		N/A	

Questionnaire for Extension Workers**Joint Terminal Evaluation of
Agricultural Productivity Promotion Project in West Tonle Sap (APPP)**

Dear Madam/Sir,

This is a questionnaire for the joint terminal evaluation on the *Agricultural Productivity Promotion Project in West Tonle Sap (APPP)*. Since the end of the project period is approaching (March 2015), the joint terminal evaluation will be conducted from September 1, 2014 to September 18, 2014.

The objectives of the joint terminal evaluation are as follows:

- (1) To review the Project's achievements;
- (2) To identify factors that have facilitated or negatively affected the project implementation process;
- (3) To evaluate the Project from the viewpoints of five evaluation criteria - Relevance, Effectiveness, Efficiency, Impact and Sustainability; and
- (4) To identify measures to be taken for the Project's further improvement.

Your answers to this questionnaire will be used to analyze the Project's performance.

Thank you for your cooperation.

JICA Terminal Evaluation Team

Respondent's Information

Name:	
Position:	
Organization:	

Instructions: **Please answer the following questions based on your personal observations on and experiences in the Project. Please make your answers as specific as possible.**

- 1) Have you been able to proactively involve yourself in project activities?

☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ No, not at all

Please discuss factors that have facilitated or hindered your involvement in project activities (e.g. communication with Japanese experts and counterparts, method of transfer of technical skills by Japanese experts, time constraint, budget constraint, etc).

--

- 2) To what extent has the Project contributed to the strengthening of your professional skills in carrying out your regular duties as a District Agricultural Office staff members?

☐ Highly ☐ To some extent ☐ Not much ☐ Not at all

Please discuss positive changes in your professional performance that have occurred as a result of the Project.

Also please list the skills and knowledge you would like to further improve in order to facilitate the improvement of the rice farmers' productivity and incomes (e.g. monitoring skills and communication skills with farmers).

<p>[Positive changes in my performance]</p> <p>a)</p> <p>b)</p>
<p>[The skills and knowledge I would like to further improve in order to facilitate the improvement of the rice farmers' productivity and incomes.]</p> <p>a)</p> <p>b)</p>

- 3) In your opinion, are the technical manuals, guidelines, and extension tools (e.g. leaflets on rice production techniques, Drum Seeder Manual, "Step Up Your Knowledge on Rice Cultivation") developed by the Project user-friendly? Are they likely to be continued to be used after project completion?

☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please provide comments (or areas of improvement) on technical manuals, guidelines, and extension tools developed in the Project.

--

4) **[Questions on FFS Activities]**

- 4-1. In your opinions, will the farmers that have participated in FFS (including demo-farmers) continue to use the rice cultivation techniques introduced to them in FFS after project completion?

☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please provide reasons for your answer above.

--

- 4-2. In your opinion, have demo-farmers been trained sufficiently to disseminate their knowledge on rice production techniques to neighboring farmers?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

4-3. In your opinion, will there be sufficient incentives for demo-farmers to disseminate rice production techniques to neighboring farmers after project completion?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please list 1) incentives available for demo-farmers to disseminate rice production techniques to neighboring farmers after project completion and discuss 2) any foreseeable challenges in expanding FTF dissemination of rice production techniques, and 3) measures that should be taken to overcome the challenges.

1) Incentives
2) Foreseeable challenges
3) Measures to be taken

5) **Questions on SGG Related Activities**

5-1. In your opinion, have SSG members been trained sufficiently in cultivating quality seeds and post-harvest handling of seeds?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

5-2. In your opinion, have SSG members been trained sufficiently in sales promotion (contacting and negotiating with rice millers, etc)?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

5-3. In your opinion, have SSG members been trained sufficiently to manage their group finances (i.e. book keeping skills)?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

5-4. In your opinion, are SSGs likely to continue their seed production and distribution activities after project completion?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please discuss any other foreseeable challenges for SSGs to continue and expand their seed production and distribution activities and measures that should be taken to overcome the challenges.

--

6) **Questions on Pilot Group Related Activities**

6-1. In your opinion, have pilot group members sufficiently gained the knowhow to cultivate quality rice through FFS and learned the importance of quality improvement?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

6-2. In your opinion, have pilot group members been trained sufficiently to manage their group finances (i.e. book keeping skills and handling of group funds)?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

6-3. In your opinion, are pilot group members likely to continue their production and marketing activities after project completion?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

6-4. In your opinion, are pilot group members likely to continue their collective purchase of seeds and fertilizers using the group fund after project completion?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please discuss any foreseeable challenges for pilot groups to continue and expand their activities and measures that should be taken to overcome the challenges.

7) **Question on Commune Activities**

In your opinion, will agricultural activities continue to be included in the Commune Investment Plan after project completion?

- ☐ Yes ☐ Yes, to some extent ☐ No, not so much ☐ Not at all

Please provide reasons for your answer above.

8) Please provide any other comments or suggestions on/about the Project.

Thank you very much for your time and cooperation.

Summary of Response by Extension Workers

(As of 11 Aug 2014)

#	Name	Target District	Question 1				Question 2				Question 3																	
			A	B	C	D	Comments				A	B	C	D	Comments				A	B	C	D						
1	Mr. Nong Chantha	Ek Phnom	1					- Set specific action plan, enough tools, provide salary on time, and it is common to communicate with each other. '- Because of shortage of water sources, rice cultivation does not follow the schedule.	1					[Positive changes in my performance]: a) Know how to prepare the action plan and be able to lead farmers to have rice cultivation. b) Practice recommended rice cultivation technologies to gain more yield. [The skills and knowledge I would like to further improve.....] a) Need to know about how to monitor and evaluate rice farmers. b) Need to learn about marketing skill for improvement.	1					Please include the post-harvest technologies.					1			
2	Mr. Sorn Pov	Bavel	1					- The communication with Japanese Experts is very easy as we have our counterpart to facilitate. '- The explanation of the experts are very easy to catch up by farmers as the project has produced some kind of technical manuals. '- Time: manage time well. '- Budget: the project provide salary on time.	1					a) Seed production technologies, seed production management activities and provide training to farmers. b) Seed selection and hot water disinfection a) Seed: produce based on farmers and market demand, and provide training on seed production to farmers. b) Disease on rice: show more about the name of disease and and its vector and measure to be taken.	1					APPP has updated the content in FFS technical manual since 2012.					1			
3	Mr. Sart Samban	Rukhakiri	1					- The communication with Japanese Experts is in common. '- Ways of transferring knowledge from experts is very effective and efficiency. '- Time: average '- Budget: average	1					a) More responsible on the assignment, make a good relationship with farmers. b) Gain good experience and share to farmers. a) The project should teach farmers on bookkeeping. b)	1					No need updating					1			
4	Mr. Mao Kry	Moung Russei	1					- It is easy to communicate with Japanese Experts '- Method of transferring technical training by experts is very efficiency. '- Manage the time well '- Received enough salary	1					a) Have more responsibility on FFS b) Work together with farmers on seed production activities. a) The project should include the training on marketing and bookkeeping to demo farmers. b) Use the quality seed demand from the market.	1					No need updating					1			

5	Mr. Sor Sary	Bakan, Pursat	1				<p>- Received enough FFS training from the project together with experience on rice cultivation.</p> <p>'- The project provide enough materials and manual on rice cultivation.</p>	1			<p>a) Received knowledge on new FFS technologies and practice actual monitoring at the field.</p> <p>b) Practice actual inspection with farmers.</p> <p>-----</p> <p>a) Marketing, Accounting and Field management skills.</p> <p>b) The skill on action planning</p>	1			<p>- The technical manual should be included The content about disease and the prevention.</p>	1		
6	Mrs. Ty Sou	Lo Lok Sor, Pursat	1				<p>- Technical training, experience, enough materials and manual in training</p>	1			<p>a) Experience with new FFS technologies, conducted actual inspection at the field.</p> <p>b) Monitor and inspect with farmers</p> <p>-----</p> <p>a) Marketing, Accounting and management skills</p> <p>b) The skill on action planning</p>	1			<p>- Should include the explanation about disease , insects and the way to prevent,</p>	1		
7	Mr. Yem Oeur	Boribo	1				<p>- The communication with Japanese Experts is very easy as we have our counterpart to facilitate.</p> <p>'- The explanation of the experts are very easy to catch up by farmers as the project has produced some kind of technical manuals.</p> <p>'- Time: manage time well.</p> <p>'- Budget: the project provide salary on time.</p>	1			<p>a) Always punctual, work with farmers in FFS training and on the monitoring day.</p> <p>b) Have more responsibility on the the activities</p> <p>-----</p> <p>a) Have regular meeting with farmers</p> <p>b) Explain to farmers about FFS technologies and practice at the field.</p>	1			<p>- Should given both English and Khmer version to extension staffs.</p> <p>'- Include more technical words.</p>	1		

Question 4										Question 5																Question 6																	
Q4-1		Q4-2				Q4-3				Q5-1				Q5-2				Q5-3				Q5-4								Q6-1				Q6-2				Q6-3				Q6-4	
Comments		A	B	C	D	A	B	C	D	Comments		A	B	C	D	A	B	C	D	A	B	C	D	Comments		A	B	C	D	A	B	C	D	A	B	C	D	A	B				
No stable irrigation system and irregular rain fall.		1				1				1) Incentive: Rice cultivation technologies, seed, fertilizer, thermometer, drum can, plastic basin, net beg, basket, drum seeder, certificate, technical manuals, whiteboard and markers. 2) Foreseeable challenges: The capacity of farmer is different from farmer to farmer. 3) Measures to be taken: The farmer who not familiar with the technologies should request the demo farmer to teach or guide them.		1				1				1				1	- The price of seed is similar to price of paddy, and it require labors therefore other members will quit. '- Need to find a good partner, especially in order to keep the price of seed sable.		1				1				1				1				
Famers capacity can not afford to conduct seed treatment as it require inputs and cost. Farmers still continue with others remaining technologies.		1				1				1) Incentive: 10kg of seed to demo farmers. Participant received a small amount of seed and should be included fertilizer. 2) Foreseeable challenges: Knowledge of farmer is limited therefore it might be difficult to transfer knowledge to other neighbor farmers. 3) Measures to be taken: Teach farmers on how to share knowledge to others.		1				1				1				1	- Challenge: Shortage of labors (the cost of hiring is high), sales price of seed is low and produce seed which no demand from the market. '- Measure: Produce seed demand from the market, negotiate for a better sales price and produce seed by using drumseeder.		1				1				1				1				
- Adoption: advantage of using pure seed, seed treatment, land leveling, fertilizer application and monitoring. '- Challenge: transplanting (shortage of irrigation system).		1				1				1) Incentive: the provision equipment for seed treatment. The explanation of technologies with the FFS manuals\ and certificate. 2) Foreseeable challenges: Shortage of irrigation system with affected to the cultivation. 3) Measures to be taken: There should be enough irrigation system.		1				1				1				1	- We should provide support on sales price of seed to encourage seed farmers.		1				1				1				1				
- The adoption technologies: seed treatment, land leveling, fertilizer application and monitoring, etc.		1				1				1) Incentive: The project have provided certificates, drum seeders and equipment for seed treatment and technical manuals and explanation. 2) Foreseeable challenges: Farmer knowledge is limited. 3) Measures to be taken: The commune can use the commune budget for FFS training to farmers in the village.		1				1				1				1	- Improve on the broadcasting system widely. '- Increase number of local and foreign buyers. '- Maintain the quality of seed.		1				1				1				1				

Answer →

A Yes

B: Yes, to some extent

C: No, not so much

D: No, not at all

Question 6			Question 7					Question 8
3-4								
C	D	Comments	A	B	C	D	Comments	Comments
		- The management skills of the group leader is limited. '- Need to maintain on the bookkeeping skill and manage the group fund to the group.	1				Cambodian depends on agriculture, and knowledge of farmers in rice cultivation is limited.	APPP should provide support on irrigation system for effectively rice cultivation.
		- Challenge: Shortage of labor for transplanting (the labor cost is high) and a fluctuate of sale price of seed. '- Measure: Update from transplanting to drumseeding, make a reliable contract with buyers.	1				The commune include the agricultural project in the CIP with specify the topic (seed production, use of chemical and organic fertilizer).	- APPP should provide snack to farmers in training. '- Provide addition payment to extension workers. '- The project should think about the distance of each target district.
			1				- The commune include the agricultural project in the CIP that is the economic base of Cambodia. '- Farmers will have knowledge on agricultural technologies through the promotion.	- The project should provide snack during to encourage more farmers. '- The project should prepare an irrigation for farmers properly.
		- Farmer knowledge is limited '- The commune should solve the problem that occur in pilot groups.	1				- Agriculture activity should be included in CIP as it is Cambodian economic base. '- Farmers should learn about rice cultivation technologies.	- Facilitate the irrigation system properly base on the region. '- SGG should have given a transplanting machine. '- The project should provide emergency support as soon as farmers affected by natural disaster.

		<ul style="list-style-type: none"> - Prepare the regularly meeting with the group members '- Improve the community activities of farmers in the village, and conduct the actual inspection. 	1				<ul style="list-style-type: none"> - Unless the will be a budget package of other project to continue the FFS activity. 	<ul style="list-style-type: none"> - The project should continue the activity for 2-3 years more to maintain the activity at the target villages.
		<ul style="list-style-type: none"> - Close relationship '- Can be organized to be an agricultural cooperative '- Prepare the meeting plan 	1				<ul style="list-style-type: none"> - Unless there is a budget package from PDA or other projects 	<ul style="list-style-type: none"> - The project should expand the activities widely because these activities were not spread to other villages.
								<ul style="list-style-type: none"> - There is a good relationship between experts, CPs and extension staffs. If the project still continue, please consider to support extension staffs such as fuel for the whole year.

**MINUTES OF MEETING
ON
THE TERMINAL EVALUATION
FOR
AGRICULTURAL PRODUCTIVITY PROMOTION PROJECT
IN WEST TONLE SAP (APPP)
IN THE KINGDOM OF CAMBODIA**

The Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Terminal Evaluation team (hereinafter referred to as "the Japanese Team"), headed by Mr. Noriaki NAGATOMO, Deputy Director General of the Rural Development Department, JICA, to the Kingdom of Cambodia (hereinafter referred to as "Cambodia") from August 31st to September 19th, 2014, for the purpose of conducting the Joint Terminal Evaluation for Agricultural Productivity Promotion Project in West Tonle Sap (APPP) (hereinafter referred to as "the Project") in accordance with the Record of Discussions on the Project.

For this purpose, the Japanese Team and the Cambodian authorities concerned formed the Joint Terminal Evaluation Team ((hereinafter referred to as "the Team"). After reviewing and analyzing the activities and achievements of the Project, the Team prepared Joint Terminal Evaluation Report (hereinafter referred to as "the Report"), which was presented to the Fourth Joint Coordinating Committee (hereinafter referred to as "the JCC") meeting.

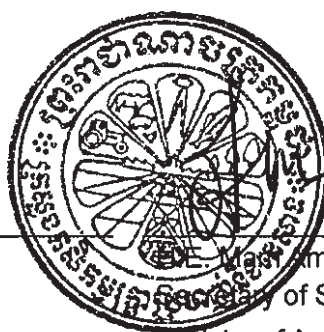
The JCC discussed the major issues pointed out in the Report and agreed the matters attached hereto.

Phnom Penh, September 18th, 2014



Mr. Noriaki NAGATOMO
Team Leader

Japanese Terminal Evaluation Team
Japan International Cooperation Agency
Japan



Mr. Vannakhamnot
Secretary of State

Ministry of Agriculture, Forestry and Fisheries
The Kingdom of Cambodia

The Attached Document

1. The Team presented the Report shown in the ANNEX 1 to the JCC.
2. The JCC accepted the Report and agreed to take necessary measures for successfully sustaining and extending the achievements of the Project.

ANNEX 1: The Joint Terminal Evaluation Report

A handwritten signature in black ink, consisting of a stylized 'A' followed by a cursive 'J' and 'C'.

THE JOINT TERMINAL EVALUATION REPORT
ON
THE AGRICULTURAL PRODUCTIVITY PROMOTION PROJECT
IN WEST TONLE SAP (APPP)
IN THE KINGDOM OF CAMBODIA

Phnom Penh, September 17, 2014



Mr. Noriaki Nagatomo
Team Leader
Japanese Evaluation Team,
Deputy Director General,
Rural Development Department,
Japan International Cooperation Agency,
Japan



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Team Leader
Cambodian Evaluation Team,
Deputy Director,
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List of Abbreviations and Acronyms

AEA	Agro-Ecosystem Analysis
APPP	Agricultural Productivity Promotion Project in West Tonle Sap
BAPEP	Battambang Agricultural Productivity Enhancement Project
BRAND	Battambang Rural Area Nurture and Development Project
C/P	Counterpart
CARDI	Cambodia Agricultural Research and Development Institute
CIP	Commune Investment Plan
DAO	District Agricultural Office
FFD	Farmers' Field Day
FFS	Farmers Field School
FTF	Farmer-to-Farmer
GDA	General Directorate of Agriculture
GDP	Gross Domestic Product
IRRI	International Rice Research Institute
JCC	Joint Coordinating Committee
JICA	Japan International Cooperation Agency
KADC	Kompong Puoy Agricultural Development Center
MAFF	Ministry of Agriculture, Forestry and Fisheries
MOWRAM	Ministry of Water Resources and Meteorology
OJT	On the Job Training
OVI	Objectively Verifiable Indicator
PDA	Provincial Department of Agriculture
PDM	Project Design Matrix
PG	Pilot Group
PO	Plan of Operations
R/D	Record of Discussions
SGG	Seed Growers' Group
TAS	Toul Lapov Agricultural Station
TSC3	Improvement of Agricultural River Basin Management and Development Project

1 Introduction

1-1. Background of the Evaluation

The *Agricultural Productivity Promotion Project in West Tonle Sap* (APPP) (hereinafter referred to as “the Project”) is a bilateral technical cooperation project between the Government of Japan (through the Japan International Cooperation Agency: JICA) and the Royal Government of Cambodia (through the Ministry of Agriculture, Forestry and Fisheries: MAFF). The Project was launched in October 2010 for the duration of four and a half years. As the end of the project period is approaching (March 2015) – as laid out in the Record of Discussions (R/D) signed on August 18, 2010 by both governments – the Joint Terminal Evaluation of the Project was conducted from August 31, 2014 to September 19, 2014 (see Annex 1 for the schedule of the Joint Terminal Evaluation).

1-2. Objectives of the Evaluation

The objectives of the Joint Terminal Evaluation are listed as follows:

- (1) To confirm the achievement levels of Inputs and Outputs and the prospect for the Project Purpose to be achieved by the end of the project period, and the Overall Goal within three to five years after the project completion, based on the Project Design Matrix (PDM) version 3 (see Annex 2);
- (2) To identify factors or issues that have promoted or hindered the implementation of project activities;
- (3) To conduct a comprehensive evaluation from the viewpoints of five evaluation criteria; Relevance, Effectiveness, Efficiency, Impact and Sustainability (see 1-3 (2) “Five Evaluation Criteria” for their definitions);
- (4) To draw up recommendations of measures that should be taken to further improve the Project and to identify lessons learned to be referred to by similar JICA projects; and
- (5) To summarize evaluation results in the Joint Terminal Evaluation report.

1-3. Methodology of the Evaluation

(1) Evaluation Method

In accordance with the *New JICA Guidelines for Project Evaluation* (First Edition, 2010), the Joint Terminal Evaluation team (hereinafter referred to as “the Evaluation Team”) evaluated the Project, taking the following steps:

- Step 1. Prepare an evaluation grid that lists evaluation questions, data/information necessary for evaluation and information sources (See Annex 3 for the Evaluation Grid);
- Step 2. Collect data and information necessary for the evaluation;
- Step 3. Assess the Project’s achievements in reference to the PDM and the Plan of Operations (PO) (see Annex 4 for PO Version 3);

- Step 4. Analyze the factors that promoted or inhibited the Project's achievements, including factors relating to the project design and the project implementation process.
- Step 5. Analyze the Project from the viewpoints of five evaluation criteria;
- Step 6. Draw up recommendations from the analysis;
- Step 7. Share the preliminary evaluation results with stakeholders and discuss the future directions of the Project; and
- Step 8. Reach an agreement on the evaluation results between the Japanese and Cambodian sides.

(2) Five Evaluation Criteria

The five evaluation criteria used in the evaluation are defined as follows:

- Relevance:** Relevance is assessed in terms of Project's validity in relation to the development policy of the Cambodian Government at the time of evaluation, Japan's Official Development Assistance (ODA) policy, and the needs of the Project's beneficiaries, as well as the appropriateness of the Project's approach to address the needs.
- Effectiveness:** Effectiveness is assessed based on the prospect of the Project Purpose being achieved by the end of the project period and whether this is due to the Project's Outputs.
- Efficiency:** Efficiency is assessed by focusing on the relationship between Outputs and Inputs in terms of timing, quality and quantity of Inputs. It measures to what extent Project Inputs have efficiently been converted into Outputs in consideration of the achievements of both Inputs and Outputs.
- Impact:** Impact is assessed based on the prospect of the Overall Goal being achieved within three to five years after the project completion and the positive and negative changes that have been produced, directly or indirectly as a result of project implementation.
- Sustainability:** Sustainability is assessed in terms of institutional, organizational, financial and technical aspects, by examining the extent to which the achievements of the Project will be maintained or further expanded by the Cambodian side after the project period.

(3) Information Sources

The following sources of information and data were used in the Joint Terminal Evaluation:

- 1) Interviews with stakeholders and/or answers to questionnaires completed by stakeholders (see Annex 5 for the list of interviewees);
 - MAFF officials/staff at the central, provincial, district level,
 - JICA experts, and
 - Farmers who have participated in project activities (i.e. demo-farmers, participants of farmers' field school [FFS], seed growers' group [SGG] members,

pilot group members, and drum-seeders' group members)

- 2) Documents agreed upon by both sides prior to and/or during the course of the Project implementation;
- 3) Records of Inputs from both sides and activities of the Project;
- 4) Project sites in the three provinces;
- 5) Documents that provide data and information indicating the degree of achievements of the Project Outputs, Project Purpose, and Overall Goals; and
- 6) Policy documents that show the Project's relevance and sustainability.

1-4. Members of the Evaluation Team

(1) Japanese Side

Name	Title	Position and Organization
Mr. Noriaki Nagatomo	Team Leader	Deputy Director General, Rural Development Group 1 Rural Development Department, JICA
Mr. Kenji Kaneko	Planning Management	Senior Assistant Director, Paddy Field Based Farming Area Division 1, Rural Development Department, JICA
Ms. Setsuko Kanuka	Evaluation and Analysis	Analyst International Management Group Inc.

(2) Cambodian Side

Name	Title	Position and Organization
Mr. Sameng Keomouine	Team Leader	Deputy Director, Department of Agriculture and Extension, MAFF
Mr. Kheng Yasith	Planning Management	Vice Chief, Monitoring Section, Department. of Planning /Statistics, MAFF
Mr. Yao Ven	Evaluation and Analysis	Officer, Department of Bilateral and Multilateral Cooperation, MAFF

1-5. Schedule of the Evaluation

The Joint Terminal Evaluation was conducted from August 31st to September 19th, 2014. The detailed schedule is attached as Annex 1.

1-6. Limitation of the Evaluation

A limitation of the Joint Terminal Evaluation was the relatively small sample size. The Project targets an extensive geographical area covering over 37 communes in three provinces. Given a short period of the evaluation, the Project was able to meet only a limited number of end-beneficiaries. To minimize the influence of the limitation, the Project reviewed the project reports and had conducted in-depth interviews with JICA experts and counterpart personnel (C/Ps).

2 Outline of the Project

2-1. Background of the Project

Agriculture is the main industry of the Kingdom of Cambodia. Agricultural production contributes to approximately 35% of the country's gross domestic product (GDP), and more than 60% of Cambodians depend on agriculture for their livelihood. Despite an abundant arable land and water resources, the Cambodia's agricultural sector has not actualized its potential due to the low agricultural productivity.

The Royal Government of Cambodia requested the Government of Japan for technical cooperation on improving agricultural productivity and income of farmers. In response to the request, JICA conducted two projects: the *Battambang Agricultural Productivity Enhancement Project* (BAPEP) from April 2003 to March 2006, and the *Battambang Rural Area Nurture and Development Project* (BRAND) from November 2006 to March 2010. While these two projects contributed to the increase in crop yield of rice and the efficiency in seed use in project target areas¹, the number and capacity of extension workers were still insufficient to implement extension activities and disseminate acquired rice cultivation techniques to the whole Battambang Province and beyond.

Against this background, the Government of Cambodia through MAFF requested the Japanese Government through JICA to conduct a technical cooperation project to sustain and further disseminate the rice cultivation techniques and strengthen the rice distribution mechanism that leads to the increase in farmers' income. In response, JICA dispatched a mission team to conduct the Detailed Planning Survey from May to June 2010 and the *Agricultural Productivity Promotion Project in West Tonle Sap* (APPP) was launched in October in the same year to be implemented for four and a half years.

Since the commencement of the Project, the Advisory Study was conducted in September 2011 to review and improve the initial project design and activity plan and the Mid-term Review Team was conducted in October 2012 to review the project implementation process and project achievements and to give recommendations to improve the project.

2-2. Summary of the Project

The Project's framework is summarized in PDM Version 3 is the following (for more details, see Annex 2).

<Overall Goal>
Productivity and income of farmers in the target areas in the three provinces in West Tonle Sap are improved.
<Project Purpose>
Productivity and income of farmers who participate in the project activities in the three provinces in West Tonle Sap are improved.

¹ The target areas in the BRAND project were four communes in four districts in Battambang Province out of 37 communes and 14 districts.

<Expected Outputs>
(1) Extension workers' abilities to implement extension activities are improved. (2) Activities for the improvement of farm management are promoted by the target communes. (3) Agricultural production techniques of the participating farmers are improved. (4) The production and distribution of quality seeds are promoted. (5) The distribution of Indica rice is improved for the beneficiary farmers through the collaboration of the provincial governments, private sectors and farmers.
<Project Implementation Period>
From October 2010 to March 2015 (54 months)
<Implementing Agencies>
<ul style="list-style-type: none"> • Ministry of Agriculture, Forestry and Fisheries (MAFF) Provincial Departments of Agriculture (PDA) of the three target provinces <ul style="list-style-type: none"> ➢ Battambang Province ➢ Pursat Province ➢ Kampong Chhnang Province
<Target Area>
37 Communes (30 in Battambang Province, 4 in Pursat Province, and 3 in Kampong Chhnang Province)
<Target Group>
Staff members of the General Directorate of Agriculture (GDA), PDAs and extension workers
<Beneficiaries>
<ul style="list-style-type: none"> • Staff members of GDA • Staff members (including extension workers) of PDA • Farmers in the target area

3 Achievements and Implementation Processes of the Project

3-1. Allocation of Inputs

(1) Allocation of Inputs by the Japanese Side

1) Assignment of JICA Experts

The Japanese side has assigned a total of seven experts to the Project (six long-term experts and one short-term expert). The areas of expertise of assigned experts are: a) chief advisor; b) extension; c) farm management; d) training; e) farmer organization strengthening support; f) community development; g) distribution improvement, h) seed production; i) project coordination (see Annex 6).

2) Provision of Machinery, Equipment and Materials

The Japanese side has provided vehicles, office equipment and furniture, and agricultural equipment that are necessary for the implementation of the Project (see Table 1). The total amount of equipment provided amounted to approximately USD 144,000 (see Annex 7).

Table 1. List of Machinery, Equipment, and Materials Provided by the Japanese Side

	Equipment	Quantity	Provided to
Vehicles	Four wheels (project vehicles)	2	Battambang PDA
	Motorcycle (for extension workers)	26	3 PDAs
Office equipment and furniture	Copier	1	Battambang PDA
	Printer	1	Battambang PDA
	Printing formats	3	Project Office
	Desk-top computers	2	Project Office
	LDC Projector	2	Project Office
	Air conditioners	4	Project Office
	Safe box	1	Project Office
Agricultural equipment	Winrower	5	4 SGGs and TAS*
	Thresher	5	4 SGGs and TAS
	Power tiller (hand-tractor)	1	TAS

* TAS: Toul Lapov Agricultural Station, Pursat PDA

3) Operation Expenses

From the beginning of the Project to the Joint Terminal Evaluation², the Japanese side has spent a total amount of approximately USD 1,313,000 for the Project's operation expenses. This includes FFS training expenses, vehicle maintenance costs, marketing expenses, and the costs for the construction/renovation of infrastructure of four seed growers' groups (SGGs) and TAS (i.e. seed warehouses, paddy dry yards, a storage facility, and a canal passage) (see Annex 8).

In addition to covering these expenses, upon request from Battambang PDA, the Japanese side provided agricultural inputs (i.e. rice seeds, seedlings, and vegetable seeds) as emergency aids to flood victims in 2011 and 2013 as well as 1,000 T-shirts for an agricultural festival organized by PDA in 2013.

(2) Allocation of Inputs by the Cambodian Side

1) Assignment of Counterpart Personnel (C/P)

The Cambodian side has assigned: a) the Under-Secretary of MAFF as the chairperson of the Project's Joint Coordinating Committee (JCC), b) the GDA Director as the Project Director, c) the PDA Directors of the target provinces (i.e. Battambang, Pursat, Kampong Chhnang Provinces) as Project Managers, and five Battambang PDA staff (one for each output), two Pursat PDA staff, and two Kampong Chhnang staff as C/Ps (see Annex 9).

2) Office and Training Facilities

The Cambodian side has provided the following facilities for project implementation.

Table 2. Office and Training Facilities Provided by the Cambodian Side

Facilities	Functions
a) Office, warehouse, etc in Battambang PDA	Project operation and management
b) Office in Pursat PDA	
c) Office in Kampong Chhnang PDA	
d) Kompong Puoy Agricultural Development Center (KADC), Battambang PDA	<ul style="list-style-type: none"> ♦ Training for C/Ps and extension workers ♦ Demonstration of rice cultivation techniques recommended by the Project

² Up to June 30, 2014

e) Toul Lapov Agricultural Station (TAS), Pursat PDA	<ul style="list-style-type: none"> ♦ Training for C/Ps and extension staff ♦ Demonstration of seed production techniques recommended by the Project ♦ Production and distribution of quality seeds
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Source: Project Report

3) Operation Expenses

From the beginning of the Project to the Joint Terminal Evaluation, the Cambodian side has covered approximately USD 42,000 as the Project's operation expenses (see Annex 10).

3-2. Achievements of Activities

Project activities have been conducted mostly as planned without any significant delay and all activities are either already completed or expected to be completed within the project period (see Annex 11. for the summary of the project progress).

The Project has conducted the transfer of skills and knowledge on rice cultivation and seed production through a group-training approach called the Farmers Field School (FFS). The FFS training, conducted in demo-plots in target communes, is comprised of five sessions conducted over a crop season. In the Project, there are three types of FFS training provided: one for participating farmers (Output 3), one for seed-growers' group (SGG) members (Outputs 3, 4 and 5), and one for pilot group (PG) members (Outputs 3 and 5). The training record is summarized in Table 3 (see Annex 12 for the detailed breakdown of FFS training record).

Table 3. Record of FFS Training

	Demo-Farms			FFS Training (times)			Participants		
	FFS	SGG	PG	FFS	SGG	PG	FFS	SGG	PG
2011	41	3	NA	249	16	NA	4,018	277	NA
2012	87	4	2	504	23	10	7,556	280	163
2013	89	4	15	403	23	75	6,270	287	1,018
(2014*)	85	4	15	211	13	21	(2,744)	(126)	(280)
Total (2011-2013) (Accumulative)	217	11	17	1,156	62	85	17,844	844	1,181
	245			1,303			19,869		

* In Cambodia, there are two cropping seasons in a year: dry (October to late April) and rainy season (May to late September). Rice is mainly produced in the rainy season. As the 2014 rainy season is yet completed at the time of the Joint Terminal Evaluation, the 2014 data for FFS training and participants are as of August 31, 2014.

SGG: seed grower's group PG: pilot groups

3-3. Achievements of Outputs

(1) Achievements of Output 1

Output 1: Extension workers' abilities to implement extension activities are improved.	
Objectively Verifiable Indicator (OVIs)	
1-1	22 extension workers are able to conduct more than 880 times of training to Demo-farmers and participating farmers with the assistance of the counterpart.
1-2	Extension workers assigned to the seed growers group acquire field inspection and seed examination skills.
1-3	Satisfaction level of Demo-farmers with extension services provided by extension workers is higher than 80%.

Output 1 is evaluated to have been achieved judging from the assessment on the achievement levels of its indicators, observations by the Project's stakeholders (i.e. JICA experts, C/Ps, and target farmers), and self-evaluation by extension workers.

In the Project, the capacity development of extension workers has been conducted through 1) technical training, which is summarized in Table 4 below, 2) on the job training (OJT) from JICA experts and C/Ps, and 3) monthly monitoring meetings in which short training sessions/thematic study sessions have been held (see Annex 13. List of Training/Workshops/Meetings Conducted in the Project).

Table 4. Main Training for Strengthening the Capacity of Extension Workers

Title	Period	Participants	Main Topics
Training Course on Rice Cultivation Techniques for C/Ps and Extension Workers in 2011	April – June 2011	22 extension workers 9 C/Ps (including three experienced C/Ps who participated in the training as trainers).	Necessary knowledge and techniques for instructing the implementation of FFS training <ul style="list-style-type: none"> • Seed treatment • Nursery and land preparation, line-transplanting • Weeding and fertilizer application, etc
Training for Extension Staff on Seed Production Techniques	May-July 2011	3 extension workers assigned to SGGs in Battambang	Necessary knowledge and techniques for supporting SGG activities <ul style="list-style-type: none"> • Seed production techniques and quality standards • Growth testing method, etc
Advanced Training Course for Extension Workers in 2012	April-July 2012	19 extension workers from the PDA-Battambang	Methods to conduct comparative experiments on rice cultivation <ul style="list-style-type: none"> • Broadcasting method and transplanting method • Fertilizers and plant density • Analysis and discussion on the experiment results

Source: Project Report

In order to facilitate extension activities, the Project has developed various technical manuals, such as the *APPP Recommended Seed Production Technology* (2011), *APPP Recommended Rice Cultivation Technology* (2012), *Drum Seeder Manual* (2014), and *Step up Your Knowledge on Rice Cultivation (Issue Specific Technical Manual)* (2014), as well as extension materials (i.e. banners and leaflets) (see Annex 14 for the list of project deliverables). The Project also required extension workers to regularly visit demo-sites. Through these activities, extension

workers have improved their abilities to transfer knowledge and skills in rice cultivation and seed production practices and to provide necessary support to farmers in organizing themselves and carrying out collective activities. As a result, all three indicators have been achieved by the time of the Joint Terminal Evaluation.

OVI 1-1: 22 extension workers are able to conduct more than 880 times of training to Demo-farmers and participating farmers with the assistance of the counterpart.

<Achievement level: achieved>

- From 2011 to 2013, FFS training for participating farmers was conducted for 1,156 times in total, exceeding the target of 880. When including the number of the FFS training for SGG and pilot group members during the same period, the total number reaches 1,303 times.
- In 2014, FFS for participating farmers will be conducted for somewhere between 450 times to 500 times.

OVI 1-2: Extension workers assigned to the seed growers group acquire field inspection and seed examination skills.

<Achievement level: achieved>

- Extension workers assigned to SGGs have acquired field inspection and seed examination skills. They have become capable of conducting field inspections (four times per cropping season) and examining the quality of seeds (twice per cropping season) according to the *Project Standards for Seed Field Inspection*, developed by the Project in 2011.

OVI 1-3: Satisfaction level of Demo-farmers with extension services provided by extension workers is higher than 80%.

<Achievement level: achieved>

- According to the 2012 and 2013 FFS End-line Survey, all demo-farmers who responded to the survey are satisfied with extension services provided by extension workers. This result was cross-checked and confirmed by interviews conducted by the Evaluation Team.

(2) Achievements of Output 2

Output 2: Activities for the improvement of farm management are promoted by the target communes.

OVI:

- 2-1 More than 80% of Training Implementation Plans are implemented.
- 2-2 More than half number of the target communes includes the agricultural activities in their Commune Investment Plans.

Output 2 is evaluated to have been achieved judging from the achievement levels of its indicators and observations by JICA experts and C/Ps.

In order to facilitate the promotion of farm management activities in target communes, C/Ps and JICA experts attended the Commune Investment Plan (CIP) meetings organized in six

districts of Battambang Province in 2011 and explained about the Project and FFS training. In the following year, the Project conducted a workshop inviting stakeholders (district and commune councilors) from all 30 communes in Battambang Province to discuss the improvement in rice cultivation through FFS. These activities have deepened the understanding among district and commune councilors about the necessity to incorporate agricultural activities to improve farm management in their CIP for sustainable agricultural development, which led to the achievement of the two indicators.

OVI 2-1: More than 80% of Training Implementation Plans are implemented.

<Achievement level: achieved>

- A FFS Monitoring Matrix, which serves as a training implementation plan, was prepared in 2011 and has been updated annually. The matrix has been incorporated in the CIP of each target commune and has been implemented as planned.

OVI 2-2: More than half number of the target communes³ includes the agricultural activities in their Commune Investment Plans.

<Achievement level: achieved>

- As a result of the Project's involvement in the 2011 meetings and the 2012 workshop, 30 communes in Battambang Province included agricultural activities in their CIPs for the fiscal year (FY) 2012 and 27 communes in the FY 2013 CIPs, and 23 communes in the FY 2014 CIPs.

(3) Achievements of Output 3

Output 3: Agricultural production techniques of the participating farmers are improved.

OVI:

- 3-1 More than half number of participating farmers is able to use at least one type of agricultural production technique shown at the training activities.

Output 3 is evaluated to have been achieved judging from the achievement level of its indicator, FFS end-line survey results, interviews conducted to participating farmers by the Evaluation Team, and observations by project stakeholders (e.g. JICA experts, C/Ps, and extension workers) on the improvement of agricultural technique among FFS participants.

As discussed in the achievement level of Output 1, the Project conducted FFS training for 1,303 times from 2011 to 2013, which were attended by approximately 20,000 farmers in total (cumulative). Following a recommendation from the Mid-term Review, the Project has involved more than 85 farmers as demo-farmers every year from 2012 and onward to facilitate the farmer to farmer (FTF) transfer of rice cultivation techniques for strengthening the Project's sustainability.

OVI 3-1: More than half number of participating farmers is able to use at least one type of agricultural production technique shown at the training activities.

<Achievement level: achieved>

³ target communes (30 in Battambang, 4 in Pursat, 3 in Kampong Chhnang)

- According to the 2012 and 2013 End-line Survey results, all respondents have adopted at least one newly introduced technique in rice cultivation⁴. The 2013 survey results reveal that the indicator is achieved in all three provinces with more than five techniques being adopted by 52%. It was also confirmed that there are regional differences in the adopting the APPP-recommended techniques. In Pursat and Kampong Chhnang Province, 100% of farmers have adopted more than five techniques, whereas the adoption rate is lower in Battambang Province where only 37% of farmers have adopted more than five techniques.

Table 5. Number of APPP Recommended Rice Cultivation Techniques Adopted (2013)

	No. of Rice Cultivation Techniques Practiced						Total	More than 5 techniques
	All nine	7-8	5-6	3-4	1-2	0		
Battambang	0	17	79	126	39	0	262	37%
Pursat	13	10	5	0	0	0	28	100%
Kampong Chhnang	7	41	8	0	0	0	56	100%
Total:	20	68	92	126	39	0	345	52%

Source: Project Report

- According to the 2013 End-line Survey, the rice cultivation techniques recommended by APPP that are widely practiced by more than 80% of respondents (FFS training participants) are land leveling (82%), appropriate fertilizer application (82%) and weeding (82%). Approximately 50 to 60% farmers practice seed selection (62%), hot water disinfection (52%), and removal of foreign varieties (46%). The techniques that are less adopted by survey respondents are three-week seedling for transplanting (31%), nursery making (25%), and line-transplanting (24%). Pilot group members had higher adoption rates for all rice cultivation techniques; however, transplanting techniques were not well-adopted even among them. This indicates techniques such as nursery bed making and line-transplanting that require more time and effort, which increases production expenses in labor, are not widely adopted by farmers.

Table 6. Adoption of APPP Recommended Rice Cultivation Techniques (2013)

	Newly Introduced Rice Cultivation Techniques	Participating Farmers	Pilot Group Members
1.	Land leveling	82%	99%
2.	Appropriate fertilizer application	82%	97%
3.	Weeding	82%	97%
4.	Seed selection	62%	100%
5.	Seed disinfection by hot water	52%	100%
6.	Removal of foreign varieties	46%	97%
7.	Three-week seedling for transplanting	31%	41%
8.	Nursery bed making	25%	86%
9.	Line- transplanting	24%	60%

Source: Project Report

⁴ The nine techniques are newly introduced by the Project. The technique, such as weeding, was not practiced because farmers used the broadcasting or random planting methods, which made it difficult for farmers to enter their rice fields.

(4) Achievements of Output 4

Output 4: The production and distribution of quality seeds are promoted.

OVI:

- 4-1 More than 100 tons of certified seeds are produced annually by 2014.
- 4-2 More than one ton of registered seeds are produced annually by 2014.
- 4-3 More than 1,000 farmers use quality seeds.

Output 4 is evaluated to have been achieved judging from the assessment on the achievement level of its three indicators, SGG monitoring survey results, interviews conducted to SGG members by the Evaluation Team, and observations by project stakeholders, such as JICA experts, C/Ps, and extension workers, on the distribution of quality seeds.

For the promotion and distribution of quality seeds, three SGGs were established in Battambang Province in 2011 and one SGG in Kampong Chhnang Province in 2012, and TAS has also been reformed into an agricultural station specialized in seed production. As shown in Table 3, from 2011 to 2013, FFS training for SGGs were held 62 times, attended by 844 SGG members in total (accumulative).

The Project developed the *Project Standards for Seed Field Inspection* (2011) and adopted the MAFF's *Standard of Seed Quality* to ensure the quality of seeds produced by four SGGs and TAS and required all SGGs and TAS to follow the standards. To promote the distribution of quality seeds, various sales promotion (marketing) activities were conducted using main channels of media (newspaper, radio and television) as well as sign-boards set up at demo-farms.

The Project has also been working to strengthen SGGs' organizational management capacity by developing standard accounting formats, providing book-keeping training, and facilitating SGGs to establish their by-laws. It has also constructed or renovated seed warehouses and drying yards (see Annex 7 for the list of facilities renovated or rehabilitated) and provided agricultural equipment (e.g. winnowers and threshers) to TAS and four SGGs (see Annex 6). These activities led to the strengthening of the capacity of the SGGs and TAS to produce quality seeds and promote their distribution.

OVI 4-1: More than 100 tons of certified seeds are produced annually by 2014.

<Achievement level: achieved>

- As shown in Table 7, four SGGs and TAS produced 110.8 tons of certified seeds in 2013, exceeding the target of 100 tons (see Annex 12 for the production volume by three provinces from 2011 to 2013.)
- In 2014, 47.4 ha is planned to be used by 72 seed growers for seed production (cumulative total of the 2014 dry and rainy season). Since the planting area for seed production in 2014 will be 7 ha larger than that in 2013, it is expected that the indicator will be achieved in 2014.

Table 7. SGG Achievements (2011-2014)

		2011	2012	2013	2014	Total
Quality seeds(tons)	Certified Seeds	93.9	81.7	110.8	-	286.5
	Registered Seeds	3.3	3.3	4.4	-	11.0
Number of Farmers Using Quality Seeds *		41	869-944	634-694	746-831	2,339-2,571

The number of farmers using quality seeds in 2011 is the number of demo-farmers. The numbers of farmers using quality seeds from 2012 to 2014 are estimated from amount of certified seeds produced in the previous years by the SGGs and TAS (e.g. for the 2013 cultivation season, seeds produced in 2012 were used).

OVI 4-2: More than one ton of registered seeds are produced annually by 2014.

<Achievement level: achieved>

- Four SGGs and TAS produced 3.3 tons of registered seeds in 2011 and 2012, and 4.4 tons in 2013. The target of more than one ton was achieved in three years in a row.

OVI 4-3: More than 1,000 farmers use quality seeds.

<Achievement level: achieved>

- According to the project estimate, approximately 2,500 farmers used quality seeds from 2011 to 2014, exceeding the target of 1,000 farmers.
- There is a high market demand for high quality seeds. According the Moung Russei SGG in Battambang, the SGG has received inquiries and orders from approximately 90 people from various provinces across the country after the Project launched a sales promotion campaign in 2013 and the SGG group leader won the 2013 Annual Excellent Farmer Contest in March 2014.

(5) Achievements of Output 5

Output 5: The distribution of Indica rice is improved for the beneficiary farmers through the collaboration of the provincial governments, private sectors and farmers.

OVI:

- 5-1 More than 2,000 tons of Indica rice produced with quality seeds are annually in circulation by 2014 in market
- 5-2 More than 18 groups of farmers in 3 target provinces conduct collective actions, such as collective purchase of agricultural inputs, produce Indica rice under a technical standard procedure introduced by the project, sharing price information, collective shipping, or collective sales.

Output 5 is evaluated to have been achieved judging from the achievement level of its indicators, monitoring survey results on SGGs and pilot groups, interviews conducted to SGG and pilot group members by the Evaluation Team, and observations by the project stakeholders, and feedback from pilot members and demo-farms.

In order to improve the distribution of Indica rice produced beneficiary farmers, the Project established 15 pilot groups, in addition to four SGGs discussed above. In the Project pilot group members are required to attend FFS training for pilot group members (90% participation rate in

2013)⁵. To facilitate the collaboration among various stakeholders from the private and public sectors, the Project held a workshop in 2012 for commune and district council members (see Output 2) and another one in 2013 for international and local NGOs, other donor agencies, and PDA staff. The Project also supported SGGs and pilot groups to visit rice millers to understand the buyers' needs and to market their produce. As a result of these project activities, the two indicators have been achieved.

OVI 5-1: More than 2,000 tons of Indica rice produced with quality seeds are annually in circulation by 2014 in market.

<Achievement level: achieved>

- Based on the amount of quality seeds produced by SGGs and TAS in the previous year and the estimated amount of self-consumption by farmers, it is estimated that 2,413 tons of Indica rice produced from quality seeds were circulated in the market in 2012 and 1,712 tons in 2013.

OVI 5-2: More than 18 groups of farmers in 3 target provinces conduct collective actions, such as collective purchase of agricultural inputs, produce Indica rice under a technical standard procedure introduced by the project, sharing price information, collective shipping, or collective sales.

<Achievement level: achieved >

- As show in Table 8, 19 farmers groups (4 SGGs and 15 pilot groups) have been formed by 2013, exceeding the target of 18.

Table 8. Group Formations of SGGs and Pilot Groups

	SGG			Pilot Groups			Total
	Battambang	Pursat	KC	Battambang	Pursat	KC	
2011	3	0	0	0	0	0	3
2012	3	0	1	1	1	0	6
2013	3	0	1	5	9	1	19
2014	3	0	1	5	9	1	19

Source: Project Report

- From 2011 to 2013, all SGGs conducted collective activities, (i.e. collective purchase of seeds, use of APPP recommended techniques in seed production, price information sharing and collective sales of their produce). As a result of collective negotiation, three SGGs in Battambang were able to successfully sign a sales/purchase agreement for 50 tons of certified seeds with one rice miller.
- The Project established a pilot group fund mechanism to facilitate collective actions. In 2013, the collection rate of the group funds of 15 groups was 92%. Using the fund, pilot groups have conducted the collective purchase of agricultural inputs. All groups have been producing rice utilizing rice cultivation techniques introduced in FFS training, and shared price information among themselves.

⁵ The FFS training for pilot group members is the same as the FFS training for participating farmers, except for the last session. While the FFS training for participating farmers focuses on rice cultivation techniques only, the training for pilot group members emphasizes the business aspect of rice cultivation more in comparison, by including discussion on the sales of the season, the cost-benefit-analysis, and the plan for the next season on the last session.

- The collective sales of produce was conducted by pilot groups in 2012 but not in 2013. The decision of pilot groups not to conduct collective sales was mainly because of the increasing market demand for wet paddy and the different timing of harvesting among pilot group members. According to one pilot group interviewed by the Evaluation Team, the sales price of wet paddy drops drastically within a few days after the harvest (the price of two-day old wet paddy is half of one-day old paddy.); therefore it is financially unfeasible to sell wet paddy as a group.

3-4. Prospect of the Project Purpose Being Achieved

Project Purpose: Productivity and income of farmers who participate in the project activities in the three provinces in West Tonle Sap are improved.

OVI:

1. The Indica rice yields of Demo-farmers will increase from 2.75 ton/ ha in 2010 to 4.00 ton/ ha.
2. The Indica rice yields of farmers who participated in training will increase from 2.75 ton/ ha in 2010 to 3.50 ton/ ha.
3. Gross output (converted to sales price) of Indica rice production of Demo-farmers increase.
4. Gross output (converted to sales price) of Indica rice production of farmers who participated in training increase.

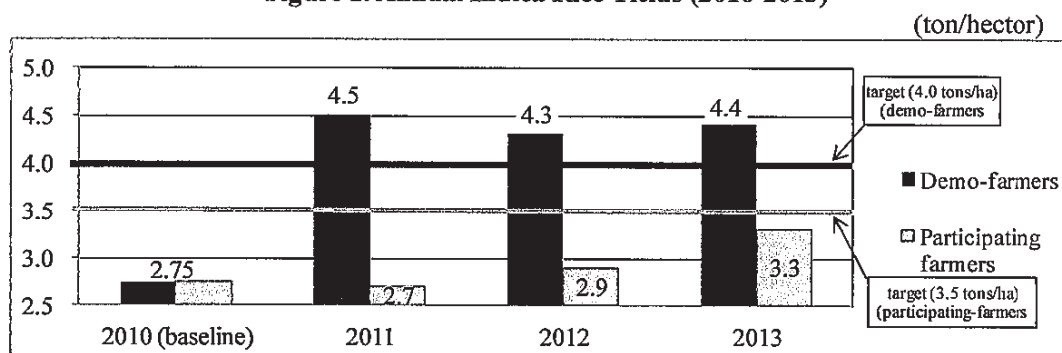
Considering that all four OVIs for the Project Purpose have been achieved or mostly achieved and all five Outputs have been achieved, the prospect of the Project Purpose of being achieved by the end of the project period is high.

OVI 1: The Indica rice yields of Demo-farmers will increase from 2.75 ton/ ha in 2010 to 4.00 ton/ ha.

<Achievement level: achieved >

- As shown in Figure 1, the annual Indica rice yields by demo-farmers exceeded the target of 4.0 tons/ha in three consecutive years since the Project started (4.5 tons/ha in 2011, 4.3 tons in 2012, and 4.4 tons in 2013).

Figure 1. Annual Indica Rice Yields (2010-2013)



OVI 2: The Indica rice yields of farmers who participated in training will increase from 2.75 ton/ ha in 2010 to 3.50 ton/ ha.

<Achievement level: mostly achieved.>

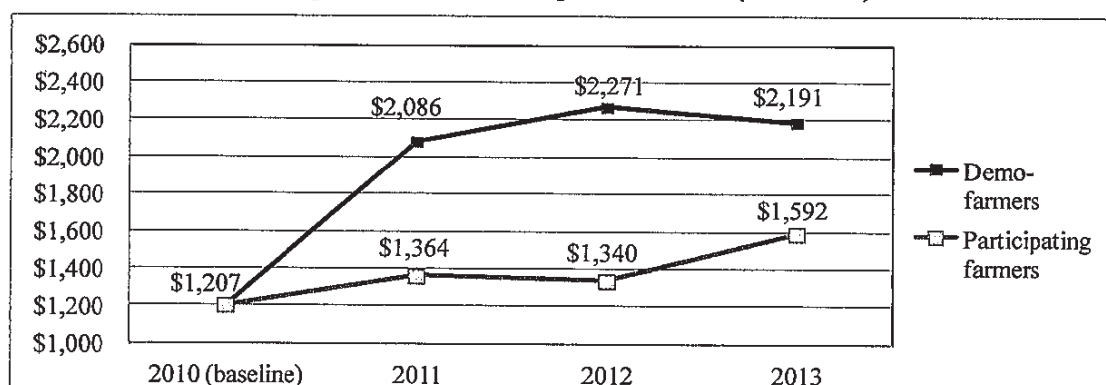
- As shown in Figure 1, although the annual Indica rice yield by participating farmers has not achieved the target, there was a steady increase in the annual yield from 2011 to 2013. Judging from the steady up-ward trend of the annual yield, the Project has successfully contributed to the improvement in participating farmers' productivity.
- Despite the up-ward trend of the annual yield, according to JICA experts, it may be difficult to reach the target in 2014 due to the extensive drought that affected the target communes, especially in Battambang Province.

OVI 3: Gross output (converted to sales price⁶) of Indica rice production of Demo-farmers increase.

<Achievement level: achieved.>

- As shown in Graph 2, there has been a significant increase in the annual sales of Indica rice among demo-farmers. According to the baseline survey, the average annual sales in 2010 among rice farmers in the three target provinces were USD 1,207 per household. The sales amount per household almost doubled in 2011 to USD 2,086 and stayed above USD 2,000 per household in the next two years (USD 2,271 in 2012 and USD 2,191 in 2013).

Figure 2. Annual Sales per Household (2010-2013)



Source: Project Report

OVI 4: Gross output (converted to sales price) of Indica rice production of farmers who participated in training increase.

<Achievement level: achieved.>

- As shown in Figure 2, there has been an increase in the annual sales of Indica rice produced by participating farmers. From USD 1,207 in 2010, the sales increased to USD 1,364 in 2011, USD 1,340 in 2012, and USD 1,592, 2013.

⁶ Sales price per household = average annual yield * averaged cultivated areas*average sales price / (4,000 Cambodian R/1USD)

- Many farmers interviewed by the Evaluation Team commended that the application of APPP recommended techniques have resulted in an increase in the yield and a decrease in the amount of seeds and fertilizers used per hectare. Several farmers have reported that the amount of fertilizers and seeds have reduced in half.
- According to farmers interviewed by the Evaluation Team, the improvement in the quality of the rice they produce is recognized by middle-men. Although the recognition rarely leads to an increase in the purchasing price, it guarantees the sales. Before the Project, several farmers experienced their produce being refused to be purchased by middle-men or purchased at hammered down price due to its poor quality. Since they participated in FFS, participating farmers have not experienced their produce being rejected by middle-men and middle-men prefer purchasing from them.

3-5. Prospect of the Overall Goal Being Achieved

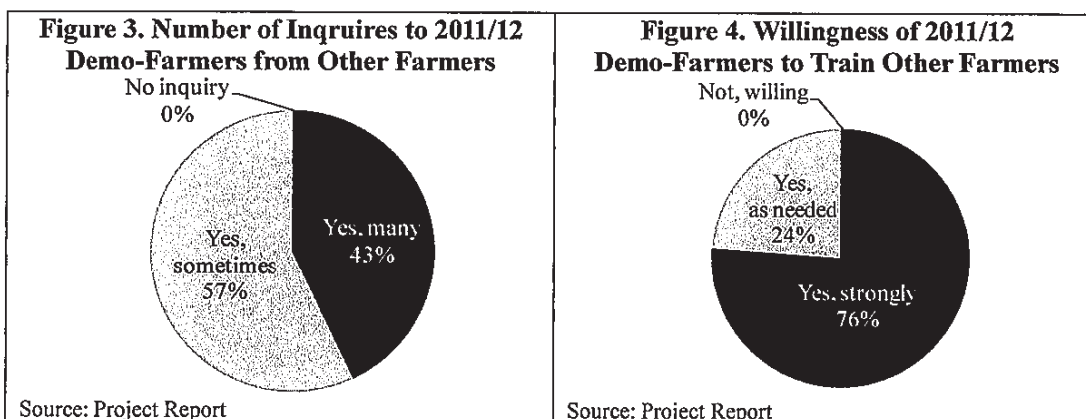
Overall Goal: Productivity and income of farmers in the target areas in the three provinces in West Tonle Sap are improved.

Indicators:

1. The Indica rice yields of farmers in the target areas will increase from 2.75 ton/ ha in 2010 to 3.00 ton/ ha.
2. Gross output (converted to sales price) of Indica rice production of farmers in the target areas increase.

The prospect of the Overall Goal being achieved within three to five years remains uncertain at the time of the Joint Terminal Evaluation. A gradual improvement in the productivity and income of farmers in the target areas in the three provinces in West Tonle Sap is highly likely to occur at a slow pace through the transfer of knowledge from farmers who participated in project activities to other farmers. However, the budgetary constraint of the Cambodian Government will likely reduce the scale of extension services provided by extension workers in the three provinces after the project completion. The improvement in the productivity and income of farmers are greatly affected by many external factors, such as the occurrence of natural disasters, the outbreak of crop diseases/pests, the change in the market demands, and the construction of irrigation systems, which make the prospect uncertain.

The follow-up survey to 22 demo-farmers who attended the 2011/12 FFS training indicates that the farmer-to-farmer (FTF) transfer of rice cultivation techniques will be likely to continue after the project completion. The survey results show that all respondents have continued to practice most of APPP recommended rice production techniques introduced in FFS training and that they have received inquiries from other farmers about technical information (approximately 60 farmers per demo-farmer) (see Figure 3). Moreover, the survey results show that all respondents are willing to support other farmers who request technical information (see Figure 4). The Evaluation Team also confirmed through interviews with demo-farmers that they have provided and will continue to provide advice to neighboring farmers who have not participated in FFS.



As to the achievement level of the Overall Goal's indicator on the average yields of farmers in the target areas, the indicator was achieved in 2013 in Pursat (3.3 tons/ hector) and in Kampong Chhnang (3.2 tons/ hector). The average yield in Battambang fell significantly below the target (2.4 tons / hector) as the Battambang province was most severely affected by floods among the three target provinces. It is also reported that the average national paddy yield increased from 2.83 tons per ha in 2009 to 3.11 tons per hector in 2012⁷. This indicates that the overall productivity in rice production in Cambodia is improving. As to the achievement level of the indicator on the income of farmers in the target areas, there is no statistics available to check the progress at the time of the Joint Terminal Evaluation.

3-6. Implementation Process of the Project

As discussed in the "3-2. Achievement of Activities," project activities have been conducted mostly as planned without any significant delay and all activities are either already completed or expected to be completed within the project period. The following factors have affected project activities.

(1) Promoting Factors of a Smooth Project Implementation

1) Close Communication within the Project

The main factor that has promoted a smooth project implementation was a strong team work among PDA officers (C/Ps), JICA experts, and extension workers, built on a close communication. In the Project, various regular meetings have been held to ensure a clear flow of information among project members. The meetings held in the Project are:

- a) daily morning assemblies⁸, attended by JICA experts, PDA Battambang C/Ps, and project staff,
- b) weekly JICA Expert meetings, attended by JICA experts,
- c) monthly monitoring meetings, attended by JICA experts, C/Ps and extension staff from three provinces, and project staff, and

⁷ National Strategic Development Plan (2014-2018)

⁸ The daily morning assembly had been conducted from the project beginning to the end of 2013; however, in consideration of the Project efficiency, it has changed to weekly morning assembly.

- d) bi-monthly project manager meetings, attended by project managers (PDA directors) from three provinces, JICA experts, C/Ps, and extension staff.

As discussed in “3-3 Achievements of Outputs,” the monthly monitoring meetings have been used to hold ad-hoc short training sessions/study sessions to brush up technical knowledge and skills of C/Ps and extension workers.

2) Effective Cooperation/Collaboration with Other JICA Schemes and NGOs

The Project has had an effective cooperation and collaboration with relevant projects by JICA, other donors, and local NGOs in transferring APPP recommended techniques in rice cultivation and seed production. Through efficiently utilizing each other's resources, the Project created synergetic effects towards achieving the Project Purpose and the Overall Goal. For example, the *Training on Rice Cultivation Methods through FFS* in 2012, which was jointly conducted by the Project and the *Improvement of Agricultural River Basin Management and Development Project* (TSC3), has strengthened not only the capacity of TSC3's C/Ps, but also the capacity of the Project's C/Ps who performed the role of trainers in the training.

3) Flexible and Timely Support in Response to Natural Disasters

In response to extensive floods that occurred in November 2011 and October 2013, the Project provided emergency supplies of agricultural inputs to support the affected for their quick recovery. The flexible and timely measures taken by the Project to mitigate the negative impacts of the disasters encouraged the affected participating farmers, SGG members, and pilot group members to continue project activities.

4) Active Media Campaigns

The Project has strategically used all mainstream media channels (i.e. nation-wide newspaper, TV, and radio) to publicize the Project's activities to the general public and donor communities with a view to attracting their interest in the Project and to promoting the sales of quality seeds produced by SGGs. The media campaigns successfully increased the public recognition of the Project and the sales of quality seeds produced by TAS and SGGs.

(2) Hindering Factor of the Project Implementation

1) Occurrence of Natural Disasters

During the project period, heavy floods and droughts occurred every year. This resulted in: a) a difficulty for farmers to follow APPP recommended techniques, especially transplanting methods, b) a reduction of their yields, and c) an increase in the number of villagers, especially the youth, migrating to urban areas or other countries for work, which exacerbated the labor shortage. Battambang and Pursat Provinces were affected by floods in 2011, all three provinces were affected by droughts in 2012 and Battambang Province was heavily affected by floods in 2013. The occurrence of a prolonged drought was also reported in 2014 during the planting season.

3-7. Measures Taken to Address the Mid-term Review's Recommendations

The Project has taken appropriate measures to follow up the recommendations set forth in the Joint Mid-term Review conducted in November 2012.

1) Recommendations to the Project on Activities Targeting Pilot Groups

The Joint Mid-term Team pointed out that in order for pilot groups to be paid higher prices for their produce (Indica rice), the Project should continue its efforts to monitor a stable supply of quality rice produced by pilot groups and to facilitate collective activities, such as collective shipment and sales of their produce.

In response to these recommendations, the Project took the following measures:

- The Project kept making it mandatory for all pilot members to adopt APPP recommended rice cultivation techniques covered in FFS training; and
- Representatives of each pilot group visited rice millers to understand the buyer's needs on rice varieties and quality and to increase the general awareness on the Project.

Upon implementing these measures, most pilot group members were able to produce Indica Rice of high quality using quality seeds produced by SGGs; however, the purchase price offered by rice millers did not necessarily increase. This is due to the fact that although the quality is certainly one of the key determinants when setting a price, there are other determinants, such as the timing of the harvest and changes in the rice market trend. Nonetheless, FFS training participants and pilot group members reported that middle-men have started to notice that the rice produced by them is of high quality and give priority to buying from them.

2) Recommendations to the Project on Strengthening the Project's Sustainability

The mid-term review team pointed out that for strengthening the Project's Sustainability, it is important that the Project trains as many demo-farmers as possible, strengthens SGGs' financial and group management capacities, and facilitates the dissemination of APPP recommended rice cultivation techniques.

In responding to the above, the Project took the following measures:

- From the second year on, the Project trained more than 85 demo-farmers a year, up from 41 demo-farmers in the first project year of 2011.
- The Project developed standardized book-keeping formats for SGGs in 2013 and made it mandatory that SGGs settle their accounts annually.
- As discussed earlier, the Project has proactively collaborated and cooperated with relevant projects and organizations. It has also conducted the *Workshop for Better Agricultural Service for Rice Farmers* in November 2013, attended by international aid agencies and NGOs. Since the joint mid-term review, 159 persons from six organizations (including NGOs) have visited SGG to learn seed production techniques.

3) Recommendations to MAFF on Utilizing the Project's Good Practices and Lessons Learned in Future Cooperation between Cambodia and Japan

Since the JICA's loan scheme, the *West Tonle Sap Irrigation and Drainage Rehabilitation and Improvement Project*, was in the pipeline, the joint mid-term review team recommended that MAFF place PDA staff (C/Ps and extension workers) trained in the Project in the target areas of the irrigation project so that good practices and lessons learned from the Project will be applied.

Following up on the recommendation, MAFF, through the cooperation with the Ministry of Water Resources and Meteorology (the executing agency of the irrigation project), has assigned staff to the implementation unit of the irrigation project. The Agricultural Extension Service Unit is in the process of developing an activity plan on improving farm management, which is one of the soft components of the irrigation project. With the actual implementation of the irrigation project under the JICA's loan scheme to be conducted from 2015, it is planned that PDA staff trained in APPP will be assigned to the project implementation unit so that they will be involved in the project implementation process.

4 Result of the Evaluation

4-1 Relevance

The Relevance of the Project is assessed as high.

(1) Relevance with the Needs of Cambodian People

In Cambodia, more than 80 percent of Cambodian people live in rural areas and most of the Cambodian rural population engages in agricultural activities. The development of the agricultural sector is a key to stable economic growth, poverty reduction, and rural development in Cambodia. Despite its importance, most farmers have not received extension services and their knowledge on effective and efficient farming practices is limited. Given the importance of developing the agricultural sector for the country's economy and livelihoods of rural people as well as the situation surrounding agricultural extension services, the Project is in line with the Cambodian people's needs.

(2) Relevance with the Development Policy of the Cambodian Government

The Project is in line with the *Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III* (2014-2018), which is the medium-term national development framework of the Cambodian Government. The Project is also in line with the *National Strategic Development Plan* (2014-2018), the *Agricultural Strategic Development Plan* (2014-2018), and the *Policy on the Promotion of Paddy Production and Rice Export* (2010). These policies state that the Cambodian Government aims to further improve the productivity of rice and other crops by, inter alia, developing the human resources of the agricultural sector, strengthening and expanding of extension services, and promoting the production and use of quality seeds.

(3) Relevance with the Japanese Aid Policy to Cambodia

In the *Country Assistance Policy for the Republic of Cambodia* (2012), the Japanese Government sets agriculture and rural development as one of the main strategic areas under the

“strengthening of the basis for economic activities,” which is one of three priority pillars (goals). Under the strategic area, the policy document states that with the aims to develop the agriculture sector and improve the livelihood of under-privileged farmers, the Japanese Government supports to improve the productivity and quality of rice through improving rice production skills.

(4) Comparative Advantages of Japan’s Cooperation in the Project

Japan’s productivity in rice cultivation is among the highest in the world. In 2012, the country’s average yield was 6.7 tons per hectare, in comparison to the world’s average of about 4.4 tons per hectare (International Rice Research Institute [IRRI], 2014). Moreover, Japan has been providing technical cooperation in improving the agricultural productivity in Battambang Province for a decade through the implementation of BAPEP from 2003 to 2006 and BRAND from 2006 to 2010. Through the experiences in supporting the Cambodian Government to implement these two projects, Japan has accumulated substantial knowledge on effective and efficient methods in rice cultivation in Cambodia.

4-2 Effectiveness

The Effectiveness of the Project is assessed as high.

(1) Prospect of the Project Purpose Being Achieved

As discussed in “3-4. Prospect of the Project Purpose Being Achieved,” the Project Purpose (“Productivity and income of farmers who participate in the project activities in the three provinces in West Tonle Sap are improved.”) is envisaged to be achieved by the end of the project period, judging from the achievement levels of the four OVIs of the Project Purpose and the achievement levels of the five Outputs.

The Project has conducted an extensive range of activities, including the capacity development of C/Ps and extension workers, the implementation of the FFS training and the development and distribution of various manuals and teaching materials. As a result, the average annual yields of Indica rice produced by demo-farmers have exceeded over 4.3 tons per hectare in three consequent years from 2011 to 2013, up from 2.75 tons per hectare in 2010 (baseline survey data) (OVI 1) and the average yields for participating farmers have also steadily increased during the same period. With the average annual yields at 3.3 tons per hectare in 2013, almost reaching the target of 3.5 tons per hectare, the indicator is mostly achieved (OVI 2). The annual sales of rice per household have also increased from USD 1,207 in 2010 (baseline) to USD 2,191 in 2013 for demo-farmers and USD 1,592 in 2013 for participating farmers (OVIs 3 and 4).

According to APPP farmers interviewed, since they participated in FFS training and practice APPP-recommended techniques, they spend less seeds and fertilizers than before, and they have received inquiries from neighboring farmers especially on the appropriate application of fertilizers. They also noted that since they acquired APPP-recommended techniques middle-men have recognized the improved quality of rice they produce. Although the production of quality rice have not guaranteed higher prices offered by middle-men in comparison to their

neighboring farmers, according to APPP farmers interviewed, middle-men give the priority of buying from them.

(2) Causality between Outputs and Project Purpose

The five outputs, a) improvement of extension workers' abilities to implement extension activities, b) promotion of farm management activities by target communes, c) improvement of rice cultivation techniques, d) promotion of the production and distribution of quality seeds, and e) improvement of the Indica rice distribution, are all necessary components for achieving the Project Purpose (improvement of the productivity and incomes of farmers) and cover all factors that contribute to its achievement within the framework of this technical cooperation project.

(3) Fulfillment of Important Assumptions for Achieving the Project Purpose

1) Important Assumption 1: Prices of Indica rice remain stable.

The prices of Indica rice fluctuate depending on the harvest timing, varieties, post-harvest treatment, and other factors. In recent years, the market demand (buyers' need) is shifting from sun-dried paddy with low moisture content to wet paddy with high moisture content. The price of wet paddy drop faster than dried paddy from the harvest because wet paddy gets spoiled if remained un-dried. The change of the buyers' need has made it more difficult for pilot group members to carry out collective shipment and sale of the Indica rice.

2) Important Assumption 2: There are no severe unseasonable changes of weather.

As discussed in "3-6 Implementing Process of the Project," heavy floods and droughts have occurred in the target areas, which affected the project implementation. Upon request from the Battambang PDA, the Project reacted by providing agricultural inputs to the affected farmers (see 3.1 Allocation of Inputs).

(4) Contributing Factor and Hindering Factor to Effectiveness

1) Contributing Factor

- Active Collaboration/Cooperation between the Project and Relevant Projects: As discussed in "3-6 Implementation Process of the Project," there has been an active collaboration/cooperation between the Project and relevant JICA projects/donors/NGO in implementing training and a workshop and facilitating FTF transfer of knowledge. The collaborative/cooperation efforts facilitated the dissemination of APPP recommended techniques on rice cultivation/seed production to a greater number of farmers. The Project has worked especially close with the TSC3 Project. The collaborative activities include implementing the training for TSC3 C/Ps in 2012, setting up demo-plots in the TSC3 target areas, and implementing FFS training in the areas.

2) Hindering Factors

- Occurrence of Natural Disasters: As discussed in the "3-6 Implementation Process of the Project", serious floods and/or droughts have occurred every year. This resulted in the reduction of yields as well as income of farmers, and increased economic migration

among villagers, which affected the attendance rate of FFS. In one of the project site, FFS participants had to sow seeds three times during one cropping season due to floods.

- Low market demand of the 10 prioritized rice seed varieties: The ten prioritized rice seed varieties are selected by the Cambodian Government from the standpoints of food security. They are not, however, necessarily in line with the market demand and are not traded at high prices. Since the Project aims to increase both the productivity and income of farmers, the Project had to select varieties that produce high yields and are traded at high prices; however, there were only few seed varieties that meet both criteria. Most demo-farmers interviewed during the Joint Terminal Evaluation produce *Phka Rumduol* (fragrant rice). This particular variety is traded at high prices but is also highly susceptible to rice blast. During the Project, there were outbreaks of rice blast at many demo-farms, which affected APPP participating farmers' yields.

4-3 Efficiency

The Efficiency of the Project is assessed as relatively high.

(1) Conversion of Inputs to Outputs

In the Project, most of the Inputs for implementing activities have been allocated as planned and duly used to implement project activities in order to produce the five Outputs. As discussed in "3-2 Achievements of Activities" project activities have been conducted mostly as planned without any significant delay and all activities are either already completed or expected to be completed within the project period. As a result, all the five outputs have been achieved.

(2) Contributing Factors and Hindering Factors to Efficiency

1) Contributing Factors

- Effective training method: The training on implementing FFS to C/Ps and extension workers and the FFS training to farmers encompass the transfer of knowledge through lectures and practices on APPP-recommended techniques on rice cultivation and seed production, which were conducted in five stages covering an entire farming season from seed treatment to harvesting. This training method is highly evaluated by project stakeholders including PDA directors, C/Ps, and extension workers.
- Efficient use of monthly monitoring meetings: As discussed in "3-6 Implementation Process of the Project," a monthly monitoring meeting is held in the Project to share information about and discuss issues related to the Project. The meeting has also been used as a learning forum to strengthen the capacity of C/Ps and extension workers through short training sessions and self-organized study sessions. The monitoring meetings have facilitated a close communication within the Project and created learning opportunities for C/Ps and extension workers from good practices in other target provinces.
- Active media campaign: As discussed in "3-6 Implementation Process of the Project," the Project has strategically used all mainstream media channels (i.e. nation-wide newspaper, TV, and radio) to publicize the Project's activities to the general public and donor communities with a view to attracting their interest in the Project and to promoting

the sales of quality seeds produced by SGGs. The media campaigns successfully increased the public recognition of the Project and the sales of quality seeds produced by TAS and SGGs.

- Use of locally available items: The agricultural equipment and tools necessary for the implementation of project activities (winnowers and threshers that were provided to SGGs and TAS and other items used in FFS training, such as drum-seeders, moisture meter, and platform scale) were mainly sourced locally. The Project did not procure any extensive and high-tech equipment in order to ensure that farmers would be able to replace them in the future by themselves.

2) Hindering Factors

- Insufficient Assignment and Transfer of former BRAND C/Ps: It was envisioned in the initial plan formulated in the Detailed Planning Survey in 2010 that the Battambang PDA staff members who were assigned as C/Ps in the previous technical cooperation projects, BAPEP and BRAND, should continuously be assigned as C/Ps in the Project and provide guidance to newly assigned C/Ps. In contrary of the Project's initial plan, only three former BRAND C/Ps were continuously assigned as C/Ps in the Project. At the time of Joint Terminal Evaluation, two of them were transferred and there is only one former BRAND C/P remaining as APPP's C/P. The insufficient transfer of technical skills and knowledge from former BAPEP/BRAND C/Ps to the newly assigned C/Ps reduced the Project's Efficiency.
- Insufficient consensus building on cost-sharing: There was not sufficient consensus building on cost-sharing between the Japanese and Cambodian sides at the project formulation stage. Many budgetary issues, such as overtime fees and payment methods for C/Ps and extension workers for project activity implementation, should have been addressed at the initial stage of the Project between the Japanese and Cambodian sides.

4-4 Impact

The Impact of the Project is assessed as relatively high.

(1) Prospect of the Overall Goal Being Achieved

As discussed in "3-5 Prospect of the Overall Goal being Achieved," the prospect of the Overall Goal ("Productivity and income of farmers in the target areas in the three provinces in West Tonle Sap are improved.") being achieved within three to five years remains uncertain. The main factors that make the prospect unclear are the budgetary and human resources constraints of the Cambodian Government and many external factors, such as the occurrence of natural disasters, the outbreak of crop diseases, the change in market demands, and the construction of irrigation systems, that affect productivity and incomes of farmers. Nonetheless, a gradual improvement in the productivity and income of farmers is expected to occur at a slow pace through the farmer to farmer transfer of knowledge. The implementation of the "West Tonle Sap Irrigation and Drainage Rehabilitation and Improvement Project," an upcoming Japanese ODA loan project, for rehabilitation and maintenance of the irrigation facilities in Battambang, Pursat and Kampong Chhnang Provinces is likely to contribute to the Overall Goal. Extension services provided by extension workers are likely to continue to some extent; however, service provision

is likely to be conducted at a limited scale due to the Cambodian Government's budgetary constraints.

(2) Prospect of the Overall Goal's Important Assumptions to be Fulfilled

1) Important Assumption 1: Extension activities are continued.

From the follow-up survey to 22 demo-farmers who attended the 2011/12 FFS training conducted by the Project and the interviews during the Joint Terminal Evaluation, it is deemed that the farmer to farmer transfer of rice cultivation techniques will continue after the project completion. The Project has provided certificates to high-forming FFS participants, demo-farmers, and pilot group members to facilitate the continuous implementation of farmer to farmer transfer of rice cultivation techniques. The scale of extension services by PDA staff and extension workers after the project completion is uncertain due to the budgetary constraint.

2) Important Assumption 2: Production of quality seed is continued.

The prospect for SGGs to continue quality seed production activities is high. There is a strong market demand for quality seeds and SGGs have been accumulating production and sales experiences through the Project. According to the Moung Russei SGG, after the sales promotion activities using the mainstream media, the group has received many orders and the seed production activities have been profitable for the group members.

3) Important Assumption 3: Distribution improvement of Indica rice production is continued.

The prospect for the collective sales of Indica rice by pilot groups is low since the market demand for wet paddy is higher than dry paddy and it is unfeasible to conduct collective sales of wet paddy as wet paddy needs to be sold quickly after the harvest. According to all pilot group members interviewed by the Evaluation Team, pilot group members plan to continue other collective activities, such as joint purchase of inputs and application of APPP recommended techniques, after the project completion.

(3) Positive Ripple Effects (Other Impacts)

As summarized in Table 9, there are many positive impacts that came about as a result of the project implementation that contribute to the achievement of the Overall Goal.

Table 9 Positive Ripple Effects

Effects	Details														
Seed Sales by Demo Farmers	Demo-farmers who participated in the FFS training sold paddy that they have produced in the demo-plots as grading seeds to neighboring farmers.														
	<table><tr><th rowspan="2">Harvest</th><th colspan="2">Grading Seeds Sold</th></tr><tr><th>By</th><th>To</th></tr><tr><td>2011</td><td>24 out of 33 demo-farmers</td><td>153 neighboring farmers</td></tr><tr><td>2012</td><td colspan="2">(no survey conducted)</td></tr><tr><td>2013</td><td>43 out of 74 demo-farmers</td><td>213 neighboring farmers and 11 rice millers</td></tr></table>	Harvest	Grading Seeds Sold		By	To	2011	24 out of 33 demo-farmers	153 neighboring farmers	2012	(no survey conducted)		2013	43 out of 74 demo-farmers	213 neighboring farmers and 11 rice millers
	Harvest		Grading Seeds Sold												
		By	To												
	2011	24 out of 33 demo-farmers	153 neighboring farmers												
	2012	(no survey conducted)													
2013	43 out of 74 demo-farmers	213 neighboring farmers and 11 rice millers													
	This indicates that the effectiveness of APPP recommended techniques in increasing the productivity was noticed by neighboring farmers.														
Voluntary Establishment of Farmers' Groups	Farmers (mainly former FFS participants and their neighboring farmers) in the Moung Russei commune, Battambang organized themselves and formed two drum-seeders groups for the collective use of drum seeders. The combined number of group members has grown from 33 members in 2013 to 44 members in 2014. As of June 2014, the two groups already purchased														

Effects	Details																													
	additional three drum seeders with money that they collected among themselves. Within the groups, the transfer of technical skills is conducted by former FFS participants to non-participants.																													
Prizes won by project assisted farmers	<p>Farmers assisted by the Project won prizes at agricultural fairs in January 2014 and March 2014. According to SGGs that won the prizes reported that orders and inquiries about production techniques have increased as a result.</p> <ul style="list-style-type: none">• <u>January 2014:</u> At the agricultural fair jointly organized by GIZ, USAID and PDA Kampong Chhnang in January 2014, two SGG members from the Phnom Touch Samaki SGG won the 1st and 2nd places and a demo farmer won the 4th place for the entry category of rice products (paddy and milled rice).• <u>March 2014:</u> At the 2013 Annual Excellent Farmer Contest, organized by MAFF, a member of the Moug Russei SGG won the nation's best farmers award for "High Quality Seed Production Technology." The award ceremony was presided by the Prime Minister Hun Sen.																													
Transfer of APPP Recommended Techniques	<p>Upon requests received from NGOs, relevant projects, and communes located outside the project target areas, the Project and SGGs conducted training to transfer APPP recommended techniques. During the cultivation season in 2013, 411 persons from 13 organizations visited 3 SGGs and TAS. Out of these, 182 persons from eight organizations received training on seed production from SGG members. According to Moug Russei SGG through project activities, not only SGG group leaders, but also its group members, have also become capable of conducting training on seed production to other organ.</p> <p style="text-align: center;">Examples of Transfer of APPP Recommended Techniques</p> <table><tr><th rowspan="2">Period</th><th colspan="2">Training provided</th><th rowspan="2">Training Topics</th></tr><tr><th>To</th><th>By/At</th></tr><tr><td rowspan="2">August 2012</td><td>Four NGO staff and 20 farmers supported by the NGOs (i.e. GRET and CIRD) operating in Siem Reap Province</td><td>Banan SGG</td><td>Seed production</td></tr><tr><td>10 farmers supported by the USAID HARVEST Project</td><td>Moug Russei SGG</td><td>Seed production</td></tr><tr><td>July-October 2012</td><td>C/Ps of TSC3 Project from six target provinces and Pursat extension workers</td><td>C/Ps</td><td>Rice cultivation techniques and FFS 515 copies of manuals developed by the Project was distributed</td></tr><tr><td>2012 onwards</td><td>Orphanage in Battambang</td><td>C/Ps and extension workers</td><td>FFS</td></tr><tr><td>February 2013</td><td>Cooperative members supported by a local NGO, KWAP</td><td>3 demo- farmers in Battambang and C/Ps</td><td><ul style="list-style-type: none">• Effectiveness of FFS, experiences as demo-farmers (visiting lecture)• Seed training (training)</td></tr><tr><td>June 2014</td><td>Farmers in the Roussey Krang commune, Moug Russei District (non-target area)</td><td>Battambang PDA (C/Ps and extension workers), and JICA experts</td><td><ul style="list-style-type: none">• Training on seed selection and treatment• Distribution of three types of manuals</td></tr></table>	Period	Training provided		Training Topics	To	By/At	August 2012	Four NGO staff and 20 farmers supported by the NGOs (i.e. GRET and CIRD) operating in Siem Reap Province	Banan SGG	Seed production	10 farmers supported by the USAID HARVEST Project	Moug Russei SGG	Seed production	July-October 2012	C/Ps of TSC3 Project from six target provinces and Pursat extension workers	C/Ps	Rice cultivation techniques and FFS 515 copies of manuals developed by the Project was distributed	2012 onwards	Orphanage in Battambang	C/Ps and extension workers	FFS	February 2013	Cooperative members supported by a local NGO, KWAP	3 demo- farmers in Battambang and C/Ps	<ul style="list-style-type: none">• Effectiveness of FFS, experiences as demo-farmers (visiting lecture)• Seed training (training)	June 2014	Farmers in the Roussey Krang commune, Moug Russei District (non-target area)	Battambang PDA (C/Ps and extension workers), and JICA experts	<ul style="list-style-type: none">• Training on seed selection and treatment• Distribution of three types of manuals
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		<p>The Project also collaborated with private companies. In 2013, it accepted a request from a private company producing rice in Battambang to participate in FFS training for participating farmers and SSGs. In 2014, upon request from another rice company in Battambang, it has been providing technical advice to the company.</p>																												
Visit to the Project by the Minister of MAFF	<p>The Minister of MAFF visited the project office in PDA Battambang in November 2011 and the project assisted two sites and demo farms in Kampong Chhnang in August 2012. The second visit was accompanied by 21 MAFF officials, 5 lecturers and 45 students of the Royal University of Agriculture.</p>																													

(4) Gender Implication of the Project

In Cambodia, women usually have the control over the family finances. The increase in incomes contributes to the improved access to education for beneficiaries' children. In the interview conducted during the Joint Terminal Evaluation, several farmers responded that they spend the increased income on children's education.

4-5 Sustainability

The Sustainability of the Project is deemed as moderate at the time of the Joint Terminal Evaluation.

(1) Institutional Perspective

The institutional sustainability of the Project is deemed as high. As discussed in "4-1 Relevance," the project is in line with Cambodia's overarching development policies (the *Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III* (2014-2018) and the *National Strategic Development Plan* (2014-2018)) and main agricultural policies (the *Agricultural Strategic Development Plan* (2014-2018) and *Policy on the Promotion of Paddy Production and Rice Export* (2010)). There is no foreseeable change in policy direction.

In cooperation with USAID, MAFF is currently developing the *Agricultural Extension Policy in Cambodia*. The strategy aims to improve agricultural productivity through the Cambodian Government's improved partnership and networking among stakeholders (e.g. development partners and NGOs, farmer organizations and private companies). It plans to deliver extension services through, inter alia, field demonstrations, FFS, and the use of mass media.

(2) Organizational and Financial Perspective

The financial and organizational sustainability of the Project is deemed as a challenge. While the MAFF budget has been increasing in recent years⁹, the share of the agriculture sector in the total government expenditure still remains small. The 2014 budget allocated to MAFF is 134,219 million riel, which is 1.6 % of the total national budget (8,268,703 million riel)¹⁰. In the agricultural sector, external donors finance a majority of public spending and extension is one of the areas where the dependency on donor funding is the highest. It was reported that only 3.5 percent of MAFF budget was allocated to extension in 2009¹¹. Furthermore, the insufficient number of extension workers has also been reported as a challenge. According to MAFF, the national average ratio of one extension workers to farming households is 1 extension worker to 2,000 farming household.

Given this structural challenge in the sector, it will be difficult for the three target PDAs to secure the sufficient budget and human resources for implementing FFS training to disseminate

⁹ Annual Conference Report 2013/14, MAFF

¹⁰ Budget in Brief, Ministry of Economy and Finance, 2014

Theng Vuthy and Koy Ra, Review of Agricultural Policy and Policy Research: A Policy Discussion Paper, March 2011, USAID

¹¹ Cambodia More Efficient Government Spending for Strong and Inclusive Growth: Integrated Fiduciary Assessment and Public Expenditure Review (IFAPER), November 2011, World Bank

APPP-recommended techniques. At the commune level, the priority for using the Commune Investment Funds is given to social infrastructure projects (e.g. building and rehabilitating of irrigation systems, schools, and roads). The chance of obtaining sufficient funding from Commune Investment Funds is little.

The organizational and financial sustainability of SGGs and pilot groups is relatively high. The Project provided book-keeping training and supported the development of group by-laws, which stipulate group members' roles and responsibilities. According to SSGs and pilot groups, they have not faced any challenges in collecting equipment user fees (SGGs) and contribution to group funds (pilot groups).

(3) Technical Perspective

The technical sustainability of the Project is deemed relatively high. Through implementing the FFS cycles over the project period, core human resources (extension workers, C/Ps, demo-farmers, and SGG group members) to disseminate APPP recommended techniques have been developed in the three target districts. The manuals developed by the Project use many pictures and are written simply and clearly in Khmer. Extension workers and farmers interviewed commented that the manuals are user-friendly and easy to understand.

According to a follow-up survey conducted to demo-farmers who attended the 2011/12 FFS training, all of survey respondents have continued to practice most of APPP-recommended techniques. Through the follow-up survey and the interviews during the Joint Terminal Evaluation, the Evaluation Team confirmed that FFS participants (including demo-farmers) have been transferring APPP-recommended techniques to their neighboring farmers. According to farmers interviewed, common inquiries are on the appropriate use of fertilizers and seed selection and disinfection. From the adoption patterns of different APPP-recommended techniques and the type of inquiries made to farmers participated in project activities, it can be inferred that only selective techniques that require relatively less inputs and efforts will continue to be practiced and disseminated after the Project. Other issues that affect the technical sustainability are the lack of knowledge among some demo-farmers about where quality seeds are supplied from and an insufficient understanding of the appropriate selection of chemicals (e.g. pesticides and fungicide) in the case of pest/disease outbreak.

5 Conclusion

Based on the Joint Terminal Evaluation's findings, it is concluded that the Project Purpose (the improvement of the productivity and income of farmers who participate in project activities in the three provinces in West Tonle Sap) is envisaged to be achieved by the end of the project period; therefore, the Evaluation Team recommends that the Project be terminated in March 2015 as originally scheduled.

The Project has been successfully implemented with an effective teamwork between the Japanese experts and the Cambodian C/Ps and extension workers. At the time of the Joint Terminal Evaluation, all five outputs have already been achieved and it is expected that the Project will further increase the level of achievements in the expected Outputs and the Project Purpose in the remaining period.

In terms of the five evaluation criteria, the Relevance of the Project is evaluated as high from its consistency with the Cambodian Government's development policies, Japanese Government's aid policies, and the needs of the beneficiaries. The Effectiveness of the Project is evaluated also as high since the four OVIs for the Project Purpose have been achieved or mostly achieved and all Outputs are expected to be produced by the end of the Project period. The Efficiency of the Project is evaluated as relatively high. Most of the Inputs for implementing activities have been allocated as planned and duly used to implement project activities in order to produce the five Outputs. The Impact of the Project is judged as relatively high. On one hand the prospect of the Overall Goal being achieved within three to five years remains uncertain, mainly due to the budgetary and human resource constraints of the Cambodian Government. On the other hand, the Project has worked extensively with wide-ranging organizations, such as NGOs, universities, cooperatives, private companies, and other organizations, to disseminate the APPP-recommended techniques and produced many positive impacts. The Sustainability of the Project is evaluated as moderate. The Project has developed core human resources and user-friendly extensions tools (e.g. manuals and extension materials) to disseminate APPP recommended techniques. The severe shortages of budget allocation and human resources in extension services have been identified as the main bottleneck of the Project's sustainability and the achievement of the Overall Goal.

6 Recommendations

In order to increase the likelihood the Overall Goal to be achieved within three to five years of the project completion and further improve the sustainability of the Project, the Evaluation Team makes the following recommendations.

1) Measures to be taken by the Project

- a) Further dissemination of APPP-recommended techniques: The Evaluation Team recommends that the Project scale up its dissemination efforts through up-coming sales promotion activities (mass media campaign) for the achievement of the Overall Goal. The Evaluation Team further suggests that the Project present its achievements in other provinces and widely distribute teaching materials for extension services and technical manuals to ensure that the project outputs will continue to be utilized by MAFF after the Project.
- b) Further promotion of farmer to farmer transfer of technical skills: The Evaluation Team recommends that the Project distribute extra leaflets and technical manuals to SGG leaders and selected high-performing demo-farmers who have been active in sharing APPP-techniques. The Evaluation Team further recommends that the Project promote training services already provided by selected SGGs (e.g Moug Russei SGG and Banan SGG) and demo-farmers in the upcoming sales promotion activities.

2) . Measures to taken by MAFF

- a) Increase in the budget allocation and human resources for extension services: The target three PDAs have not secured sufficient budgets and human resources for sustaining and expanding project effects after the Project. The Evaluation Team recommends that MAFF

continue to increase its budget allocation for extension activities. The Evaluation Team further recommends that MAFF increase the number of extension workers and provide sufficient training to them.

- b) Continuous dissemination of the APPP-recommended techniques: In order for the Overall Goal to be achieved and strengthen the Project's sustainability, it is crucial that MAFF continues to disseminate APPP-recommended techniques using the Project's outputs (i.e. the technical manuals and extension materials as well as PDA staff and extension workers whose capacity was strengthened through the Project). For the continual use of the technical manuals and extension materials, the Evaluation Team recommends that MAFF promote their use in non-project target provinces and also to other development partners implementing relevant projects. Given a shortage of extension workers, it is recommended that MAFF utilize high performing SGG leaders, pilot group leaders, and demo-farmers as resource persons for the dissemination of APPP-recommended techniques.
- c) Use of APPP's outputs in the upcoming irrigation project (Japanese ODA loan project): The *West Tonle Sap Irrigation and Drainage Rehabilitation and Improvement Project* (Letter of Agreement signed in 2011) under the Japanese ODA loan scheme will be conducted from 2015. It is planned that the irrigation project will be implemented by the Ministry of Water Resources and Meteorology (MoWRM) as its main implementing agency, in cooperation with MAFF. The Evaluation Team recommends that MAFF coordinate with MoWRM to ensure that APPP's outputs (technical manuals and extension materials) and human resources strengthened by APPP will be effectively used in the soft component (farm management) of the irrigation project.
- d) Prevention of the deterioration of rice cultivation techniques: In order to prevent the deterioration of rice cultivation techniques transferred by the Project, MAFF should continue to closely monitor the rice cultivation techniques practices by farmers. The Evaluation Team further recommends that MAFF strengthen the partnership with CARDI, International Rice Research Institutes (IRRI) and higher education institutions for better addressing potential challenges such as the occurrence of diseases and pests in rice production. In addition, the Team emphasized that it is highly important that MAFF continue to enhance its technical and organizational capabilities in order to ensure the stable production of rice and quality seeds.
- e) Implementation of the periodical review of prioritized 10 seed varieties: In order to achieve the Cambodian Government's policy goal of transforming the country into a major milled rice exporter in the global market, it is important that farmers use high yield varieties with a high resistance pests and diseases that meet the market demand and are resilient to climate changes. The Evaluation Team recommends that the prioritized 10 varieties be periodically reviewed and reassessed based on the market demand and new research findings from research institutions such as CARDI and IRRI.

7 Lessons Learned

In the Project, there has been the transfer of rice cultivation techniques from project beneficiaries (demo-farmers, participating farmers, SGG leaders/members, and pilot group

leaders/members) to neighboring farmers who have not been participated in FFS training. From this farmer to farmer transfer of technologies, there are two lessons to be learned.

- Any project beneficiaries (even the end-beneficiaries) whose capacity is strengthened through project activities can become the agents of transferring new knowledge/skills to others. They can be utilized as resource persons to disseminate project effects in a cost-effective manner.
- Through daily social interactions with others, people learn what they perceive to be beneficial to themselves. Social learning occur through observations and direct instructions. Visual improvements experienced by project beneficiaries (in the APPP's case, healthy and orderly paddy fields) facilitate the social learning process by motivating non-project supported people to learn. As APPP established demo-farms, set up banners and posters at demo-farms, and launched the media campaign to share the Project's successes and technologies, it is also important to create an environment conducive for social learning in order to facilitate the spread of knowledge and technologies.

Annex 1. Joint Terminal Evaluation Schedule

No.	Date		Activities	Location
1	Aug. 31	Sun	- Depart from Tokyo and arrive in Phnom Penh	Phnom Penh
2	Sep. 1	Mon	- Visit the JICA Cambodia Office - Hold the first joint terminal evaluation meeting - Move from Phnom Penh to Kampong Chhnang Province - Conduct interviews with: ➢ Demo-farmers and FFS participants ➢ Deputy Director of the Chhnang Provincial Department of Agriculture (PDA), C/Ps, and extension workers	Phnom Penh / Kampong Chhnang
3	Sep. 2	Tu	- Conduct interviews with the Phnom Touch Samaki SGG, the pilot group (PG 14), demo farmers, and FFS participants - Move to Pursat Province - Conduct interviews with the Pursat PDA Director, C/Ps, and extension workers	Kampong Chhnang/ Pursat
4	Sep. 3	Wed	- Conduct interviews with pilot groups (PG 7, 11, 13), demo-farmers, and FFS participants - Visit the Toul Lapov Agricultural Station (TAS)	Pursat
5	Sep. 4	Th	- Move from Pursat Province to Battambang Province - Conduct interviews with the Moung Russei SGG, a demo farmer and FFS participants in a target area for the Improvement of Agricultural River Basin Management and Development Project (TSCS), and drum seeder (DS) group members - Conduct interviews with Battambang the PDA Director and C/Ps	Battambang
6	Sep. 5	Fri	- Conduct interviews with the Banan SGG and Banan pilot group members - Conduct interviews with extension workers and JICA experts	Battambang
7	Sep. 6	Sat	- Conduct interviews with demo farmers and FFS participants - Analyze the data and information collected / draft the Joint Terminal Evaluation Report	Battambang
8	Sep. 7	Sun	- Analyze the data and information collected / draft the Joint Terminal Evaluation Report	Battambang
9	Sep. 8	Mon	- Depart from Battambang and arrive in Phnom Penh - Depart from Tokyo and arrive in Phnom Penh (Japanese Terminal Evaluation Members from the JICA Headquarters)	Phnom Penh
10	Sep. 9	Tu	- Visit the JICA Cambodia Office - Conduct courtesy call / interviews to the Secretary of State of MAFF, the Director General of General Directorate of Agriculture MAFF	Phnom Penh
11	Sep. 10	Wed	- Hold the second joint terminal evaluation meeting - Move from Phnom Penh to Kampong Chhnang Province - Visit/interview to the Phnom Touch Samaki SGG	Phnom Penh / Kampong Chhnang
12	Sep. 11	Th	- Move from Kampong Chhnang Province to Pursat Province - Visit/interview to/with a pilot group (PG13, TSC3 Model Irrigation District) - Visit/interview to the Toul Lapov Agricultural Station (TAS) - Visit/interview to the Moung Russei SGG (2013 seed production technology award winner) - Visit/interview to a rice field of a former demo-farmer/drum seeder group member (TSC3 Model Irrigation District)	Pursat / Battambang
13	Sep. 12	Fri	- Conduct courtesy call to the Battambang PDA Deputy Director - Conduct interview to ➢ JICA experts (by the Japanese Evaluation Team members) ➢ C/Ps and BTB extension workers (by the Cambodian Evaluation Team members) - Visit to project sites of the West Tonle Sap Irrigation and Drainage Rehabilitation and Improvement Project (the JICA's loan scheme)	Battambang/ Phnom Penh

No.	Date		Activities	Location
			- Move to Phnom Penh	
14	Sep. 13	Sat	- Analyze the data and information collected / draft the Joint Terminal Evaluation Report - Visit to project sites of the West Tonle Sap Irrigation and Drainage Rehabilitation and Improvement Project (the JICA's loan scheme)	Phnom Penh
15	Sep. 14	Sun	- Analyze the data and information collected / draft the Joint Terminal Evaluation Report	Phnom Penh
16	Sep. 15	Mon	- Hold the third joint terminal evaluation meeting	Phnom Penh
17	Sep. 16	Tu	- Draft the joint terminal evaluation report - Discuss the content of the report to the Secretary of State of MAFF, the Director General of General Directorate of Agriculture MAFF	Phnom Penh
18	Sep. 17	Wed	- Finalize the joint terminal evaluation report - Have the joint terminal evaluation report signed by both governments - Prepare for the JCC	Phnom Penh
19	Sep. 18	Th	- Conduct the JCC - Have the M/M signed by both governments - Report to the JICA Cambodian Office and the Embassy of Japan in Cambodia - Depart from Phnom Penh	Phnom Penh
20	Sep. 19	Fri	- Arrive in Tokyo	-

Annex 2. Project Design Matrix (PDM)

Project Title: Agricultural Productivity Promotion Project in West Tonle Sap
 Project Duration: 4.5 Years (54 months)
 Target Group: Staff members of GDA, PDAs and Extension Workers

Target Area: 37 Communes in Battambang, Pursat and Kampong Chhnang provinces (30+4+3=37)
 Beneficiaries: Staff members of GDA, Provincial Government, PDAs and Extension Workers and Farmers in the target area

As of 25 October 2012, PDM version 3.

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal: Productivity and income of farmers in the target areas in the three provinces in West Tonle Sap are improved.	1. The <u>Indica rice</u> yields of farmers in the target areas will increase from 2.75 ton/ ha in 2010 to 3.00 ton/ ha. 2. Gross output (converted to sales price) of <u>Indica rice</u> production of farmers in the target areas increase.	1. Interview survey, MAFF and PDA annual report and existing statistics 2. Interview Survey and existing statistics	
Project Purpose: Productivity and income of farmers who participate in the project activities in the three provinces in West Tonle Sap are improved.	1. The <u>Indica rice</u> yields of Demo-farmers will increase from 2.75 ton/ ha in 2010 to 4.00 ton/ ha. 2. The <u>Indica rice</u> yields of farmers who participated in training will increase from 2.75 ton/ ha in 2010 to 3.50 ton/ ha. 3. Gross output (converted to sales price) of <u>Indica rice</u> production of Demo-farmers increase. 4. Gross output (converted to sales price) of <u>Indica rice</u> production of farmers who participated in training increase.	1. Project report, MAFF and PDA annual report 2. <i>ditto</i> 3. Project report and existing statistics 4. <i>ditto</i>	1. Extension activities are continued. 2. Production of quality seed is continued. 3. Distribution improvement of <u>Indica rice</u> production is continued.
Outputs 1. Extension workers' abilities to implement extension activities are improved. 2. Activities for the improvement of farm management are promoted by the target communes. 3. Agricultural production techniques of the participating farmers are improved. 4. The production and distribution of quality seeds are promoted.	1-1. 22 extension workers are able to conduct more than 880 times of training to Demo-farmers and participating farmers with the assistance of the counterpart. 1-2. Extension workers assigned to the seed growers group acquire field inspection and seed examination skills. 1-3. Satisfaction level of demo-farmers with extension services provided by extension workers is higher than 80%. 2-1. More than 80% of Training Implementation Plans are implemented. 2-2. More than half number of the target communes includes the agricultural activities in their Commune Investment Plans. 3-1. More than half number of participating farmers is able to use at least one type of agricultural production technique shown at the training activities. 4-1. More than 100 tons of certified seeds are produced annually by 2014. 4-2. More than one ton of registered seeds are produced annually by 2014. 4-3. More than 1,000 farmers use quality seeds.	1-1. Project report 1-2. Project report 1-3. Project report 2-1. Project report 2-2. Project report 3-1. Project report 4-1. Project report 4-2. Project report 4-3. Project report	1. Prices of <u>Indica rice</u> remain stable. 2. There are no severe unseasonable changes of weather.

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
5. The distribution of <u>Indica rice</u> is improved for the beneficiary farmers through the collaboration of the provincial governments, private sectors and farmers.	5-1. More than 2,000 tons of <u>Indica rice</u> produced with quality seeds are annually in circulation by 2014 in market 5-2. More than 18 groups of farmers in 3 target provinces conduct <u>collective actions, such as collective purchase of agricultural inputs, produce Indica rice under a technical standard procedure introduced by the project, sharing price information, collective shipping, or collective sales.</u>	5-1. Project report 5-2. Project report	

Narrative Summary	Inputs	Important Assumption
Activities 1-1. Review management system and the improved techniques developed and utilized in BAPEP and BRAND. 1-2. Prepare the training curriculum for PDA staff in charge of extension and extension workers. 1-3. Conduct trainings for PDA staff in charge of extension. 1-4. Conduct trainings for extension workers. 2-1. Implement AEAs in order to grasp the situation of the target communes. 2-2. Support drafting Training Implementation Plan based on the results of AEAs. 2-3. Support implementation, monitoring and improvement of Training Implementation Plan through women groups, water user groups and other farmer groups. 2-4. Support inclusion of agricultural activities into Commune Investment Plan. 3-1. Select Demo-farmers. 3-2. Implement training for Demo-farmers in the target communes. 3-3. Support Demo-farmers to implement training for neighboring farmers. 3-4. Conduct impact surveys. 4-1. Select target varieties of quality seeds. 4-2. Conduct technical training for seed grower groups of quality seeds. 4-3. Conduct monitoring activities regularly at quality seed farms. 4-4. Promote effective ways of sales of quality seeds. 5-1. Promote the collaboration between the provincial governments, private sectors, farmers and other related organizations in order to improve the distribution of agricultural products. 5-2. Promote effective ways of distribution and sales of agricultural products. 5-3. Share information on successful activities among MAFF HQ and the three provinces through seminars etc.	Cambodian Side 1. Office Space in Phnom Penh and in Battambang (including the running costs for the offices, especially for water and electricity). 2. Counterparts Project Director: Director General of GDA, MAFF Project Managers: Directors of PDA of Battambang, Pursat and Kampong Chhnang MAFF staff: 1 from MAFF PDA staff: 5 from PDA of Battambang 2 from PDA of Pursat 2 from PDA of Kampong Chhnang Japanese Side 1. Experts Long Term: Chief Advisor/Extension 1 Farm Management/Seed Production Community Development /Distribution Improvement Coordinator /Training/Extension 2 Short Term: Farmers Organization and others if necessary 2. Equipment Motorbikes, Vehicles, and others 3. C/P training	1. The extension workers trained in the project keep working in the same positions. Preconditions 1. Extension workers are assigned to the target communes. 2. There are no significant conflicts in the target communes.

Annex 3. Evaluation Grid

SECTION I: Achievements and Prospects

Evaluation Questions		Information/Data Required	Information Sources	Data Collection Method
Main Questions	Sub Questions			
Prospect for Achieving the Overall Goal	What is the prospect for achieving the overall goal within three to five years of the project completion?	<ul style="list-style-type: none"> Project data, information, and/or documents related to the overall goal's Objectively Verifiable Indicators (OVIs) Perceptions of Japanese experts and C/Ps and other Project's stakeholders 	<ul style="list-style-type: none"> Relevant reports/documents <ul style="list-style-type: none"> Interview survey MAFF and PDA annual report Existing statistics Japanese experts, Counterparts (C/Ps) and other project related people/offices (e.g. extension workers, demo farmers, pilot group members, seed grower group members) 	<ul style="list-style-type: none"> Document review Interviews Questionnaires (QNs)
Prospect for Achieving the Project Purpose	What is the prospect for achieving the project purpose by the end of the project period?	<ul style="list-style-type: none"> Project data, information, and/or documents related to the project purpose's OVIs Perceptions of Japanese experts and C/Ps and other Project's stakeholders 	<ul style="list-style-type: none"> Relevant reports/documents <ul style="list-style-type: none"> Interview survey MAFF and PDA annual report Existing statistics Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
Achievement levels of the Outputs	To what degree has Output 1 been achieved?	<ul style="list-style-type: none"> Project data, information, and/or documents related to the Output 1's OVIs. Perceptions of Japanese experts and C/Ps and other Project's stakeholders 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
	To what degree has Output 2 been achieved?	<ul style="list-style-type: none"> Project data, information, and/or documents related to the Output 2's OVIs. Perceptions of Japanese experts and C/Ps and other Project's stakeholders 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
	To what degree has Output 3 been achieved?	<ul style="list-style-type: none"> Project data, information, and/or documents related to the Output 3's OVI. Perceptions of Japanese experts and C/Ps and other Project's stakeholders 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
	To what degree has Output 4 been achieved?	<ul style="list-style-type: none"> Project data, information, and/or documents related to the Output 4's OVIs. Perceptions of Japanese experts and C/Ps and other Project's stakeholders 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
Achievement of Inputs	To what degree has Output 5 been achieved?	<ul style="list-style-type: none"> Project data, information, and/or documents related to the Output 5's OVI. Perceptions of Japanese experts and C/Ps and other Project's stakeholders 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
	Have the Japanese side's inputs been allocated as planned?	<ul style="list-style-type: none"> Record of the following planned inputs: Japanese experts, Equipment, and C/P training 	<ul style="list-style-type: none"> Project reports/documents Japanese experts and C/Ps 	<ul style="list-style-type: none"> Document review On-site observation
	Have the Cambodian side's inputs been allocated as planned?	<ul style="list-style-type: none"> Record of the following planned inputs: Facilities: office space in Phnom Penh and in Battambang and C/Ps 	<ul style="list-style-type: none"> Project reports/documents Japanese experts and C/Ps 	<ul style="list-style-type: none"> Document review On-site observation

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SECTION II. Implementation Process

Evaluation Questions		Information/Data Required	Information Sources	Data Collection Method
Main Questions	Sub Questions			
Implementation of Activities	To what degree have project activities been implemented as planned?	<ul style="list-style-type: none"> Activity implementation progress 	<ul style="list-style-type: none"> Project reports/documents - Plan of Operations 	<ul style="list-style-type: none"> Document review
Project management	Has there been an efficient coordination among relevant project stakeholders (e.g. among Japanese experts, C/Ps, extension workers, demo farmers, seed-grower's group members and pilot group members)?	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports Japanese experts and C/Ps 	<ul style="list-style-type: none"> Document review Interviews
	Has the motivation of target groups (i.e. staff members of MAFF and the three target PDAs) been high toward the implementation of project activities? Have C/Ps and extension workers been proactive in implementing project activities?	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports Japanese experts and C/Ps 	<ul style="list-style-type: none"> Document review Interviews
	Have there been effective cooperation and collaboration with other JICA projects (i.e. "West Tonle Sap Irrigation and Drainage Rehabilitation and Improvement Project," and "the Improvement of Agricultural River Basin Management and Development Project (TSC3)") and relevant agricultural projects by other donors or NGOs?	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports Japanese experts and C/Ps 	<ul style="list-style-type: none"> Document review Interviews
Technology Transfer	Have the methods and/or approaches for the transfer of technology been effective?	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports Japanese experts and C/Ps 	<ul style="list-style-type: none"> Document review Interviews
Follow-ups of Recommendations made in the Mid-Term Review	Have appropriate measures been taken on the recommendations put forth in the Mid-term Review?	<ul style="list-style-type: none"> Actions taken to follow up the recommendations Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports Japanese experts and C/Ps 	<ul style="list-style-type: none"> Document review Interviews
Contributing and impeding factors on implementation process	Have there been contributing factors and/or obstacles or problems for the implementation of project activities?	<ul style="list-style-type: none"> Contributing and hindering factors for the implementation of the Project 	<ul style="list-style-type: none"> Project reports Japanese experts and C/Ps 	<ul style="list-style-type: none"> Document review Interviews QN

SECTION III: Evaluation by the Five Criteria

[Relevance]

Evaluation Questions		Information/Data Required	Information Sources	Data Collection Method
Main Questions	Sub Questions			
Consistency with the Government policy of Cambodia	Is the Project in line with the priority of development policies of the Cambodian Government?	<ul style="list-style-type: none"> Relevant Cambodian Government Policies on the agricultural sector <ul style="list-style-type: none"> Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III (2014-2018) National Strategic Development Plan (2014-2018), etc 	<ul style="list-style-type: none"> Government of Cambodia 	<ul style="list-style-type: none"> Document review Interviews

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Evaluation Questions		Information/Data Required	Information Sources	Data Collection Method
Main Questions	Sub Questions			
Consistency with the Japan's ODA Policy	Is the Project in line with the Japanese Government's assistance policies in general and for Cambodia?	<ul style="list-style-type: none"> Japan's ODA policy to Cambodia Country Assistance Policy for Cambodia 	<ul style="list-style-type: none"> Government of Japan 	<ul style="list-style-type: none"> Document review Interviews
Relevance with beneficiaries' needs	Is the Project in line with the socio-economic needs of Cambodia?	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Reports and publications on the agricultural sector of Cambodia Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews
	Is the Project in line with the need of target groups? Is the need high?	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
Appropriateness of the Project approach	Is the Project's approach appropriate for improving the productivity and income of farmers in Cambodia?	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
Others	Have the political, economic and social environment surrounding the project changed substantially since the Project started?	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews

[Effectiveness]

Evaluation Questions		Information/Data Required	Information Sources	Data Collection Method
Main Questions	Sub Questions			
Prospect of the Achievement of the Project Purpose	To what degree have the Project Purpose's OVIs been achieved?	See Section 1: Achievements and Prospects		
	What is the prospect of achieving the Project Purpose by the end of the project period?	• See Section 1: Achievements and Prospects		
	Have the cooperation with other JICA projects and relevant agricultural projects of other donors or NGOs contributed to the achievement of the Project Purpose?	• Cases of cooperation between the Project and other relevant projects. • Effects that the cooperation have had on the achievement of the Project Purpose	• Project reports/documents • Japanese experts , C/Ps and other project related people	• Document review • Interviews
Causality of the Project Purpose and Outputs	To what degree have the Outputs' OVIs been achieved?	• See Section 1: Achievements and Prospects		
	To what degree is the achievement of the Project Purpose attributable to the successful achievement of the Outputs?	• Perceptions of Japanese experts, C/Ps, and other project related people	• Project reports/documents • Japanese experts , C/Ps and other project related people	• Document review • Interviews • QNs
	Are the Important Assumptions for achieving the Project Purpose still relevant? Have they affected the prospect for achieving the Project Purpose? <u>Important Assumptions:</u> - Prices of Indica rice remain stable. - There are no severe unseasonable changes of weather.	• Perceptions of Japanese experts, C/Ps, and other project related people	• Project reports/documents • Japanese experts , C/Ps and other project related people	• Document review • Interviews •
	Have there been any factors that have hindered (or may hinder) the achievement of the Project Purpose?	• Perceptions of Japanese experts, C/Ps, and other project related people	• Project reports/documents • Japanese experts , C/Ps and other project related people	• Document review • Interviews • QNs

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[Efficiency]

Evaluation Questions		Information/Data Required	Information Sources	Data Collection Method
Main Questions	Sub Questions			
Causality of Inputs and Outputs	Have project activities been appropriately conducted in terms of their timing, duration, and quality to produce planned Outputs?	<ul style="list-style-type: none">• Perceptions of Japanese experts, C/Ps, and other project related people	<ul style="list-style-type: none">• Project reports/documents• Japanese experts and C/Ps	<ul style="list-style-type: none">• Document review• Interviews
	Has the Important Assumption for producing the Outputs been fulfilled? <u>Important Assumption:</u> The extension workers trained in the project keep working in the same positions.	<ul style="list-style-type: none">• Perceptions of Japanese experts, C/Ps, and other project related people	<ul style="list-style-type: none">• Project reports/documents• Japanese experts , C/Ps and other project related people	<ul style="list-style-type: none">• Document review• Interviews• QNs
	Have the Preconditions for implementing project activities been fulfilled? <u>Preconditions:</u> 1) Extension workers are assigned to the target communes, and 2) There are no significant conflicts in the target communes.	<ul style="list-style-type: none">• Perceptions of Japanese experts, C/Ps, and other project related people	<ul style="list-style-type: none">• Project reports/documents• Japanese experts , C/Ps and other project related people	<ul style="list-style-type: none">• Document review• Interviews• QNs
	How appropriate have the Japanese side's inputs been, in terms of their quality, quantity and timing of allocation, for implementing project activities as planned?	<ul style="list-style-type: none">• Record of inputs• Perceptions of Japanese experts, C/Ps, and other project related people	<ul style="list-style-type: none">• Project reports/documents• Japanese experts and C/Ps	<ul style="list-style-type: none">• Document review• On-site observation• Interviews
	How appropriate have the Cambodian side's inputs been, in terms of their quality, quantity and timing of allocation, for implementing project activities as planned?	<ul style="list-style-type: none">• Record of inputs• Perceptions of Japanese experts, C/Ps, and other project related people	<ul style="list-style-type: none">• Project reports/documents• Japanese experts and C/Ps	<ul style="list-style-type: none">• Document review• On-site observation• Interviews
Contributing or Hindering factors to Efficiency	Are there any other factors that increased or decreased the efficiency of the Project?	<ul style="list-style-type: none">• Perceptions of Japanese experts, C/Ps, and other project related people	<ul style="list-style-type: none">• Project reports/documents• Japanese experts , C/Ps and other project related people	<ul style="list-style-type: none">• Document review• Interviews• QNs

[Impact]

Evaluation Questions		Information/Data Required	Information Sources	Data Collection Method
Main Questions	Sub Questions			
Prospects of achieving the Overall Goal	To what degree has the Overall Goal been achieved?	<ul style="list-style-type: none">• See Section 1: Achievements and Prospects	<ul style="list-style-type: none">•	<ul style="list-style-type: none">•
	What is the prospect of achieving the Overall Goal within 3 to 5 years after the completion of the Project?	<ul style="list-style-type: none">• Current situations and issues regarding “farmers to farmer” dissemination of rice cultivation technologies• Dissemination activity plan by PDAs• Perceptions of Japanese experts, C/Ps, and other project related people	<ul style="list-style-type: none">• Project reports/documents• Japanese experts , C/Ps and other project related people	<ul style="list-style-type: none">• Document review• Interviews• QNs

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[Impact]

Evaluation Questions		Information/Data Required	Information Sources	Data Collection Method
Main Questions	Sub Questions			
Prospects of achieving the Overall Goal	Are the Important Assumptions for achieving the Overall Goal likely to be fulfilled? Are the Important Assumptions for achieving the Overall Goal still appropriate? <u>Important Assumptions:</u> - Extension activities are continued. - Production of quality seed is continued. - Distribution improvement of Indica rice production is continued.	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
Others	Are there any other impacts that are expected to be produced as a result of the Project?	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review QNs Interviews

[Sustainability]

Evaluation Questions		Information/Data Required	Information Sources	Data Collection Method
Main Questions	Sub Questions			
Institutional aspect	What is the prospect of the Cambodian Government's policy on rice production to change in the foreseeable future?	<ul style="list-style-type: none"> Policy on rice production 	<ul style="list-style-type: none"> Policy documents 	<ul style="list-style-type: none"> Document review Interviews
	Has a sustainable system for incentivising demo-farms to engage in the farmer to farmer (FTF) dissemination activities been established?	<ul style="list-style-type: none"> System to incentivize demo-farmers Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
Organizational aspect	Do MAFF and PDAs have sufficient organizational capacities (e.g. staffing and monitoring system) to continue the implementation of FFS?	<ul style="list-style-type: none"> Record and plan of staff allocation Monitoring system Monitor tools Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
	Have pilot groups and SGGs built sufficient organizational capacity (i.e. decision-making and financial management) to continue implementing rice cultivation and marketing activities after the project completion?	<ul style="list-style-type: none"> Perceptions of Japanese experts, C/Ps, and other project related people 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs
Financial aspect	What is the prospect for sufficient budgets for implementing extension activities (incl. FFS) to be secured after the project completion?	<ul style="list-style-type: none"> Budget for extension activities (provincial level, district level, and commune level [commune investment plan]) Perceptions of Japanese experts , C /Ps, and other project related people 	<ul style="list-style-type: none"> Project reports/documents Japanese experts , C/Ps and other project related people 	<ul style="list-style-type: none"> Document review Interviews QNs

[Sustainability]

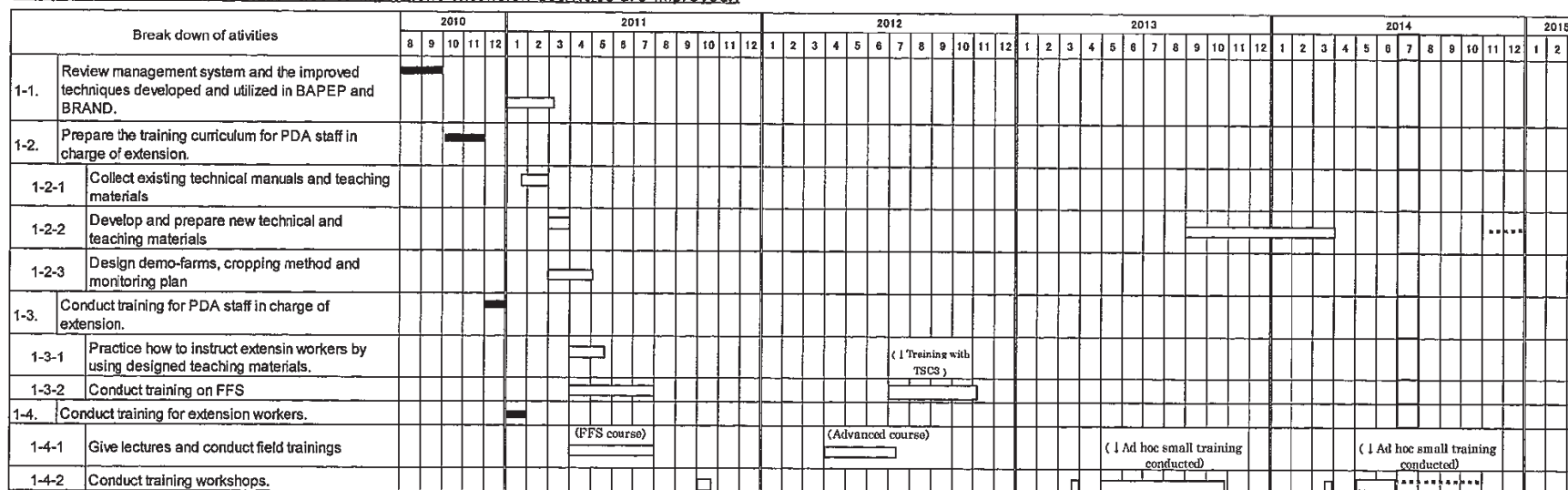
Evaluation Questions		Information/Data Required	Information Sources	Data Collection Method
Main Questions	Sub Questions			
Technical aspect	Have MAFF and PDA staff members (incl. extension workers) been trained sufficiently in number and quality to continue and disseminate the implementation of APPP model extension services (FFS and supports given to SGGs and pilot groups) after the project completion?	• Perceptions of Japanese experts, C/Ps, and other project related people	• Project reports/documents • Japanese experts , C/Ps and other project related people	• Document review • Interviews • QNs
	Have the rice cultivation techniques covered in FFS been sufficiently adopted by participating farmers?	• Perceptions of Japanese experts, C/Ps, and other project related people	• Project reports/documents • Japanese experts , C/Ps and other project related people	• Document review • Interviews • QNs
	Have demo farmers sufficiently obtained rice cultivation techniques to implement training to neighboring farmers? To what extent is the rice cultivation techniques transferred in the Product likely to be sustained and disseminated by demo-farmers?	• Perceptions of Japanese experts, C/Ps, and other project related people	• Project reports/documents • Japanese experts , C/Ps and other project related people	• Document review • Interviews • QNs
	What is the prospect for technical manuals, guidelines, and extension tools developed in the Project being used after the project completion? (Are they user-friendly enough?)	• Perceptions of Japanese experts, C/Ps, and other project related people	• Project reports/documents • Japanese experts , C/Ps and other project related people	• Document review • Interviews • QNs
	Will SGGs and PDA (TAS) be able to properly maintain equipment (i.e. power tiller, threshers, and winnowers) provided by the Project after the project completion?	• Perceptions of Japanese experts, C/Ps, and other project related people	• Project reports/documents • Japanese experts , C/Ps and other project related people	• Document review • Interviews • On-site observation
Other factors that will increase or decrease the sustainability of the Project	Are there any other possible factors that will increase or decrease the sustainability of the Project?	• Perceptions of Experts, C/Ps and other Project's stakeholders	• Project reports/documents • Experts, C/Ps and other Project's stakeholders	• Document review • Interviews

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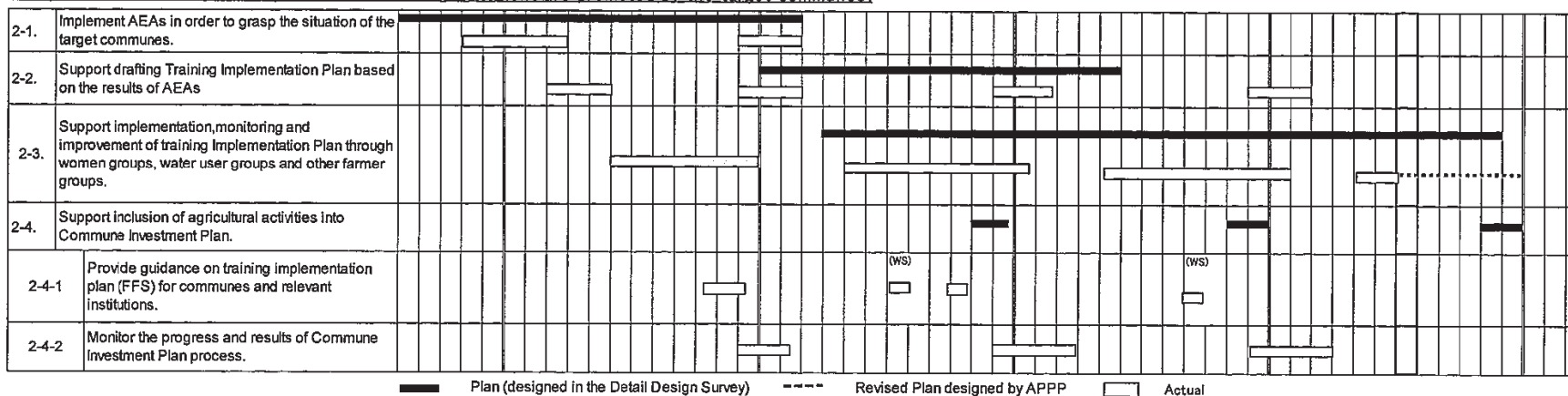
Annex 5. Plan of Operations (version 3)

As of July 2014

[Output 1: Extension worker's abilities to implement extension activities are improved.]

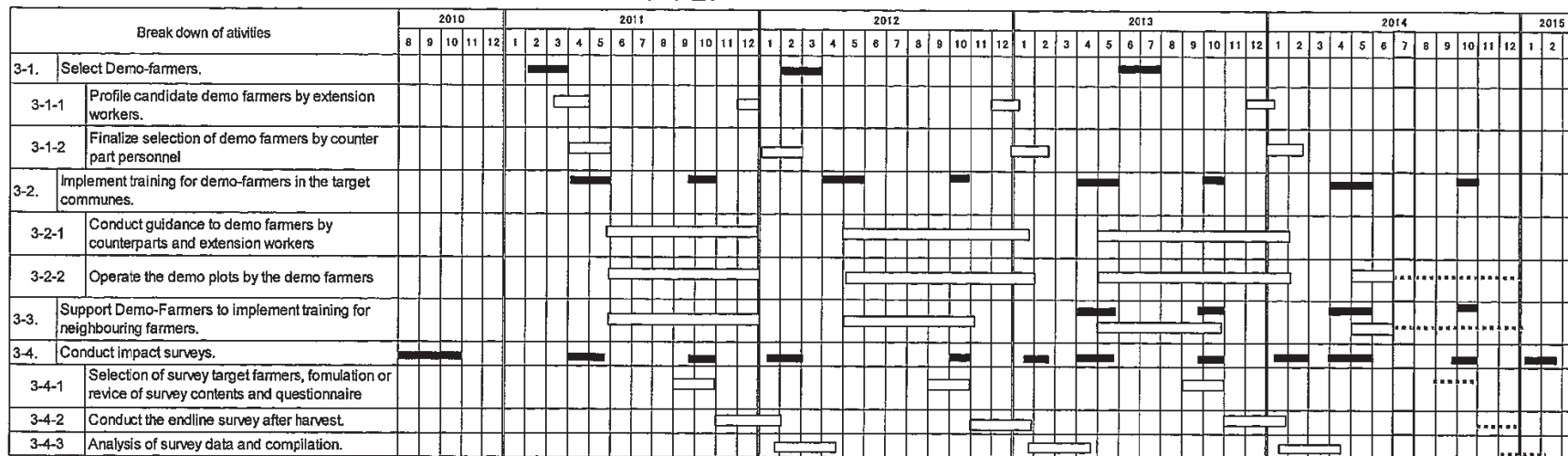


[Output 2: Activities for the improvement of farm management are promoted by the target communes]

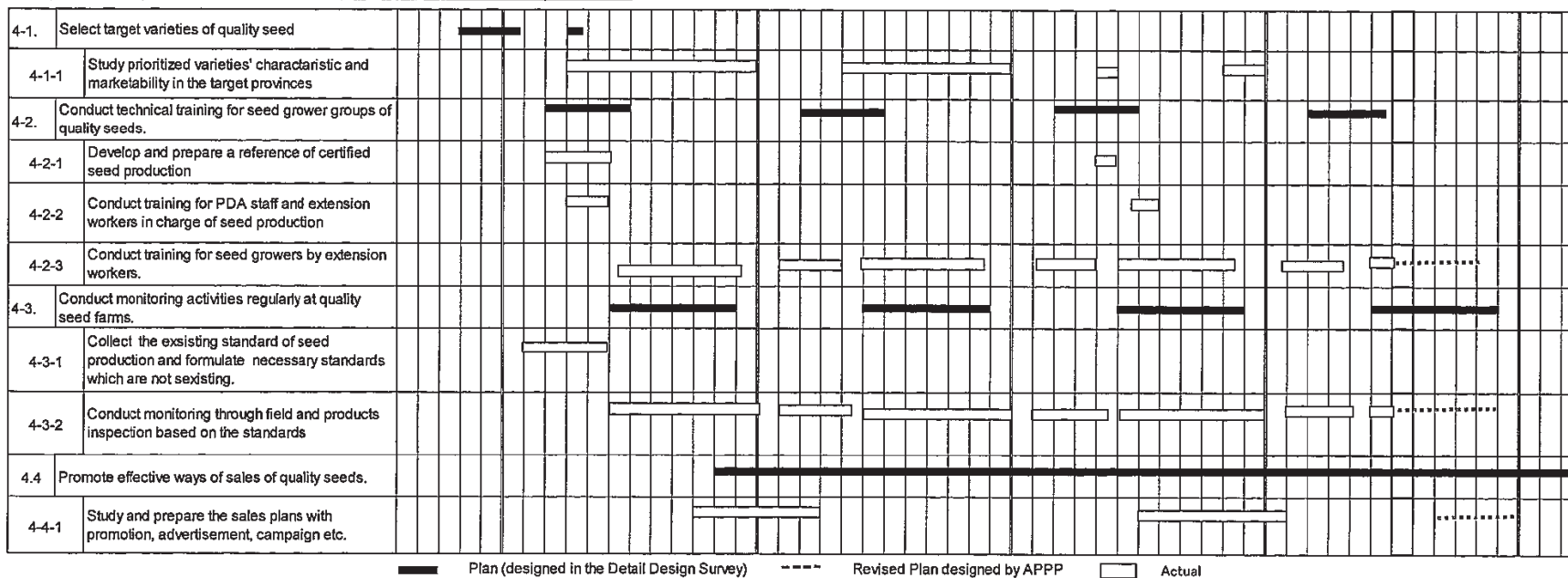


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[Output3: Agricultural production techniques of participating farmers are improved.]

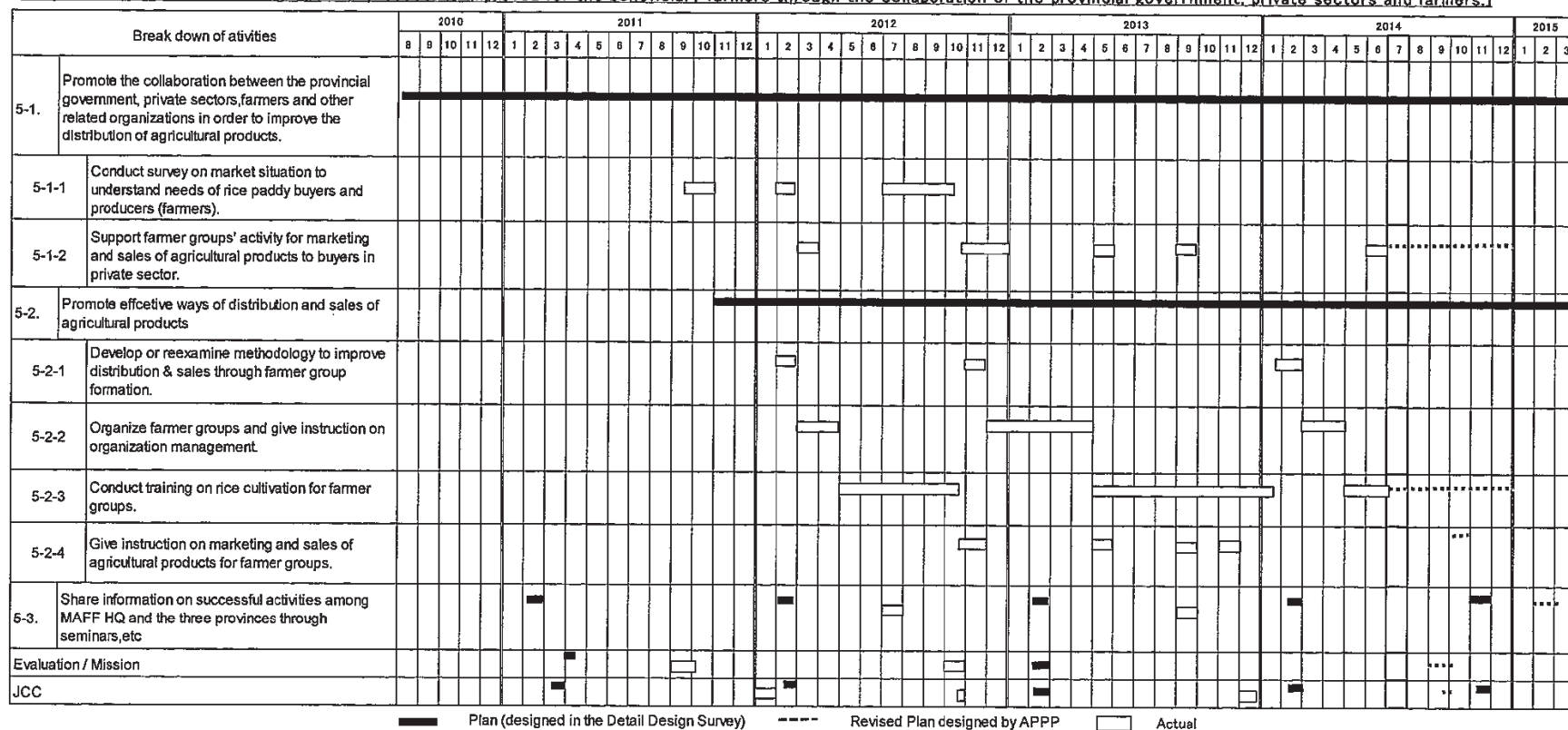


[Output 4: The production and distribution of quality seeds are promoted.]



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[Output 5: The distribution of agricultural products is improved for the beneficiary farmers through the collaboration of the provincial government, private sectors and farmers.]



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Annex 5. List of Interviewees

Ministry of Agriculture, Fishery, and Forestry (MAFF)

- H.E. Mam Amnot (Under Secretary of State/ Chairperson)

General Directorate of Agriculture (GDA)

- H.E. So Khan Rithykun (Director General/ Project Director)

Battambang Provincial Department of Agriculture (PDA)

- Mr. Chhim Vachira (Director/ Project Manager)
- Mr. Long Phorn (Deputy Director)

Agricultural Extension Office

- Mr. Siea Kimnay (Deputy Chief/ C/P for Output 1 (Training))

Agronomy Office

- Mr. Ouch Hoeun (Chief/ C/P for Output 2 (Commune Activity))
- Ms. Ros Ratha (Officer/ C/P for Output 3 (Extension))
- Ms. Pov Lina (C/P for Output 4 (Seed Production))

Agro-industrial Office

- Mr. Pa Boreak (Deputy Chief/ C/P for Output 5 (Distribution))

District Agricultural Office (DAO)

【Bavel DAO】

- Mr. Sorn Pov (Extension Worker)

【Aek Phnom DAO】

- Mr. Nang Chantha (Extension Worker)

【Maung Russei DAO】

- Mr. Moa Kry (Extension Worker)

【Rokhak Kiri DAO】

- Mr. Sath Samban (Extension Worker)

Pursat PDA

- Mr. Lay Viseth (Director/ Project Manager)

Agricultural Extension Office

- Mr. Leng Chandamony (Officer/ C/P (Extension))



Agronomy Office

- Mr. Hov Chandara (Officer/ C/P (Agronomy))

District Agricultural Office (DAO)

【PS DAO】

- Mr. Kvoeu Py (Extension Worker)
- Mr. Oun Chun Lin (District Chief)
- Mr. Ly Pak (District Chief)

【Bakan DAO】

- Mr. Sor Sary (District Chief)

【Kandieng DAO】

- Ms. Ty Sour (District Chief)

Kampong Chhnang PDA

- Ms. Heng Kimsreany (Deputy Director)

Agricultural Extension Office

- Mr. El Yoeurn (Chief/ C/P (Extension))

Agronomy Office

- Mr. Ly Samol (Officer/ C/P (Agronomy))

District Agricultural Office (DAO)

【Baribour DAO】

- Mr. Yem Oeur (Extension Worker)



Annex 6. Assignment of Japanese Experts

	Name	Expertise	Assigned Period
1	Mr. Satoru Hagiwara	Chief Advisor/ Extension	Jan. 5, 2011-Mar. 31, 2015
2	Mr. Yoshitoshi Tsutsui	Farm Management	Dec. 20, 2010 – Dec. 19, 2012
3	Mr. Masaru Yamada	Coordinator/ Training/ Extension	Dec. 20, 2010 – Jan. 31, 2013
4	Ms. Noriko Ishibashi	Farmer Organization Strengthening Support	Feb. 8, 2012 – Feb. 25, 2012 (Short-term)
5	Mr. Hideki Sonoyama	Community Development/ Distribution Improvement	May 10, 2012 – Mar. 31, 2015
6	Mr. Koji Shimokawa	Coordinator/ Training/ Extension	Dec. 24, 2012-Mar. 31, 2015
7	Mr. Tatsuo Fujita	Farm Management/Seed Production	Mar. 21, 2013 – Oct. 14, 2013 Nov. 15, 2013 – Feb. 18, 2014 Apr. 17, 2014 – Oct. 3, 2014 (Nov. 2014- Mar. 2015)



Annex 7. Provision of Machinery and Equipment

No.	Date	Item	Model/Specification	Make	Unit price	Qty	Sub-total(\$)	User	Installed	Procured	Running condition
1	2011.01.13	Copier (with finisher)	DC-III 2007 P/N: TL200363 (B1 P/N: QC100043)	Fuji Xerox	3,950	1	3,950	APPP	Battambang PDA	Local	Good
2	2011.01.24	Vehicle - Prado (OI 7417)	Engine No. 5L-6155748; Chassis No. JTEBD9F J2BK002899	Toyota	41,500	1	41,500	APPP	Battambang PDA	Local	Good
3	2011.01.24	Vehicle - Hilux Vigo (OI 7416)	Engine No. 2KD 5140069; Chassis No. MROFR22G4B0576085	Toyota	26,000	1	26,000	APPP	Battambang PDA	Local	Good
4	2011.05.30	Motorbike - Suzuki Viva	FD110CSD	Suzuki	1,500	26	39,000	APPP	Battambang PDA (16), Pursat PDA (5), Kampong Chhnang PDA (3)	Local	Good
5	2011.01.17	Desk-top computer	OptiPlex TM 380DT	Dell	890	1	890	APPP	Project office	Local	Good
6	2011.03.03	Air conditioner	Indoor Unit CS-C12KKH, Outdoor Unit CU-C12KKH	Panasonic	790	1	790	APPP	Project office	Local	Good
7	2011.05.18	Air conditioner	Indoor Unit CS-C12KKH, Outdoor Unit CU-C12KKH	Panasonic	878	1	878	APPP	Project office	Local	Good
8	2011.07.07	Air conditioner	Indoor Unit CS-C13MKH, Outdoor Unit CU-C13MKH	Panasonic	760	1	760	APPP	Project office	Local	Good
9	2011.07.07	Air conditioner	Indoor Unit CS-C13MKH, Outdoor Unit CU-C13MKH	Panasonic	760	1	760	APPP	Project office	Local	Good
10	2011.05.03	Desk-top computer	Dell Vostro 230MT	Dell	635	1	635	APPP	Project office	Local	Good
11	2011.01.12	LDC Projector	X1110	Acer	620	1	620	APPP	Project office	Local	Good
12	2011.07.15	Power tiller (hand tractor)	RT140 (H.P.14), plough implements, cage wheel, rubber tyre, pump	Siam Kubota	3,140	1	3,140	APPP	TLAS	Local	Good
13	2011.07.14	Printer Monochrome	LBP-3500	Canon	885	1	885	APPP	Project office	Local	Good
14	2011.11.23	Printing format	Local made printing format for paddy seed backs	n.a.	1,200	1	1,200	APPP	Project office	Local	Good
15	2011.05.24	Safety Box	Steel made, dial and key lock	President	295	1	295	APPP	Project office	Local	Good
16	2011.05.27	Thresher	Metal frame	Nouth Vatha (local workshop)	3,800	1	3,800	APPP	Bavel SSG	Local	Good
17	2011.06.16	Thresher	Metal frame	Nouth Vatha (local workshop)	3,800	1	3,800	APPP	Moung Russei SGG	Local	Good
18	2011.09.14	Thresher	Metal frame	Nouth Vatha (local workshop)	3,850	1	3,850	APPP	Moung Russei SGG	Local	Good
19	2011.05.27	Winnower	Wood frame	Local workshop	683	1	683	APPP	Bavel SSG	Local	Good
20	2011.06.02	Winnower	Wood frame	Local workshop	683	1	683	APPP	Banan SGG	Local	Good
21	2011.06.02	Winnower	Wood frame	Local workshop	683	1	683	APPP	Banan SGG	Local	Good
22	2012.11.05	Winnower	Wood frame	Voem Chadeule, Battambang	990	1	990	APPP	Rolea B'ier SGG	Local	Good
23	2012.11.05	Winnower	Wood frame	Voem Chadeule, Battambang	990	1	990	APPP	Pursat PDA (TAS)	Local	Good
24	2012.11.12	Thresher	Metal frame	Chheang Rath, Pinom Penh	2,500	1	2,500	APPP	Rolea B'ier SGG	Local	Good
25	2012.11.12	Thresher	Metal frame	Chheang Rath, Pinom Penh	2,500	1	2,500	APPP	Pursat PDA (TAS)	Local	Good
26	2013.10.16	Printing format	Local made printing format for paddy seed backs	n.a.	550	1	550	APPP	Pursat PDA (TAS)	Local	Good
27	2013.10.16	Printing format	Local made printing format for paddy seed backs	n.a.	550	1	550	APPP	Rolea B'ier SGG	Local	Good
28	2014.04.09	LCD Projector	Dx140	Sony	715	1	715	APPP	Project office	Local	Good

TOTAL (USD): 143,597



Annex 8. Operation Expenses (by the Japanese Side)

Operation cost including renovation of building and procurement of equipment

Fiscal Year (Apr.-Mar.)	Budget Executed	Note
2010	\$ 40,085	The actual budget execution for the fourth quarter of FY 2010
2011	\$ 415,147	
2012	\$ 409,748	
2013	\$ 374,282	
2014	\$ 73,411	Amount of executed till June 30, 2014
Total	\$ 1,312,673	This amount does not include the cost of the donated equipment

List of Infrastructure Renovated or Rehabilitated by the Project

No.	Fiscal Year	Site	Item	Cost	Details
1	JFY2010 Q4	Bavel SGG	Seed warehouse	\$ 3,444.00	Provision of construction materials (Free labor contribution from the SGG.)
2	JFY2011 Q2	Moung Russei SGG	Seed warehouse	\$ 16,050.00	Provision of construction materials, construction supervision fee (Free labor contribution from the SGG.)
3	JFY2011 Q2	Banan SGG	Seed warehouse	\$ 11,020.25	Provision of construction materials, construction supervision fee (Free labor contribution from the SGG.)
4	JFY2011 Q3	Banan SGG	Paddy dry yard	\$ 4,847.50	Provision of construction materials and constructor service fee (Free labor contribution from the SGG.)
5	JFY2011 Q3	Moung Russei SGG	Paddy dry yard	\$ 11,889.00	Provision of construction materials, constructor service fee and land refill cost (Free labor contribution from the SGG.)
6	JFY2012 Q1	Bavel SGG	Paddy dry yard	\$ 7,594.00	Provision of construction materials, constructor service fee and land refill cost (Free labor contribution from the SGG.)
7	JFY2012 Q1	TAS, Pursat PDA	Renovation of storage	\$ 8,828.00	Construction of toilet and installation of rain guard at the TAS, Pursat PDA.
8	JFY2013 Q2	TAS, Pursat PDA	Renovation of warehouse	\$ 3,945.00	Renovation of existing warehouse for the use of Seed Store Facility including renewal of roofing, ceilings, flooring and basement's surrounding.
9	JFY2013 Q2	TAS, Pursat PDA	Renovation of canal passage	\$ 4,782.00	Raising of passage by application of gravel, sand and soil and compaction to function properly as passage and canal bank.
11	JFY2013 Q3	K. Chhnang SGG	Seed warehouse & Paddy dry yard	\$ 14,943.00	Construction materials and contractor service fee for seed warehouse (30-40 tons of storing capacity) and concrete floor (13m x 10 m) to dry seed
10	JFY2013 Q3	TAS, Pursat PDA	Paddy dry yard	\$ 6,242.00	Construction materials and contractor service fee for concrete floor (30m x 20 m) to dry seed
		TOTAL		\$ 63,672.75	

Annex 9. List of Cambodian Counterparts

No.	C/P's Name	Position	Organization	Expertise	Assigned Period
1	H.E. Mr. San Vanty	Under Secretary of State/ Chair person	MAFF		
2	H.E. Mr. So Khan Rithy	Director General/ Project Director	MAFF, GDA		
3	Dr. Cheam Chansophon	Director/ Project Manager	Battambang PDA		2011.01.10-2012.07.31
4	Mr. Chhim Vachira	Director/ Project Manager	Battambang PDA		2012.08.01-2011.01.09
5	Mr. Tith Sam Oenn	Director/ Project Manager	Pursat PDA		2011.01.10-2014.02.27
6	Mr. Lay Viseth	Director/ Project Manager	Pursat PDA		2014.02.28-up-to-date
7	Mr. Ngan Nany	Director/ Project Manager	Kampong Chhnang PDA		2011.01.10-2014.01.15
8	Mr. Ngen Hun	Director/ Project Manager	Kampong Chhnang PDA		2014.01.16-up-to-date
9	Ms. Siea Kimnay	Deputy Chief/ C/P for Output 1 (Training)	Battambang PDA, Agricultural Extension Office	Training/ Extension	2011.01.10-up-to-date
10	Mr. In Sovanmony	Chief/ C/P for Output 2 (Commune Activity)	Battambang PDA, Agronomy Office	Agronomy/ Community Development	2011.01.10-2013.04.30
11	Mr. Ouch Hoeun	Chief/ C/P for Output 2 (Commune Activity)	Battambang PDA, Agronomy Office	Agronomy/ Community Development	2013.05.01-up-to-date
12	Ms. Ros Ratha	Officer/ C/P for Output 3 (Extension)	Battambang PDA, Agronomy Office	Extension/ Community Development	2011.01.10-up-to-date
13	Mr. Khath Borin	C/P for Output 4 (Seed Production)	Battambang PDA, Agronomy Office	Agronomy/ Seed Production	2011.01.07-2012.02.29
14	Ms. Pov Lina	C/P for Output 4 (Seed Production)	Battambang PDA, Agronomy Office	Agronomy/ Seed Production	2012.02.30-up-to-date
15	Mr. Pa Boreak	Deputy Chief/ C/P for Output 5 (Distribution)	Battambang PDA, Agro- industrial Office	Distribution	2011.01.10-up-to-date
16	Mr. Leng Chandamony	Officer/ C/P (Extension)	Pursat PDA, Agricultural Extension Office	Extension/ Seed Production	2011.01.10-up-to-date
17	Mr. Hov Chandara	Officer/ C/P (Agronomy)	Pursat PDA, Agronomy Office	Extension/ Seed Production	2011.01.10-up-to-date
18	Mr. El Yoeurn	Chief/ C/P (Extension)	Kampong Chhnang PDA, Agricultural Ext. Office	Extension/ Seed Production	2011.01.10-up-to-date
19	Mr. Ly Samol	Officer/ C/P (Agronomy)	Kampong Chhnang PDA, Agronomy Office	Extension/ Seed Production	2011.01.10-up-to-date
20	Mr. Sreng Rithy	Officer/ C/P 10 for Monitoring and Coordination	GDA, Department of Administration, Accounting and International Cooperation	Monitoring	2011.11.01-up-to-date
21	Mr. Touth Kimseun	District Chief/ Extension Staff 1	Battambang, Banan DAO	Extension	2011.01.10-up-to-date
22	Mr. Yorm Sandosh	Extension Worker/ Extension Staff 2	Battambang, Banan DAO	Extension	2011.01.10-2014.09.30
23	Mr. Sen Nil	Extension Worker/ Extension Staff 2	Battambang, BTB PDA	Extension	2013.10.01-up-to-date
24	Mr. Chhoeuk Sam Ath	District Chief Extension Staff 3	Battambang, Thma Koul DAO	Extension	2011.01.10-up-to-date
25	Mr. Chhin Nun	Extension Worker/ Extension Staff 4	Battambang, Thma Koul DAO	Extension	2011.01.10-up-to-date
26	Ms. Yim Sarath	District Chief/ Extension Staff 5	Battambang, BTB DAO	Extension	2011.01.10-up-to-date
27	Ms. Vy Saven	Extension Worker/ Extension Staff 6	Battambang, BTB DAO	Extension	2011.01.10-up-to-date

The highlighted C/Ps have been either retired or transferred.

No.	C/P's Name	Position	Organization	Expertise	Assigned Period
28	Mr. Sorn Pov	<i>Extension Worker/ Extension Staff 7</i>	Battambang, Bavel DAO	Extension	2011.01.10-up-to-date
29	Mr. Tin Sophal	<i>Extension Worker/ Extension Staff 8</i>	Battambang, Bavel DAO	Extension	2011.01.10-up-to-date
30	Mr. Chab Sothea	<i>District Chief/ Extension Staff 9</i>	Battambang, Aek Phnom DAO	Extension	2011.01.10-up-to-date
31	Mr. Nang Chantha	<i>Extension Worker/ Extension Staff 10</i>	Battambang, Aek Phnom DAO	Extension	2011.01.10-up-to-date
32	Mr. Nob Nang	<i>Extension Worker/ Extension Staff 11</i>	Battambang, Maung Russei DAO	Extension	2011.01.10-2011.11.30
33	Ms. Young Leakhena	<i>Extension Worker/ Extension Staff 11</i>	Battambang, Maung Russei DAO	Extension	2011.12.01-up-to-date
34	Mr. Moa Kry	<i>Extension Worker/ Extension Staff 12</i>	Battambang, Maung Russei DAO	Extension	2011.01.10-up-to-date
35	Mr. Phath Sopheurn	<i>District Chief/ Extension Staff 13</i>	Battambang, Sangkae DAO	Extension	2011.01.10-up-to-date
36	Mr. Pech Sakhon	<i>Extension Worker/ Extension Staff 14</i>	Battambang, Sangkae DAO	Extension	2011.01.10-up-to-date
37	Mr. Ann Samoeurn	<i>District Chief/ Extension Staff 15</i>	Battambang, Koas Krala DAO	Extension	2011.01.10-up-to-date
38	Mr. Yim Sameth	<i>Extension Worker/ Extension Staff 16</i>	Battambang, Koas Krala DAO	Extension	2011.01.10-up-to-date
39	Mr. Pok Ren	<i>District Chief/ Extension Staff 17</i>	Battambang, Rokhak Kiri DAO	Extension	2011.01.10-up-to-date
40	Mr. Sath Samban	<i>Extension Worker/ Extension Staff 18</i>	Battambang, Rokhak Kiri DAO	Extension	2011.01.10-up-to-date
41	Mr. Seang Heng	<i>Manager/ Extension Staff 23</i>	Battambang, KADC	Extension	2011.07.01-up-to-date
42	Mr. Kvoeu Py	<i>Extension Worker/ Extension Staff 19</i>	Pursat, PS DAO	Extension	2011.01.10-up-to-date
43	Mr. Sum Han	<i>Extension Worker/ Extension Staff 20</i>	Pursat, Bakan DAO	Extension	2011.01.10-up-to-date
44	Mr. Sor Sary	<i>District Chief/ Extension Staff 21</i>	Pursat, Bakan DAO	Extension	2011.01.10-up-to-date
45	Mr. Oun Chun Lin	<i>District Chief/ Extension Staff 24</i>	Pursat, PS PDA	Extension	2012.11.01-up-to-date
46	Mr. Ly Pak	<i>District Chief/ Extension Staff 25</i>	Pursat, PS DAO	Extension	2012.11.01-up-to-date
47	Ms. Ty Sour	<i>District Chief/ Extension Staff 26</i>	Pursat, Kandieng DAO	Extension	2012.11.01-up-to-date
48	Mr. Yem Oeur	<i>Extension Worker/ Extension Staff 22</i>	Kampong Chhnang, Baribour DAO	Extension	2011.01.10-up-to-date

Annex 10. Operational Expenses by the Cambodian Side

The maintenance costs of project offices, estimated in terms of electricity bills¹ born by the target PDAs

Fiscal Year (Jan.-Dec.)	Budget Executed	Note
2010	-	Seed warehouse for the Bavel SGG
2011	\$ 12,064	♦ Cost for KADC, TAS ♦ Registration fee (motorbikes).
2012	\$ 12,064	♦ Cost for TAS
2013	\$ 12,064	♦ Cost for TAS
2014	\$ 6,032	♦ Cost for TAS
Total	\$ 42,224	

¹ The electricity bill is estimated by the size of the office space allocated for C/Ps in each PDA; 80% to Battambang PDA, 10% to Pursat PDA, and 10% to Kampong Chhnang PDA.



Annex 11. Summary of the Project Progress

Outputs	PDM Indicators	Level of Achievement of the Indicators (%)	Activities	Target of the Activity	Progress in Activity Implementation	Implementation Status/Planned Activities	Reason for the Delay
[Output 1] Extension workers' abilities to implement extension activities are improved.	1-1 22 extension workers are able to conduct more than 880 times of training to Demo-farmers and participating farmers with the assistance of the counterpart.	<u>Achieved</u> No. of training conducted 2011: 265 times 2012: 537 times 2013: 501 times 2014: 245 times (as of August) Total: 1,548 times (including FFS training for SQG and pilot groups)	1-1 Review management system and the improved techniques developed and utilized in BAPEP and BRAND.	1-1-1 A Rolling Plan is to be prepared.	1-1-1 The Rolling Plan was prepared. The rice cultivation techniques and extension methods developed by the BRAND project have been drastically improved.	<u>Completed.</u>	N/A
				1-1-2 A FFS Monitoring Matrix is to be prepared.	1-1-2 2011-2013: The FFS Monitoring Matrix was prepared.		
	1-2 Extension workers assigned to the seed growers group acquire field inspection and seed examination skills.	<u>Achieved</u> Since 2011, three extension workers assigned to seed grower's groups (SGGs) have acquired necessary skill and knowledge in quality seed production and distribution and have conducted on-site inspection and quality control of the product.	1-2 Prepare the training curriculum for PDA staff in charge of extension and extension workers.	1-2-1 A Training Outline is to be prepared.	1-2-1 The training outlines for PDA staff in charge of extension activities and workers were prepared.	<u>Mostly completed</u> (expected to be completed within the project period). Planned activity: partial revision on the manuals.	N/A
				1-2-2 A technical manual is to be prepared.	1-2-2 The following technical manuals were prepared. 2011: Rice Cultivation and Seed Production 2013: 1) Subject-focused Technical Manuals 2) Drum Seeder Manual 3) Farmers Calendar		
				1-2-3 Extension material to be prepared.	1-2-3 Various extension (and teaching) materials were developed during 2011-2014.		
	1-3 Satisfaction level of Demo-farmers with extension services provided by extension workers is higher than 80%.	<u>Achieved</u> (Satisfaction level & achievement % to Indicator) 2011: 100% (100%) 2011: 100% (100%) 2011: 100% (100%)	1-3 Conduct trainings for PDA staff in charge of extension.	1-3-1 Training and On-the-Job-Training (OJT) are to be conducted.	1-3-1 2011: All C/Ps participated (together with all extension workers) in the FFS technical training course conducted at KADC (PDA agricultural station in Battambang). 2012: 23 trainees (PDA and MOWRAM officials) have undertaken the rice cultivation technology training course at TAS in collaboration with the TSC3 project. Four APPP C/Ps played a role as the training instructors. 2011-2014: OJT, ad-hoc training sessions, and study sessions have been provided to C/Ps and extension staff to cover every aspects of activities.	<u>Completed.</u>	N/A
				1-3-2 Monitoring meetings are to be conducted.	1-3-2 Monthly monitoring meetings have been held regularly.		
			1-4 Conduct trainings for extension workers.	1-4-1 Twenty two (22) extension staff to be trained.	1-4-1 2011: A FFS technical training course was conducted at KADC targeting 22 extension workers. The satisfaction level of the training was 72%. 2012: Advanced technical course was organized for 19 Battambang extension staff with the satisfaction level of 92%. 2011-2014: OJT, ad-hoc training sessions, and study sessions have been provided to C/Ps and extension staff to cover every aspects of activities.	<u>Completed.</u>	N/A
				1-4-2 Monitoring meetings to be conducted.	1-4-2 The Project's monthly monitoring meeting has also been used for an opportunity to hold ad-hoc training and study sessions among C/Ps and extension staff.		

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Outputs	PDM Indicators	Level of Achievement of the Indicators (%)	Activities	Target of the Activity	Progress in Activity Implementation	Implementation Status/ Planned Activities	Reason for the Delay
[Output 2] Activities for the improvement of farm management are promoted by the target communes.	2-1 More than 80% of Training Implementation Plans are implemented.	[Achieved] 2011: 100% 2012: 100% 2013: 100% *The matrix has been incorporated in the Commune Investment Plans (CIP) and has been implemented as planned.	2-1 Implement AEA's in order to grasp the situation of the target communes.	2-1-1. AEA reports are to be compiled.	2-1-1. The AEA reports for 36 communes were compiled and distributed to the respective commune councils and District Agricultural Offices (DAOs). One set of the AEA report was donated to PDA Battambang.	Completed.	N/A
			2-2 Support drafting Training Implementation Plan based on the results of AEA's.	2-2-1. The FFS Monitoring Matrix to be prepared and updated. ※ Activity 2-2 is the same as 3-1.	2-2-1. The FFS Monitoring Matrix was prepared. (also see the Summary of the Project Progress of Activity 3-1)	Mostly completed (expected to be completed within the project period).	N/A
	2-2 More than half number of the target communes includes the agricultural activities in their Commune Investment Plans (CIPs).		2-3 Support implementation, monitoring and improvement of Training Implementation Plan through women groups, water user groups and other farmer groups.	2-3-1. Training (FFS+FFD) is to be implemented, monitored and improved. ※ Activity 2-3 is the same as those of 3-2 and 3-3.	2-3-1. (see the Summary of the Project Progress of Activities 3-2.)	Mostly completed (expected to be completed within the project period).	N/A
		[Achieved] Achievement Level (in the brackets: number of communes that included agricultural activities in CIP) 2011: 100% (30 communes) 2012: 100% (27 communes) 2013: 100% (26 communes)	2-4 Support inclusion of agricultural activities into Commune Investment Plan.	2-4-1. More than 19 commune councils are to be supported to integrate Training (FFS) into CIP.	2-4-1. A workshop was held with participation from the commune and district offices in order to integrate the Matrix into the CIP. Involved stakeholders are: → 2011: 6 districts (21 communes) for CIP 2012 → 2012: 9 districts (30 communes) for CIP 2013	Completed.	N/A
[Output 3] Agricultural production techniques of the participating farmers are improved.	3-1. More than half number of participating farmers is able to use at least one type of agricultural production technique shown at the training activities.	[Achieved] (Adoption rate and achievement %) 2011: 2.5 techniques /participant (100%) 2012: 7 techniques /participant (100%) 2013: 5 techniques /participant (100%) Breakdown (2013 practice) • Land leveling 82% • Nursery making 25% • Seed selection 62% • Seed disinfection 52% • 3-week seedling 31% • Line transplanting with 2-3 seedlings 24% • Fertilizer application 82% • Removal of foreign varieties 46% • Weeding 82% *Data obtained by the End-line Survey in 2013.	3-1 Select Demo-farmers.	3-1-1 The FFS Monitoring Matrix to be prepared and updated.	3-1-1 The FFS Monitoring Matrix has been prepared and updated every year.	Completed.	The scale of the activity was expanded from the initial plan.
				3-1-2 A site map to be prepared and updated.	3-1-2 2011-2012: The site map was set up in the project office and was updated.		
				3-1-3 176 demo farmers to be enrolled by cultivation season in 2014 41 (in 2011), 45 (in 2012), 45 (in 2013), 45 (in 2014)	3-1-3 The number of demo farmers enrolled: 2011: 41 demo sites 2012: 87 demo sites 2013: 89 demo sites 2014: 85 demo sites Total: 302 demo sites		
			3-2 Implement training for Demo-farmers in the target communes.	3-2-1 The number of training (FFS+FFD) to be reached 1,535 times.	3-2-1 The number of implemented FFS training for participating participants. (the numbers in the brackets include FFS training for SGG and pilot group members.) 2011: 249 times (265 times) 2012: 504 times (537 times) 2013: 403 times (501 times) 2014: 211 times (245 times) (as of August 2014) Total: 1,367 times (1,548 times) (*expected final number: 1,750 times)	Mostly completed (expected to be completed within the project period)	The occurrence of droughts and floods 2011: flood damage (BTB and Pursat) 2012: drought damage (3 target provinces) 2013: flood damage (BTB)
			3-3 Support Demo-farmers to implement training for neighboring farmers.		3-2-2 The cumulative number of Participating Farmers to be reached 30,700.	3-2-2 The cumulative number of participating farmers (the numbers in the brackets include FFS training for SGG and pilot group members.) 2011: 4,018 persons (4,295 persons) 2012: 7,556 persons (7,999 persons) 2013: 6,270 persons (7,665 persons) 2014: 2,744 persons (3,150 persons) (as of August 2014) Total: 20,588 persons (23,109 persons) (expected final number: 27,500)	
			3-4 Conduct impact surveys.	3-4-1 An Annual Report is to be compiled.	3-4-1 2011-2013: The end line survey was conducted every year after completion of FFS and through analysis of survey data, the Annual Report was prepared and submitted to MAFF and JICA.	Mostly completed (expected to be completed within the project period)	N/A

2014

Outputs	PDM Indicators	Level of Achievement of the Indicators (%)	Activities	Target of the Activity	Progress in Activity Implementation	Implementation Status/ Planned Activities	Reason for the Delay
[Output 4] The production and distribution of quality seeds are promoted.	4-1 More than 100 tons of certified seeds are produced annually by 2014.	[Achieved] (Production and achievement level) 2011: 94.0 tons (94.0%) 2012: 81.7 tons (81.7%) 2013: 110.8 tons (100%)	4-1 Select target varieties of quality seeds.	4-1-1 A variety (is) for quality seed production is selected.	4-1-1 The 10 varieties prioritized by MAFF were adopted as the target varieties. The following varieties are produced by the Project assisted 4 SGGs and TAS in the target three provinces. <u>Early maturity:</u> 1) IR 66, 2) Chulsa <u>Medium maturity:</u> 3) Phka Rumduol Romeat, <u>Late maturity:</u> 4) Rieng Chey, 5) CAR 4, 6) CAR 6	Completed.	N/A
	4-2 More than one ton of registered seeds are produced annually by 2014.	[Achieved] (Production and achievement level) 2011: 3.3 tons (100%) 2012: 3.3 tons (100%) 2013: 4.4 tons (100%)	4-2 Conduct technical training for seed grower groups of quality seeds.	4-2-1 The following is to be conducted: 1) training on management, e.g. on-site inspection, seed quality inspection, and shipping and marketing; and 2) training on cultivation, e.g. seed preparation, transplanting, fertilization.	4-2-1 2011-2013: conducted as per schedule. 2014: being conducted as per schedule (on-going)	Mostly completed (expected to be completed within the project period.)	N/A
	4-3 More than 1,000 farmers use quality seeds.	[Achieved] (#Demo and participating farmers received certified seeds and achievement %) 2011: 41 farmers 2012: 867-944 farmers (over 86.7%) 2013: 715-788 farmers (over 162%) Total by 2013: <u>1,623-1,773 farmers</u>	4-3 Conduct monitoring activities regularly at quality seed farms.	4-3-1 Monitoring is to be conducted.	4-3-1 Monitoring has been conducted since 2011.	Completed.	N/A
				4-3-2 Tentative Standards and Inspection for Certified Seed Production as well as a Standard of Seed Quality are to be established.	4-3-2 The Project developed the <i>Project Standards for Seed Field Inspection</i> . The Project adopted the MAFF's <i>Standard of Seed Quality</i> .		
				4-3-3 Inspection is to be conducted in accordance with the said standards.	4-3-3 Inspections have been conducted in accordance with the said standards.		
			4-4 Promote effective ways of sales of quality seeds.	4-4-1 Sales promotion is to be conducted.	4-4-1. 2011-2012: Sales promotion to local rice millers was conducted including distribution of leaflets and posters. The APPP seeds are sold under the product name of "SAMAKI". 2013: A production contract between 3 SGGs in Battambang and one rice miller for 50 tons of certified seeds was signed. The radio program was also made and broadcasted in Battambang area for further sales promotion.	Mostly completed (expected to be completed within the project period.) Planned activity: expansion of sale promotion through various media channels in 2014	N/A

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Outputs	PDM Indicators	Level of Achievement of the Indicators (%)	Activities	Target of the Activity	Progress in Activity Implementation	Implementation Status/Planned Activities	Reason for the Delay
[Output 5] The distribution of Indica rice is improved for the beneficiary farmers through the collaboration of the provincial governments, private sectors and farmers.	5-1 More than 2,000 tons of agricultural products produced with quality seeds are annually in circulation by 2014 in market.	[Achieved] 2011: 2,413 ton (100%) 2012: 1,712 ton (86%) 2013: 3,010 ton (100%)	5-1 Promote the collaboration between the provincial governments, private sectors, farmers and other related organizations in order to improve the distribution of agricultural products.	5-1-1 A survey and analysis is to be conducted.	5-1-1 <u>2011-2012:</u> The surveys and analysis on rice producer and millers were conducted.	Mostly completed (expected to be completed within the project period)	N/A
				5-1-2 Rapport building among rice farmers, rice millers and buyers is to be developed.	5-1-2 <u>2012:</u> The Project invited rice millers to two FFS training sites <u>2013:</u> PG members visited 6 rice millers (i.e. 3 rice millers in Battambang, 2 rice millers in Pursat, and 1 rice miller in Kampong Chhnang) and the three SGCs achieved the contract production with one rice miller in Battambang.		
	5-2 More than 18 groups of farmers in 3 target provinces conduct collective actions, such as collective purchase of agricultural inputs, produce Indica rice under a technical standard procedure introduced by the project, sharing price information, collective shipping or collective sales.	[Mostly Achieved] <u>2011: 3 groups</u> • 3 SGCs in Battambang <u>2012: 6 groups</u> • 3 SGCs in Battambang • 1 SGC in Kampong Chhnang • 2 pilot groups (1 group in Battambang and 1 group in Pursat) <u>2013: 19 groups</u> • 4 SGCs (3 groups in Battambang and 1 group in Kampong Chhnang) • 15 pilot groups (5 groups in Battambang, 9 groups in Pursat, and 1 group in Kampong Chhnang) <u>2014: 19 groups</u> -do- Some collective actions were taken by all 19 groups. Collective sales of the produce by pilot groups were not conducted in 2013 by the pilot members' decision as envisaged in the original plan.	5-2 Promote effective ways of distribution and sales of agricultural products.	5-2-1 A method for a group formation is to be considered.	5-2-1 <u>2012:</u> A Group Fund Mechanism was formulated and introduced.	Mostly completed (expected to be completed within the project period.)	The transition of the market demand of unhulled rice from wet rice to dry rice.
				5-2-2 Group formation, e.g. pilot group or Seed Growers Groups (SGGs), is promoted up to 18 groups.	5-2-2 Promotion of group formation (result): <u>2011:</u> 3 SGCs in Battambang <u>2012:</u> 1 SGC in Kampong Chhnang 1 pilot group in Battambang 1 pilot group in Pursat <u>2013:</u> 4 pilot groups in Battambang 8 pilot groups in Pursat 1 pilot group in Kampong Chhnang <u>Total: 19 groups (4 SGCs+15 pilot groups)</u>		
				5-2-3 Collective works among the said groups are promoted.	5-2-3 Promotion of collective works <u>2011-2013:</u> Collective sales and material purchase by 4SGCs was conducted. <u>2012-2013:</u> Collective works for 15 pilot groups have been conducted.		
			5-3 Share information on successful activities among MAFF HQ and the three provinces through seminars etc.	5-3-1 A workshop/ seminar is to be held.	5-3-1 <u>2012:</u> The commune workshop was organized to provide project and technical information to the participants (Output 2 related). <u>2013:</u> The Workshop for Better Agricultural Service for Rice Farmers was conducted to provide the experience and information for promoting improved agricultural extension services to donor agencies and local NGOs	Mostly completed (expected to be completed within the project period.) <u>Planned activity:</u> A terminal seminar is scheduled in February or March, 2015.	N/A

Annex 12. Detailed Breakdown of FFS Training Record

Indicators	Category	Total (Three Provinces)				Breakdown											
						Battambang Province				Kampong Chhnang Province				Pursat Province			
		2011	2012	2013	Total	2011	2012	2013	Total	2011	2012	2013	Total	2011	2012	2013	Total
Training	FFS Participants	249	504	403	1,156	209	409	298	916	10	30	35	75	30	65	70	165
	SGGs	16	23	23	62	16	18	18	52	Yet established	5	5	10	Yet established	Yet established	Yet established	NA
	Pilot Groups	NA	10	75	85	Yet established	5	25	30	Yet established	Yet established	5	5	Yet established	5	45	50
	Total	265	537	501	1,303	225	432	341	998	10	35	45	90	30	70	115	215
Number of Farms Participated in FFS (Accumulated) *including demo-farmers	FFS Participants*	4,018	7,556	6,270	17,844	3,085	5,597	4,403	13,085	251	699	604	1,554	682	1,260	1,263	3,205
	SGGs	277	280	287	844	277	230	197	704	Yet established	50	90	140	Yet established	Yet established	Yet established	NA
	Pilot Groups	NA	163	1,018	1,181	Yet established	50	314	364	Yet established	Yet established	76	76	Yet established	113	628	741
	Total	4,295	7,999	7,575	19,869	3,362	5,877	4,914	14,153	251	749	770	1,770	682	1,373	1,891	3,946
Amount of Certified Seed Production (tons)	4 SGG+TAS	94	81.7	110.8	286.5	94	73	89.6	256.6	0	5.5	12.8	18.3	0	3.2	8.4	11.6
Amount of Registered Seed Production (tons)	4 SGG+TAS	3.3	3.3	4.4	11	3.3	1.6	3.5	8.4	0	1.1	0	1.1	0	0.6	0.9	1.5
Awarded Farmers by APP ^{1/}	Demo-farmers	0	22	32	54	0	18	23	41	0	1	2	3	0	3	7	10
	General Participants in FFS	0	0	326	326	0	0	177	177	0	0	49	49	0	0	100	100
	Pilot Groups	0	0	48	48	0	0	12	12	0	0	3	3	0	0	33	33
	Total	0	22	406	428	0	18	212	230	0	1	54	55	0	3	140	143

1/ Award classification (2013): 1) to demo farmers (Master of Improved Rice Cultivation Technology**), 2) to FFS participants (Certificate of Fully Attending the Training on Rice Cultivation Technology and Certificate of Enthusiastically Attending the Training on Rice Cultivation Technology**), and 3) to SGG participants (Certificate of Best Farmer** and Certificate of Good Farmer**)
The Project provided seeds and fertilizers as award prize.

2013

Indicators	Category	Average (Three Provinces)				Breakdown											
						Battambang Province				Kampong Chhnang Province				Pursat Province			
		2011	2012	2013	Average	2011	2012	2013	Average	2011	2012	2013	Average	2011	2012	2013	Average
Rice Yield (ton/ha)	Demo-farmers	4.4	3.9	4.7	4.3	4.1	4.4	4.2	4.2	4.4	4.2	4.9	4.5	4.8	3.2	4.9	4.3
	General Farmers Participated in FFS	2.8	2.7	3.5	3.0	2.6	2.7	3.2	2.8	2.8	3.0	3.9	3.2	3.0	2.4	3.5	3.0
	Pilot Groups	-	2.9	3.1	3.0	Yet established	3.4	2.8	3.1	Yet established	Yet established	2.8	2.8	Yet established	2.3	3.7	3.0
Revenue (US\$/ha) (Net Income/ha)	Demo-farmers	\$757	\$753	\$894	801.2	\$628	\$850	\$605	\$694	\$918	\$843	\$1,052	\$938	\$724	\$567	\$1,024	\$772
	General Participants in FFS	-	\$582	\$565	573.8	Un-surveyed	\$572	\$489	\$531	Un-surveyed	\$637	\$658	\$648	Un-surveyed	\$538	\$549	\$544
	Pilot Groups	-	\$489	\$521	504.6	Yet established	\$569	\$522	\$546	Yet established	Yet established	\$384	\$384	Yet established	\$408	\$656	\$532
Use of More than One Technique Introduced by the Project (%)	Demo-farmers	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	General Farmers Participated in FFS	-	100%	100%	100%	Un-surveyed	100%	100%	100%	Un-surveyed	100%	100%	100%	Un-surveyed	100%	100%	100%
	Pilot Groups	-	100%	100%	100%	Yet established	100%	100%	100%	Yet established	Yet established	100%	100%	Yet established	100%	100%	100%
Percentage of Farms Satisfied with Training (%)	Demo-farmers	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	General Farmers Participated in FFS	-	100%	100%	100%	Un-surveyed	100%	100%	100%	Un-surveyed	100%	100%	100%	Un-surveyed	100%	100%	100%
	Pilot Groups	-	100%	98%	99%	Yet established	100%	93%	97%	Yet established	Yet established	100%	100%	Yet established	100%	100%	100%

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Annex 13. Training/Workshops/ Meetings Conducted in the Project

Date	Venue	Item	Contents	Duration	Participants	
2011.01.09-11	Battambang PDA	Project Managers' Meeting 1	Kick-off Meeting	3	31	Project Manager, Counterparts (9) and extension workers (22)
2011.04.6-8	Battambang PDA/ KADC	Training Session 1	1) Salt-water seed selection, 2) Hot-water seed disinfection, 3) Soaking seeds, 4) Nursery preparation and Sowing, and 5) <i>Depog (simple nursery)</i>	3	35	Counterparts (9) extension workers (22), seed farmers (4)
2011.04.28-29	Battambang PDA/ KADC	Training Session 2	1) Land preparation, 2) Types and characteristics of fertilizer, 3) Fertilizer application and timing (basal and top dressing), and 4) Transplanting (line planting).	2	35	Counterparts (9) extension workers (22), seed farmers (4)
2011.05.26-27	Battambang PDA/ KADC	Training Session 3	1) Fertilizer application, refresher, and 2) fertilizer application (first top dressing)	2	35	Counterparts (9) extension workers (22), seed farmers (4)
2011.06.16-17	Battambang PDA/ KADC	Training Session 4	1) Checking the panicle initiation; 2) fertilizer application (second top dressing)	2	35	Counterparts (9) extension workers (22), seed farmers (4)
2011.07.28-29	Battambang PDA	Monitoring Meeting 1	1) Preparation of yield survey, 2) Preparation for FFS 2012 (identification of Transplanting sites); 3) Reviewing rainfall data; 4) case study of mutual help in Pursat	2	32	Counterparts (9) extension workers (23)
2011.08.30	Battambang PDA	Monitoring Meeting 2	1) Cropping calendar for each district; 2) pest and disease control	1	32	Counterparts (9) extension workers (23)
2011.09.13	Battambang PDA	Monitoring Meeting 3	Reviewing and study PDM	1	9	Counterparts (9)
2011.10.3	Battambang PDA	Monitoring Meeting 4	Group formation and farmers' cooperative	1	32	Counterparts (9) extension workers (23)
2011.10.27	Battambang PDA	Training Session 5	Crop cutting yield survey, usage of grain moisture meter, and yield calculation.	2	32	Counterparts (9) extension workers (23)
2011.12.28	Battambang PDA	Monitoring Meeting 5	Revising the FFS extension materials, and planning for 2012	1	31	Counterparts (9) extension workers (22)
2012.01.20	Battambang PDA	Project Managers' Meeting 2	Preparation of the First JCC meeting	1	12	Project Manager (3), Counterparts (9)
2012.01.26	MAFF, Phnom Penh	JCC meeting 1	Review of 2011 and planning of 2012; Revision of PDM	1	15	Chairman (1), PD (1), PM (3), Counterparts (10) and others
2012.01.30-31	Battambang PDA	Monitoring Meeting 6	Reviewing the FFS 2011; Planning for experiment at the KADC	2	32	Counterparts (9) extension workers (23)
2012.02.28-29	Battambang PDA	Monitoring Meeting 7	Finalizing the FFS extension materials and selection of demo sites; Preparation of experiment at the KADC	2	32	Counterparts (9) extension workers (23)
2012.04.30	Battambang PDA	Monitoring Meeting 8	Monitoring FFS2012, seed production	1	32	Counterparts (9) extension workers (23)
2012.05.28-29	Battambang PDA	Monitoring Meeting 9	Monitoring FFS2012 (household survey, growth observation), seed production, observation of KADC experiment	2	32	Counterparts (10) extension workers (23)
2012.06.26	Battambang PDA	Project Managers' Meeting 3	Monitoring FFS2012 (household survey, growth observation)	2	36	PM (3), Counterparts (10) and extension workers (23)
2012.07.11-13	Pursat PDA/ TLAS	TSC3 Collaboration Training Session 1	1) Seed preparation (seed selection and disinfection); 2) Seed incubation; 3) Nursery bed making and sowing; 4) Introduction of the 10 prioritized varieties; 5) Renewal of seeds; 6) Introduction of FFS	3	25	TSC3 Counterparts (12), Pursat PDA (10), GDA (1), MOWRAM (2)
2012.07.20	Battambang PDA	Workshop on Rice Cultivation Training through Farmers' Field School and Commune Investment Program	1) Familiarize communes and districts staff with rice cultivation technologies recommended by the Project 2) Familiarize the participants with the basic structure and implementation budget of the FFS; 3) Discuss issues to be addressed for sustainable agricultural development in each commune, and exchange views on agricultural extension activities to be included into the Commune Investment Program (CIP).	1	40	Commune council members (30), district council members (9), provincial staff (1)
2012.07.30	Battambang PDA	Monitoring Meeting 10	Monitoring FFS2012 (household survey, growth observation), and assessment and preparedness of drought impact	1	33	Counterparts (10) and extension workers (23)
2012.08.01-03	Pursat PDA/ TLAS	TSC3 Collaboration Training Session 2	1) Land preparation; 2) Line transplanting; 3) Fertilizer application (basal); 4) Fertilizer application: types and characteristics; and appropriate timing & amount; 5) Site visit	3	25	TSC3 Counterparts (12), Pursat PDA (10), GDA (1), MOWRAM (2)
2012.08.27-28	Battambang PDA	Project Managers' Meeting 4	Monitoring Operation 2012	2	36	PM (3), Counterparts (10) and extension workers (23)
2012.08.29	Banan SGG	Exchange Visit	Seed production (field visit to the Banan SGG)	1	24	Project staff from NGOs (GRET and CIRD) and farmers
2012.09.04-07	Pursat PDA/ TLAS	TSC3 Collaboration Training Session 3	1) Observation of Panicle Initiation (P.I.) and additional fertilizer application; 2) Growth survey method; 3) Depog Nursery making practice; 4) Use of Drum seeder and its seeding practice; 5) Site visit: FFS demo sites & Rice millers	3	25	TSC3 Counterparts (12), Pursat PDA (10), GDA (1), MOWRAM (2)
2012.09.25-28	Battambang PDA	Monitoring Meeting 11	Monitoring FFS2012 on Demo farmer sites, Pilot groups and Seed Growers Group (SGG)	4	33	Counterparts (10) and extension workers (23)
2012.11.6-8	Pursat PDA/ TLAS	TSC3 Collaboration Training Session 4	1) Yield survey by "Cutting method" including sampling in the rice field and analyzing method for estimating yield per square meters; 2) Overview of whole training course and evaluation; 3) Closing and certification ceremony	3	25	TSC3 Counterparts (12), Pursat PDA (10), GDA (1), MOWRAM (2)
2012.11.20-21	Battambang PDA	Monitoring Meeting 12	1) Update FFS 2012 by DF, PG & SGG; 2) End-line (yield) survey 2012	2	36	Counterparts (10) and extension workers (26)
2012.12.24-25	Battambang PDA	Monitoring Meeting 13	1) Update FFS 2012; 2) End-line (yield) survey 2012 (Continued)	2	36	Counterparts (10) and extension workers (26)
2013.01.21-22	Battambang PDA	Monitoring Meeting 14 & PM meeting	1) Making plan for 2013 FFS activities including new demo site selection by hearing from extension workers; 2) A presentation by Mr. Yamada for informing extension system and effort in other countries	2	39	PM(3), Counterparts (10) and extension workers (26)
2013.02.21-22	Battambang PDA	Monitoring Meeting 15	1) Discussion on extension methods; 2) Improvement of Signboard for FFS demo sites; 3) Production plan of rice cultivation guideline book (tentative title); 4) Update requirement of FFS materials 2013	2	43	Counterparts(10), Extension worker(26), SGG(7)

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Date	Venue	Item	Contents	Duration	Participants	
2013.02.22	Battambang	FFS demonstration	1) Introduction of FFS techniques and its courses; 2) Demonstration of seed treatment practice	1	26	APPP Counterparts(2), Coop member farmers(22)
2013.03.12	Kampong Spue	TSC3 Collaboration FFS demo	1) Seed Treatment Demonstration and guideline for demo sites of TSC3 project in Kampong Spue; 2) Nursery preparation as well as introduction of FFS technique guideline	1	24	APPP Counterpart (2), PDA K.Spue(2), TSC3 Counterparts(2), Farmers(18)
2013.03.21	Battambang PDA	Monitoring Meeting 16 & PM meeting	1) Briefing on End-line Survey results; 2) Discussion on farmers' guidebook; 3) Finalizing on FFS materials and distribution arrangement; 4) Updating PG group membership	1	39	PM (3), Counterparts(10), Extension worker(26),
2013.04.03	Kampong Spue	TSC3 Collaboration FFS demo	1) Line Transplanting Method and its practice	1	22	APPP Counterpart (2), PDA K.Spue(2), TSC3 Counterparts(2), Farmers(16)
2013.04.10	Pursat PDV TLAS	Book keeping training for PG	1) Lecture of book keeping; 2) Book keeping exercise	1	21	Counterparts(2), Extension worker(1), 9 PGs in Pursat province (18)
2013.04.23-24	Battambang PDA	Monitoring Meeting 17	1) FFS demo farm 2013 monitoring and reporting method; 2) SGG: Production Plan 2013, Inspection guideline, Monitoring method update, SGG by laws update ; 3) PG	2	35	Counterparts(9), Extension worker(26),
2013.04.30	TSC3 (MOWRAM)	Training for TSC3 C/PS	1) Agronomy basics; 2) Introduction of APPP FFS techniques and project activities	1	21	APPP Expert(1), Farming Management Counterparts (10), Irrigation Counterparts (10)
2013.05.21-22	Battambang PDA	Monitoring Meeting 18 & PM meeting	1) Making of FFS technical leaflet on seed treatment; 2) SGG: Production Plan 2013, Inspection guideline, Monitoring method update, SGG by laws update ; 3) PG :Progress & result, Bylaw and Memberlist, FFS activities	2	39	PM (3), Counterparts(10), Extension worker(26),
2013.06.24-25	Battambang PDA	Monitoring Meeting 19	1) Progress reporting and monitoring record submission for demo farms, PG & SGG	2	35	Counterparts(9), Extension worker(26),
2013.07.23-24	Battambang PDA	Monitoring Meeting 20	1) Rice blast measures and information sharing, Instruction on the use of improved signboard for FFS demo field(paddy), Simple hydrometer making for use in seed treatment; 2) Progress reporting and monitoring record submission for demo farms, PG & SGG	2	36	Counterparts(10), Extension worker(26),
2013.08.22-23	Battambang PDA	Monitoring Meeting 21 & PM meeting	1) Information sharing on the use of drum seeder, Discussion of measures to water shortage cases in FFS demo sites, Making of farmer calendar for keeping record of expenditure, Chemical use for disease control ; 2) Progress reporting and monitoring record submission for demo farms, PG & SGG	2	35	Counterparts(9), Extension worker(26),
2013.09.25	Battambang PDA	Monitoring Meeting 22 & PM meeting	1) Progress reporting and monitoring record submission for demo farms, PG & SGG	1	39	PM (3), Counterparts(10), Extension worker(26),
2013.09.26-27	Khemala Hotel, Battambang	Workshop	A workshop titled as the "Workshop for Better Agricultural Service for Rice Farmers" was organized to share the experience and information for promoting improved agricultural extension services.	2	90	11 NGOs in Battambang province, APPP Counterparts, PDA staff & extension workers
2013.10.21-22	Battambang PDA	Monitoring Meeting 23	1) Progress reporting and monitoring record submission for demo farms, PG & SGG; 2) Updating flood damage	2	36	Counterparts(10), Extension workers(26),
2013.11.21-22	Battambang PDA	Monitoring Meeting 24	1) Progress reporting and monitoring record submission for demo farms, PG & SGG; 2) FFS End-line survey progress; 3) Draft of JCC Presentation by Counterparts	2	35	Counterparts(9), Extension workers(26),
2013.12.23-24	Battambang PDA	Monitoring Meeting 25	1) Progress reporting and monitoring record submission for demo farms, PG & SGG; 2) FFS End-line survey progress; 3) SGG: Book keeping training for accountants	2	35	Counterparts(9), Extension workers(26),
2014.01.20-22	Battambang PDA	Monitoring Meeting 26 & PM meeting	1) Progress reporting of End-line survey for Demo farmers; 2) PG:Updating result of production and sale , Account book checking; 3) SGG: Annual activity report, Annual settlement of account, Activity plan 2014.	3	50	PM (3), Counterparts(10), Extension worker(26), SGG(11)
2014.02.24-26	Battambang PDA	Monitoring Meeting 27	1) DF: FFS action plan 2014, New demo farmer selection; 2)PG: PG awardee farmer selection, Seed procurement; 3) SGG: Updating Matrix on dry season cultivation, action plan 2014	3	36	Counterparts(10), Extension workers(26),
2014.03.20-21	Battambang PDA	Monitoring Meeting 28	1) Explanation on Rice Cultivation Technical Manual and Farmers' Calendar, Assembly practice of Drum seeder; 2) PG: Preparation of PG workshop for Action planning, Progress of Awards (Best & Good)	2	35	Counterparts(10), Extension workers(26),
2014.04.24-25	Battambang PDA	Monitoring Meeting 29 & PM meeting	1) End-line survey report presentation, Reminders on FFS operation 2014; 2) PG: Preparation of PG workshop for action planning(continued); 3) SGG: Preparation of Action Plan for wet-season 2014.	2	39	PM (3), Counterparts(10), Extension worker(26),
2014.05.22-23	Battambang PDA	Monitoring Meeting 30	1) Introduction of FFS training materials(revised ver.), Practice on making hydrometer ; 2) SGG: Preparation of Action Plan for wet-season 2014(continued); 3)PG:Progress of FFS in wet season 2014, Progress of accounting records.	2	35	Counterparts(9), Extension workers(26),
2014.06.24-25	Battambang PDA	Monitoring Meeting 31 & PM meeting	1) Progress report submission, JCC preparation; 2) Carbonized-husk making demo.; 3) Lecture on how to use herbicide; 4) FFS presentation practice; 5) SGG: Work plan update, Progress report & Growth Survey; 6) Update of Action Plan 2014, Progress of FFS, Plan of PG Sales Promotion.	2	38	PM (2), Counterparts(10), Extension worker(26),
TOTAL					1,751	

Others

Date	Venue	Item	Contents	Duration	Participants	
2011.07-11	Battambang PDA	Internship	Internship requested by Battambang university and University of Management and Economics (UME)	5 months	10	Students from Battambang University
2012.05-09	Battambang PDA	Internship	Internship requested by Battambang university and University of Management and Economics (UME)	5 months	5	Students from Battambang University
TOTAL					15	

Annex 14. List of Project Deliverables

Classification	Title / Description	Issued in	Purpose	Content	Language	# printing	Distributed to
Technical Manuals	APPP Recommended Seed Production Technology	May 2011	SGG	Rice cultivation techniques and inspection standards	English/ Khmer	printed in the Project office	C/P staff in charge of seed production
	APPP Recommended Rice Cultivation Technology	April 2012	C/P training	Rice cultivation techniques and its explanation	English/ Khmer	printed in the Project office	C/P, PDA officials, extension staff
	Drum Seeder Manual	March 2014	FFS, PG	How to use DS and technical explanation	English/ Khmer	1,200 (+5,000)	C/P, extension staff, demo farmers, FFS participants, PG members
	Issue Specific Technical Manual (Title: Step Up Your Knowledge on Rice Cultivation)	March 2014	FFS, PG	Issue specific on rice cultivation techniques and its explanation	English/ Khmer	4,000	C/P, extension staff, demo farmers, FFS participants, PG members
	Farmer's Calendar (Farming Management)	March 2014	FFS	Rice cultivation process and cost record calendar	English/ Khmer	4,000 (+5,000)	C/P, extension staff, demo farmers, FFS participants, PG members
	Seed Treatment Manual for Farmers (Produced by the C/P task team)	Aug. 2014	Extension	Seed selection and disinfection method	Khmer	5,000	C/P, extension staff, SGG/Pilot group members, farmers in general
	[Revision] Issue Specific Technical Manual (Ver 2: Step up your knowledge on rice cultivation)	Dec. 2014	Seminar and general extension	Issue specific technical manuals for general farmers and for the instructors.	English/ Khmer	5,000	C/P, extension staff, demo farmers, FFS participants, PG members
	Guidebook on the Quality Seed Production	Dec. 2014	SGG	Production process, techniques and technical standards	English/ Khmer	5,000	C/P, extension staff, SGG members
	Guideline for Farmers Group Formation and Management	Dec. 2014	Distribution Improvement	Group fund mechanism, group activity, management criteria	English/ Khmer	5,000	C/P, extension staff

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Classification	Title / Description	Issued in	Purpose	Content	Language	# printing	Distributed to
Teaching Materials for extension activities	Technical poster for FFS (printed on a large vinyl canvas sheet)	Jan. 2011	FFS	Cultivation techniques (flow)	Khmer	240	Demo farmers, community halls, etc.
	Technical poster for FFS (stage specific) (printed on a large vinyl canvas sheet)	April 2012	FFS	Focus on individual techniques	Khmer	130	Demo farmers, FFS participants, pilot group (PG) members
	[Ver.2] Technical poster (techniques on cultivation stages) for FFS (15 types /set) (Printed on large vinyl canvas sheet)	Jun. 2014	FFS	Focus on individual techniques	Khmer	30 sets	Demo farmers, FFS participants, pilot group members
	Technical poster for SGG (Printed on a large vinyl canvas sheet)	April 2011	SGG	Cultivation techniques (flow)	Khmer	5	SGG members
	Leaflet for Rice Cultivation Technology	April 2011	FFS	Cultivation techniques (flow)	English/ Khmer	20,000	FFS participants, framers, rice millers, village bulletin boards
	Group Fund Mechanism (Printed on a large vinyl canvas sheet)	May 2012	PG	Flow of group funding and spending	Khmer	30	PG members
Public Relations and Promotion Materials	Outline of APPP	2011- revision continuing	General Public Relations	Outline of activities and outcomes	Japanese/ English	printed in the project office	Project visitors, JICA officials, etc.
	Poster for seed sale promotion (3 types)	Sept. 2012	Sale promotion	Explanation of SGG and its produced seed	Khmer	100	SGG members, demo farmers, village bulletin boards
	Leaflet for seed sale promotion	Oct. 2011	Sale promotion	Explanation of SGG and its produced seed	Khmer	20,000	FFS participants, farmers, rice millers
	Poster for seed sale promotion	Jan. 2014	Sale promotion	Explanation of SGG and its produced seed	Khmer	300	FFS participants, farmers, rice millers, village bulletin boards
Equipment	Rice husk charcoal maker	June 2014	SGG	Making charcoals from rice husk	-	8 units	SGG members

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Dispatched Expert - long and short-term (As of 30 June 2014)

ANNEX 1

(1) 長短専門家派遣実績（氏名、専門分野、派遣期間、派遣前の所属）

番号	専門家氏名	指導科目	名前	指導科目	派遣期間	派遣前の所属先
No.	Name	Expertise	Name	Expertise	Assigned Period	Organization
1	萩原 知	チーフアドバイザー/農業普及1	Mr. Satoru Hagiwara	Chief Advisor/ Extension1	2011.01.05 - 2015.03.31	JICA
2	筒井 佳壽	営農	Mr. Yoshitoshi Tsutsui	Farm Management	2010.12.20 -2012.12.19	n.a.
3	山田 大	業務調整/研修/農業普及2	Mr. Masaru Yamada	Coordinator/ Training/ Extension2	2010.12.20 -2013.01.31	n.a.
4	石橋 典子	農民組織強化支援	Ms. Noriko Ishibashi	Farmer Organization Strengthening Support	2012.02.08 -2012.02.25 (Short-term)	IC Net Limited
5	園山 英毅	コミュニティ活動/ 流通改善	Mr. Hideki Sonoyama	Community Development/ Distribution Improvement	2012.05.10 -2015.03.31	JIN Corporation
6	下川 浩二	業務調整/研修/農業普及2	Mr. Koji Shimokawa	Coordinator/ Training/ Extension	2012.12.24-2015.03.31	n.a.
7	藤田 達夫	営農/種子生産	Mr.Tatsuo Fujita	Farm Management/Seed Production	2013.03.21-2013.10.14 2013.11.15-2014.02.18 2014.04.17-2014.10.03 2014.11.x-2015.03.x	OADA Foundation

Assignment of Counterparts (C/P) and other personnel (As of 30 June 2014)

ANNEX2-A

Assignment of Counterparts (C/P) (As of 30 June 2014)

No.	C/Pの氏名及び役職		配属先	C/Pの専門分野	配置期間	実施機関での勤務期間	技術協力を行った専門家氏名*					備考等
No.	C/P's Name	Position	Organization	Expertise	Assigned Period	Duration of Duty (years)	Expert-in-charge*					Note
							1	3,6	2,7	4	5	
1	H.E. Mr. San Vanty	Under Secretary of State/ Chiar person	MAFF									
2	H.E. Mr. So Khan Rithykun	Director General/ Project Director	MAFF, GDA									
3	Dr. Cheam Chansophon	Director/ Project Manager	Battambang PDA		2011.01.10-2012.07.31		1					退官(Retired)
4	Mr. Chhim Vachira	Director/ Project Manager	Battambang PDA		2012.08.01-2011.01.09		1					後任(Successor)
5	Mr. Tith Sam Oenn	Director/ Project Manager	Pursat PDA		2011.01.10-2014.02.27		1					退官(Retired)
6	Mr. Lay Viseth	Director/ Project Manager	Pursat PDA		2014.02.28-up-to-date		1					後任(Successor)
7	Mr. Ngan Nany	Director/ Project Manager	Kampong Chhnang PDA		2011.01.10-2014.01.15		1					退官(Retired)
8	Mr. Ngen Hun	Director/ Project Manager	Kampong Chhnang PDA		2014.01.16-up-to-date		1					後任(Successor)
9	Ms. Siea Kimnay	Deputy Chief/ C/P for Output 1 (Training)	Battambang PDA, Agricultural Extension Office	Training/ Extension	2011.01.10-up-to-date	27	1	1				
10	Mr. In Sovanmony	Chief/ C/P for Output 2 (Commune Activity)	Battambang PDA, Agronomy Office	Agronomy/ Community Development	2011.01.10-2013.04.30	16	1				1	異動
11	Mr.Ouch Hoeun	Chief/ C/P for Output 2 (Commune Activity)	Battambang PDA, Agronomy Office	Agronomy/ Community Development	2013.05.01-up-to-date	5	1	1				後任(Successor)
12	Ms. Ros Ratha	Officer/ C/P for Output 3 (Extension)	Battambang PDA, Agronomy Office	Extension/ Community Development	2011.01.10-up-to-date	6	1	1				
13	Mr. Khath Borin	C/P for Output 4 (Seed Production)	Battambang PDA, Agronomy Office	Agronomy/ Seed Production	2011.01.07-2012.02.29	24			1			異動
14	Ms. Pov Lina	C/P for Output 4 (Seed Production)	Battambang PDA, Agronomy Office	Agronomy/ Seed Production	2012.02.30-up-to-date	5			1			後任(Successor)
15	Mr. Pa Boreak	Deputy Chief/ C/P for Output 5 (Distribution)	Battambang PDA, Agro-industrial Office	Distribution	2011.01.10-up-to-date	17					1	
16	Mr. Leng Chandamony	Officer/ C/P (Extension)	Pursat PDA, Agricultural Extension Office	Extension/ Seed Production	2011.01.10-up-to-date	24	1	1	1	1	1	
17	Mr. Hov Chandara	Officer/ C/P (Agronomy)	Pursat PDA, Agronomy Office	Extension/ Seed Production	2011.01.10-up-to-date	15	1	1	1	1	1	
18	Mr. El Yoeurn	Chief/ C/P (Extension)	Kampong Chhnang PDA, Agricultural Ext. Office	Extension/ Seed Production	2011.01.10-up-to-date	16	1	1	1	1	1	
19	Mr. Ly Samol	Officer/ C/P (Agronomy)	Kampong Chhnang PDA, Agronomy Office	Extension/ Seed Production	2011.01.10-up-to-date	22	1	1	1	1	1	
20	Mr. Sreng Rithy	Officer/ C/P 10 for Monitoring and Coordination	GDA, Department of Administration, Accounting and International Cooperation	Monitoring	2011.11.01-up-to-date	7	1	1				
21	Mr. Touth Kimseun	District Chief/ Extension Staff 1	Battambang, Banan DAO	Extension	2011.01.10-up-to-date	30	1	1	1		1	
22	Mr. Yorm Sandosh	Extension Worker/ Extension Staff 2	Battambang, Banan DAO	Extension	2011.01.10-2014.09.30	24	1	1			1	退職(Quitted)
23	Mr. Sen Nil	Extension Worker/ Extension Staff 2	Battambang, BTB PDA	Extension	2013.10.01-up-to-date	27	1	1			1	後任(Successor)
24	Mr. Chhoeuk Sam Ath	District Chief Extension Staff 3	Battambang, Thma Koul DAO	Extension	2011.01.10-up-to-date	26	1	1				
25	Mr. Chhin Nun	Extension Worker/ Extension Staff 4	Battambang, Thma Koul DAO	Extension	2011.01.10-up-to-date	20	1	1				
26	Ms. Yim Sarath	District Chief/ Extension Staff 5	Battambang, BTB DAO	Extension	2011.01.10-up-to-date	25	1	1				
27	Ms. Vy Saven	Extension Worker/ Extension Staff 6	Battambang, BTB DAO	Extension	2011.01.10-up-to-date	26	1	1				

No.	C/Pの氏名及び役職		配属先	C/Pの専門分野	配置期間	実施機関での勤務期間	技術協力を行った専門家氏名*					備考等
No.	C/P's Name	Position	Organization	Expertise	Assigned Period	Duration of Duty (years)	Expert-in-charge*					Note
							1	3,6	2,7	4	5	
28	Mr. Sorn Pov	Extension Worker/ Extension Staff 7	Battambang, Bavel DAO	Extension	2011.01.10-up-to-date	26	1	1	1			
29	Mr. Tin Sophal	Extension Worker/ Extension Staff 8	Battambang, Bavel DAO	Extension	2011.01.10-up-to-date	24	1	1			1	
30	Mr. Chab Sothea	District Chief/ Extension Staff 9	Battambang, Aek Phnom DAO	Extension	2011.01.10-up-to-date	28	1	1				
31	Mr. Nang Chanthha	Extension Worker/ Extension Staff 10	Battambang, Aek Phnom DAO	Extension	2011.01.10-up-to-date	28	1	1				
32	Mr. Nob Nang	Extension Worker/ Extension Staff 11	Battambang, Maung Russei DAO	Extension	2011.01.10-2011.11.30	8	1	1				
33	Ms. Young Leakhena	Extension Worker/ Extension Staff 11	Battambang, Maung Russei DAO	Extension	2011.12.01-up-to-date	26	1	1				
34	Mr. Moa Kry	Extension Worker/ Extension Staff 12	Battambang, Maung Russei DAO	Extension	2011.01.10-up-to-date	26	1	1	1			
35	Mr. Phath Sopheurn	District Chief/ Extension Staff 13	Battambang, Sangkae DAO	Extension	2011.01.10-up-to-date	26	1	1			1	
36	Mr. Pech Sakhon	Extension Worker/ Extension Staff 14	Battambang, Sangkae DAO	Extension	2011.01.10-up-to-date	19	1	1				
37	Mr. Ann Samoeurn	District Chief/ Extension Staff 15	Battambang, Koas Krala DAO	Extension	2011.01.10-up-to-date	22	1	1				
38	Mr. Yim Sameth	Extension Worker/ Extension Staff 16	Battambang, Koas Krala DAO	Extension	2011.01.10-up-to-date	26	1	1				
39	Mr. Pok Ren	District Chief/ Extension Staff 17	Battambang, Rokhak Kiri DAO	Extension	2011.01.10-up-to-date	26	1	1				
40	Mr. Sath Samban	Extension Worker/ Extension Staff 18	Battambang, Rokhak Kiri DAO	Extension	2011.01.10-up-to-date	24	1	1				
41	Mr. Seang Heng	Manager/ Extension Staff 23	Battambang, KADC	Extension	2011.07.01-up-to-date	24	1	1				
42	Mr. Kvoeu Py	Extension Worker/ Extension Staff 19	Pursat, PS DAO	Extension	2011.01.10-up-to-date	24	1	1			1	
43	Mr. Sum Han	Extension Worker/ Extension Staff 20	Pursat, Baken DAO	Extension	2011.01.10-up-to-date	6	1	1			1	
44	Mr. Sor Sary	District Chief/ Extension Staff 21	Pursat, Baken DAO	Extension	2011.01.10-up-to-date	22	1	1			1	
45	Mr. Oun Chun Lin	District Chief/ Extension Staff 24	Pursat, PS PDA	Extension	2012.11.01-up-to-date	4	1	1			1	追加任命 (Additionally assigned)
46	Mr. Ly Pak	District Chief/ Extension Staff 25	Pursat, PS DAO	Extension	2012.11.01-up-to-date	29	1	1			1	追加任命 (Additionally assigned)
47	Ms. Ty Sour	District Chief/ Extension Staff 26	Pursat, Kandieng DAO	Extension	2012.11.01-up-to-date	29	1	1			1	追加任命 (Additionally assigned)
48	Mr. Yem Oeur	Extension Worker/ Extension Staff 22	Kampong Chhnang, Barbour DAO	Extension	2011.01.10-up-to-date	16	1	1			1	
49	Mr. Chhoeurn Kolyan	Project Assistant	APPP	Extension	2011.01.10-2013.06.10	7	1	1				退職(Quitted)
50	Mr. Tieng Sopheap	Project Assistant	APPP	Extension	2013.08.01-up-to-date	1	1	1				新採用 (New employment)
51	Mr. Phay Piseth	Project Assistant	APPP	Seed Production	2011.01.24-up-to-date	3	1		1			
52	Mr. Chhoeurn Sothea	Project Assistant	APPP	Distribution	2012.04.04-up-to-date	2	1			1	1	

Note: *Each number below listed corresponds to the number of each Expert listed on the ANNEX I.

Allocation of Counterparts (C/P) & Farmers' groups (As of 30 June 2014)

ANNEX 2-B

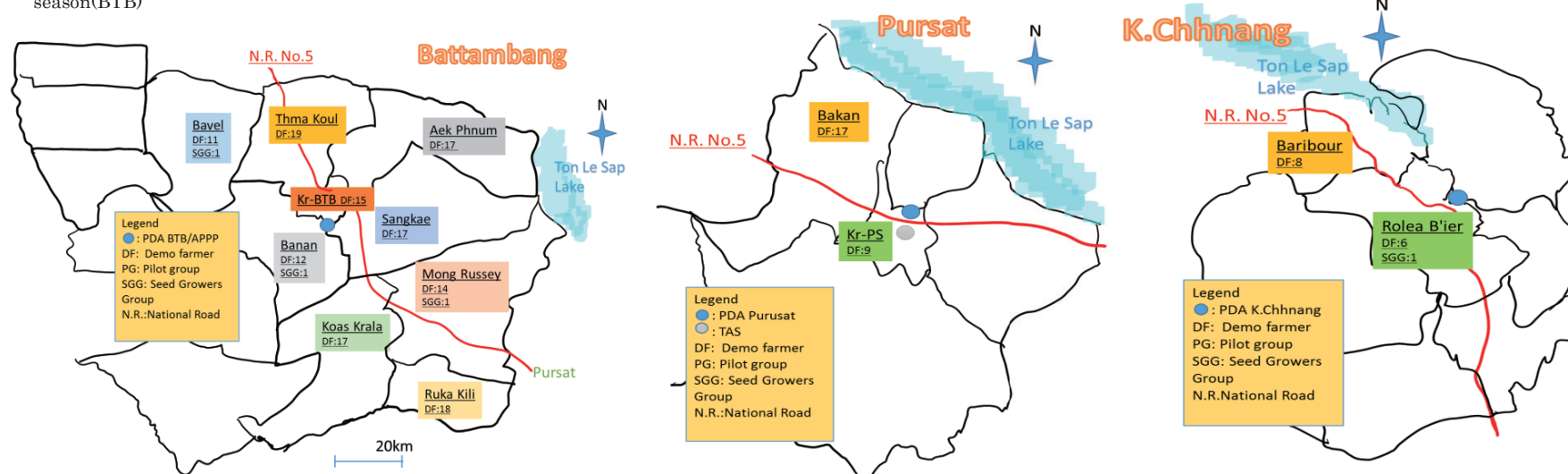
(2)C/P配置実績(年次及び対象地域別)、デモ農家、種子生産グループ、原種生産圃場数及び農民組織数の推移(年次及び対象地域別)

	Battambang				Pursat				Kampong Chhnang				PNP	Total
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	Since 2011	June. 2014
C/P 配置数/ C/P Allocation	5	5	5	5	2	2	2	2	2	2	2	2	1	10
普及員配置数/ Extension Staff Allocation	19	19	19	19	3	3	6	6	1	1	1	1	n.a.	26
デモ農家 (DF) 数/ No. of Demo Farmers(DF)	33	35	34	38	6	7	7	6	2	4	4	4	n.a.	180 ¹⁾
デモサイト数/ No. of demo sites	33	68	68	65	6	13	14	12	2	6	7	8	n.a.	302 ²⁾
パイロット・グループ (PG) 数/ No. of Pilot Groups (PG)	n.a.	1	5	5	n.a.	1	9	9	n.a.	n.a.	1	1	n.a.	15
種子グループ (SGG) 数/ No. of Seed Growers Group (SGG)	3	3	3	3	n.a.	1	1	1	n.a.	1	1	1	n.a.	5

1)対象州で各年時に採用されたデモ農家数(実数)を示す。デモ農家は原則、2年間に2回継続・実施する。1) #of Demo Farmer, one demo farmer continue operation of demo farm for 2years

2)対象州で各年時に設定されたデモサイト数(1年目のデモ農家数+2年目のデモ農家数)となるが、2年目のデモ農家数の減少によりサイト数が減る場合がある

(例: 2014年バタンバン州デモサイト数)。2) #of demo site(1year demo+2nd year demo. # of Demo sites may reduce in case that some 2nd year demo farmers dropped out in the middle of season(BTB))



(4) 機材供与及び携行機材実績/Procured Equipment (As of 30 June 2014)

ANNEX 3

No.	Date	Item	Model/Specification	Make	Unit price	Qty	Sub-total(\$)	User	Installed	Procured	Purpose	Running condition	Date of handover
Handed over items													
1	2011.01.13	Copier (with finisher)	DC-III 2007 P/N: TL200363 (B1 P/N: QC100043)	Fuji Xerox	3,950	1	3,950	APPP	Battambang PDA	Local	Project	Good	2011.01.25
2	2011.01.24	Vehicle - Prado (OI 7417)	Engine No. 5L-6155748; Chassis No. JTEBD9F J2BK002899	Toyota	41,500	1	41,500	APPP	Battambang PDA	Local	Project	Good	2011.01.25
3	2011.01.24	Vehicle - Hilux Vigo (OI7416)	Engine No.2KD 5140069; Chassis No. MROFR22G4B0576085	Toyota	26,000	1	26,000	APPP	Battambang PDA	Local	Project	Good	2011.01.25
4	2011.05.30	Motorbike - Suzuki Viva	FD110CSD	Suzuki	1,500	26	39,000	APPP	Battambang PDA (18), Pursat PDA (5), Kampong Chhnang PDA (3)	Local	Project	Good	2011.05.30
TOTAL 110,450													

Items owned by the JICA side													
1	2011.01.17	Desk-top computer	OptiPlex TM 380DT	Dell	890	1	890	APPP	Project office	Local	Project	Good	n.a.
2	2011.03.03	Air conditioner	Indoor Unit:CS-C12KKH, Outdoor Unit:CU-C12KKH	Panasonic	790	1	790	APPP	Project office	Local	Project	Good	n.a.
3	2011.05.18	Air conditioner	Indoor Unit:CS-C12KKH, Outdoor Unit:CU-C12KKH	Panasonic	878	1	878	APPP	Project office	Local	Project	Good	n.a.
4	2011.07.07	Air conditioner	Indoor Unit:CS-C13MKH, Outdoor Unit:CU-C13MKH	Panasonic	760	1	760	APPP	Project office	Local	Project	Good	n.a.
5	2011.07.07	Air conditioner	Indoor Unit:CS-C13MKH, Outdoor Unit:CU-C13MKH	Panasonic	760	1	760	APPP	Project office	Local	Project	Good	n.a.
6	2011.05.03	Desk-top computer	Dell Vostro 230MT	Dell	635	1	635	APPP	Project office	Local	Project	Good	n.a.
7	2011.01.12	LDC Projector	X1110	Acer	620	1	620	APPP	Project office	Local	Project	Good	n.a.
8	2011.07.15	Power tiller (hand tractor)	RT140 (H.P.14), plough implements, cage wheel, rubber tyre, pump	Siam Kubota	3,140	1	3,140	APPP	TLAS	Local	Project	Good	n.a.
9	2011.07.14	Printer Monochrome Laser	LBP-3500	Canon	885	1	885	APPP	Project office	Local	Project	Good	n.a.
10	2011.11.23	Printing format	Local made printing format for paddy seed backs	n.a.	1,200	1	1,200	APPP	Project office	Local	Project	Good	n.a.
11	2011.05.24	Safety Box	Steel made, dial and key lock	President	295	1	295	APPP	Project office	Local	Project	Good	n.a.
12	2011.05.27	Thresher	Metal frame	Nouth Vatha (local workshop)	3,800	1	3,800	APPP	Bavel SSG	Local	Project	Good	n.a.
13	2011.06.16	Thresher	Metal frame	Nouth Vatha (local workshop)	3,800	1	3,800	APPP	Moung Russei SGG	Local	Project	Good	n.a.
14	2011.09.14	Thresher	Metal frame	Nouth Vatha (local workshop)	3,850	1	3,850	APPP	Moung Russei SGG	Local	Project	Good	n.a.
15	2011.05.27	Winnower	Wood frame	Local workshop	683	1	683	APPP	Bavel SSG	Local	Project	Good	n.a.
16	2011.06.02	Winnower	Wood frame	Local workshop	683	1	683	APPP	Banan SGG	Local	Project	Good	n.a.
17	2011.06.02	Winnower	Wood frame	Local workshop	683	1	683	APPP	Banan SGG	Local	Project	Good	n.a.
18	2012.11.05	Winnower	Wood frame	Voeum Chadeule, Battambang	990	1	990	APPP	Rolea B'ier SGG	Local	Project	Good	n.a.
19	2012.11.05	Winnower	Wood frame	Voeum Chadeule, Battambang	990	1	990	APPP	Pursat PDA (TAS)	Local	Project	Good	n.a.
20	2012.11.12	Thresher	Metal frame	Chheang Rath, Phnom Penh	2,500	1	2,500	APPP	Rolea B'ier SGG	Local	Project	Good	n.a.
21	2012.11.12	Thresher	Metal frame	Chheang Rath, Phnom Penh	2,500	1	2,500	APPP	Pursat PDA (TAS)	Local	Project	Good	n.a.
22	2013.10.16	Printing format	Local made printing format for paddy seed backs	n.a.	550	1	550	APPP	Pursat PDA (TAS)	Local	Project	Good	n.a.
23	2013.10.16	Printing format	Local made printing format for paddy seed backs	n.a.	550	1	550	APPP	Rolea B'ier SGG	Local	Project	Good	n.a.
24	2014.04.09	LCD Projector	Dx140	Sony	715	1	715	APPP	Project office	Local	Project	Good	n.a.
TOTAL 33,147													

(6) カンボジア側の施設等の提供/Offices and facilities offered by MAFF, Cambodia

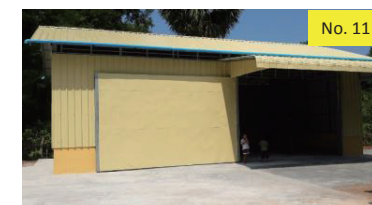
付属機関・施設/Organization・Facilities	主な用途/Major Functions
A. バッタバン州農業局/執務室、資材倉庫等 BTB PDA /Office, Warehouse, etc.,	プロジェクト運営・管理 Project operation & management
B. プルサット州農業局/執務室等 PDA-Pursat/Office, etc.	同上/-do-
C. コンボンチュナン州農業局執務室等 PDA-K.Chhnang /Office, etc.	同上/-do-
D. バッタバン州農業局 PDA-BTB/ Kompinpuai Agriculture Development Center(KADC)	C/P、普及員等指導研修開催、FFS推奨技術実証等 Training for C/Ps and Extension Staff & FFS techniques' demonstrations
E. プルサット州農業局 PDA-Pursat/ Toul Lapov Agricultural Station (TAS)	C/P、普及員等指導研修開催、FFS推奨技術実証及び原種、保証種子生産・配布等 Training for C/Ps & Extension Staff, FFS techniques' demonstrations and quality seed production and distribution



(5)在外事業強化費等を通じた施設整備/Renovation/ Rehabilitation of Infrastructure (As of 30 June 2014)

ANNEX 4

No.	Fiscal Year	Site	Item	Cost	Details
1	JFY2010 Q4	Bavel SGG	Seed warehouse	\$ 3,444.00	Provision of construction materials (Free labour contribution from the SGG.)
2	JFY2011 Q2	Moung Russei SGG	Seed warehouse	\$ 16,050.00	Provision of construction materials, construction supervision fee (Free labour contribution from the SGG.)
3	JFY2011 Q2	Banan SGG	Seed warehouse	\$ 11,020.25	Provision of construction materials, construction supervision fee (Free labour contribution from the SGG.)
4	JFY2011 Q3	Banan SGG	Paddy dry yard	\$ 4,847.50	Provision of construction materials and constructor service fee (Free labour contribution from the SGG.)
5	JFY2011 Q3	Moung Russei SGG	Paddy dry yard	\$ 11,889.00	Provision of construction materials, constructor service fee and land refill cost (Free labour contribution from the SGG.)
6	JFY2012 Q1	Bavel SGG	Paddy dry yard	\$ 7,594.00	Provision of construction materials, constructor service fee and land refill cost (Free labour contribution from the SGG.)
7	JFY2012 Q1	TAS, Pursat PDA	Renovation of storage	\$ 8,828.00	Construction of toilet and installation of rain guard at the TAS, Pursat PDA.
8	JFY2013 Q2	TAS, Pursat PDA	Renovation of warehouse	\$ 3,945.00	Renovation of existing warehouse for the use of Seed Store Facility including renewal of roofing, ceilings, flooring and basement's surrounding.
9	JFY2013 Q2	TAS, Pursat PDA	Renovation of canal passage	\$ 4,782.00	Raising of passage by application of gravel, sand and soil and compaction to function properly as passage and canal bank.
11	JFY2013 Q3	K. Chhnang SGG	Seed warehouse &	\$ 14,943.00	Construction materials and contractor service fee for seed warehouse (30-40 tons of storing capacity) and concrete floor(13m x 10 m) to dry seed
10	JFY2013 Q3	TAS, Pursat PDA	Paddy dry yard	\$ 6,242.00	Construction materials and contractor service fee for concrete floor(30m x 20 m) to dry seed
		TOTAL		\$ 63,672.75	



(7) 日本側ローカルコスト負担事業(在外事業強化費実績)及びカンボジア側投入予算実績

ANNEX 6

Local Cost Shearing (As of 30 June 2014)

A. Budget Execution by JICA

Unit: USD

Item/JFY ¹⁾	2010	2011	2012	2013	2014	Total Amount
Operation cost including renovation of building and procurement of equipment	\$40,085	\$415,147	\$409,748	\$374,282	\$73,411	\$1,312,674
Note	The actual budget execution for the fourth quarter of JFY2010.				Amount of excuted till 30 June, Y2014	This amount does not include the cost of the donated equipment appears on ANNEX 3.

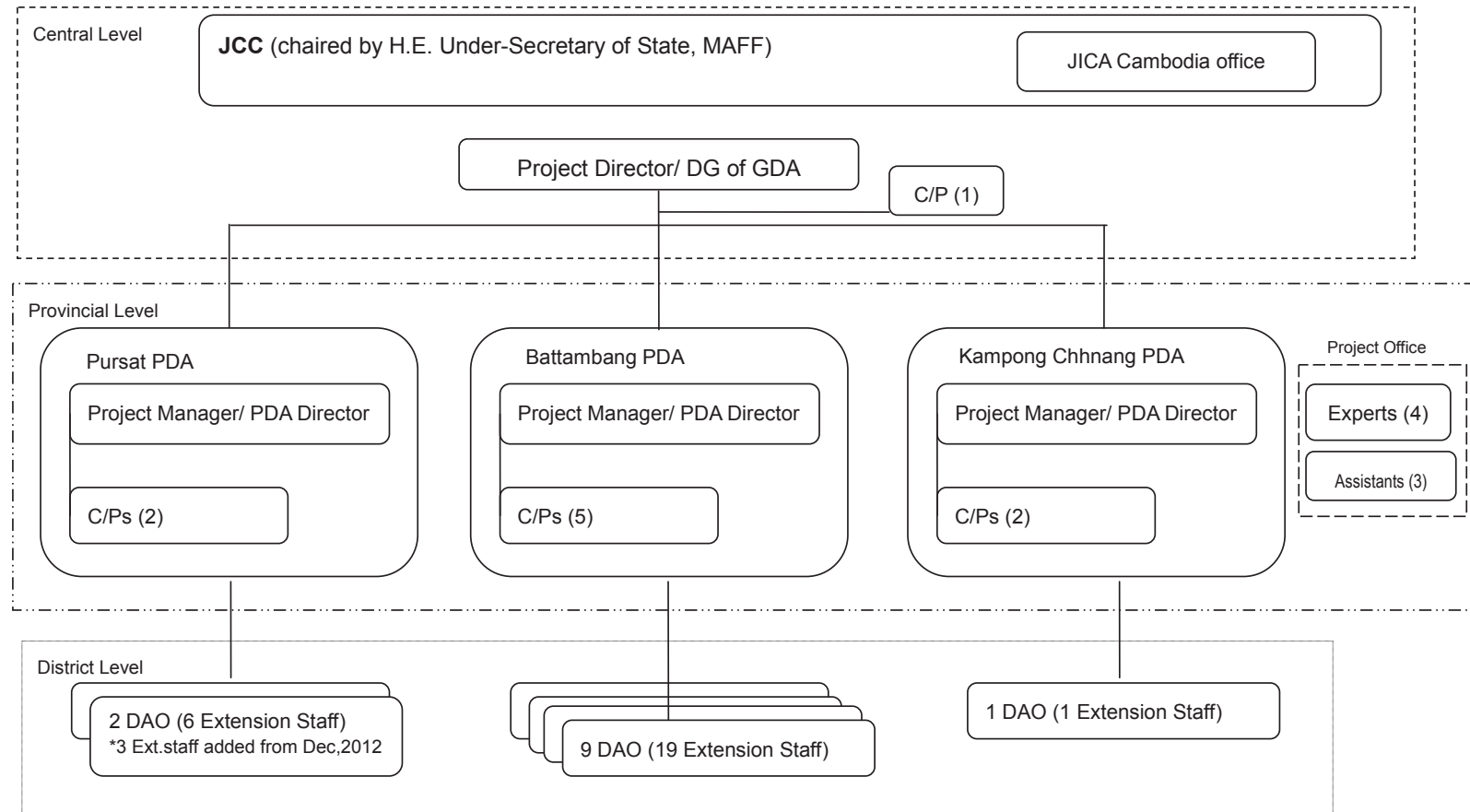
B. Budget Execution by Ministry of Agriculture, Forestry and Fisheries

Unit: USD

Item/CFY ²⁾	2010	2011	2012	2013	2014	Total Amount
Project offices maintenance cost ³⁾ , estimated in terms of electricity bill paid by PDA BTB, PDA-Pursat, and PDA-K.Chhnang		\$12,064	\$12,064	\$12,064	\$6,032	\$36,193
Note	*Seed warehouse for the Bavel SGG	*Cost for KADC, TAS *Registration fee (motorbikes).	*Cost for TAS	*Cost for TAS	*Cost forTAS	

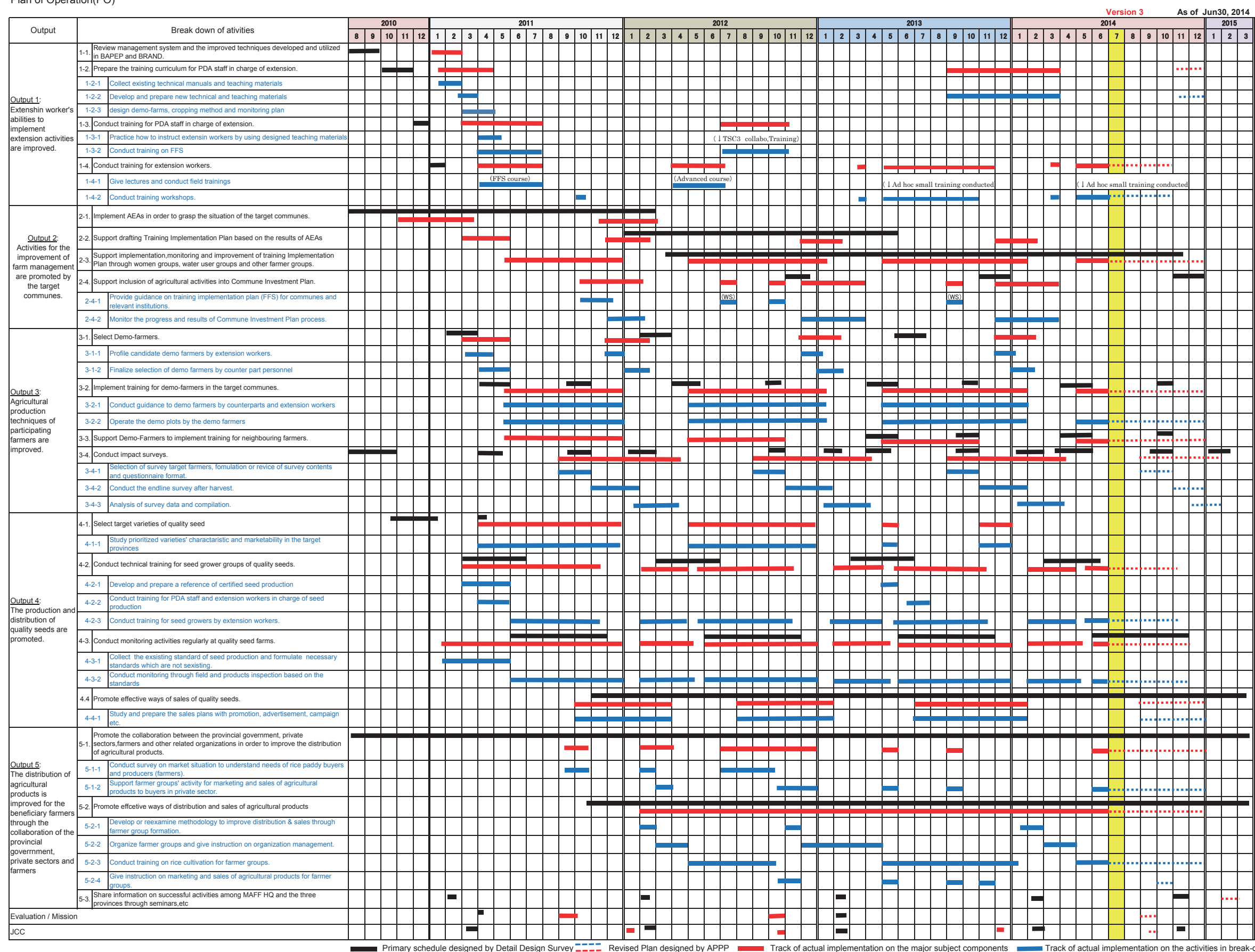
1) Japanease Fisical Year:April-March, 2) Cambidian Fisical Year:January-December, 3) The electricity bill is estimated by the size of the office space allotted for project C/Ps in each PDA; 80% to PDA-BTB, 10% to PDA-Pursat, 10% to PDA-K. Chhnang

プロジェクト実施体制図



9. 詳細実施計画 (PO) (2014 年度改訂版：英文及び和文)

Plan of Operation(PO)



Primary schedule designed by Detail Design Survey Revised Plan designed by APPP Track of actual implementation on the major subject components Track of actual implementation on the activities in break-down

 詳細計画策定調査団による初期計画
 APPPIによる改訂計画
 主要課題にかかる実行済み線
 主要課題下詳細活動計画にかかる実行済み線

活動実績一覧表(2014年6月30日現在)

項目	PDM指標	PDM指標(実績・達成度)	活動内容(PDM活動)	到達目標	進捗状況と実績	達成率*1	活動遅延理由	今後の計画
上位 目標	トンレサップ西部3州の対象地域において農家の生産性及び所得が向上する。	対象地域の農家のインディカ米の単収が2.75トン/ha(2010年時点)から3.00トン/haにまで増加する。						
		対象地域の農家のインディカ米の総生産量(販売価格換算)が増加する。						
プロジェ クト目標	トンレサップ西部3州においてプロジェクト活動に参加した農家の生産性及び所得が向上する。	1. デモ農家のインディカ米の単収が2.75トン/ha(2010年時点)から4.00トン/haにまで増加する。			2011年～2013年、指標に到達する。	3		
		2. 研修に参加した農家のインディカ米の単収が2.75トン/ha(2010年時点)から3.50トン/haにまで増加する。			2011年～2012年、技術の広がりとともに参加農家の平均収量は少しずつ増加し、2013年、指標未到達ながらも目標にわずかのところまで近づいた。	2		
		3. デモ農家のインディカ米の総生産量(販売価格換算)が増加する。			2010年の一般農家数値から比較し、2011年以降は全て総生産量の増加が確認される。	3		
		4. 研修に参加した農家のインディカ米の総生産量(販売価格換算)が増加する。			2010年の一般農家数値から比較し、2011年以降は全て総生産量の増加が確認される。	3		
成果1	普及員の普及実施能力が向上する。	1-1. カウンターパートの支援の下、26名の普及員がデモ農家と参加農家に対して880回以上の研修を実施できる。	1-1. BAPEP、BRANDで構築・利用されてきたマネジメント体制及び現場の技術をレビューする。	1-1-1.Rolling Plan準備 1-1-2.普及計画(FFS Monitoring Matrix)準備	1-1-1. Rolling Plan策定済み →従前プロジェクトより引き継いだ技術や普及手法は大幅に改良・改善を図った(ANNEX17.技術改善事例参照)。 1-1-2. 普及計画2011～2014年作成済み。	4	特記事項無し	完了 概ね完了 今後一部マニュアルの改訂する。
		1-2. 種子生産グループの担当普及員が圃場審査や種子検査技術を身につける。	1-2. 州農業局の普及担当職員及び普及員に対する研修カリキュラムを作成する。	1-2-1.研修計画(Training Outline)準備 1-2-2.技術指導マニュアル準備 1-2-3.普及教材の準備	1-2-1. 研修計画の策定→2011-2012策定済み。 1-2-2. 技術指導マニュアル作成 →2011年:FFS用一般稲作&種子生産技術マニュアル →2013年:技術課題別マニュアル、DSマニュアル、農家カレンダー 1-2-3. 普及教材作成 →2011年～2012年:大型ビニールキャンバス製技術ポスター3種及びA4サイズリーフレット →2014年: ・ビニールキャンバス製技術ポスター1種(1セット15枚)(制作済) ・種子生産ガイドライン(予定) ・農家グループ形成と運営ガイドブック(予定) ・技術課題別マニュアル改訂版、他(予定) (*ANNEX16 成果品参照)	3		

6月30日現在の実績

項目	PDM指標	PDM指標(実績・達成度)	活動内容(PDM活動)	到達目標	進捗状況と実績	達成率*1	活動遅延理由	今後の計画	
		1-3. 普及員による普及サービスに対するデモ農家の満足度が平均80%以上となる。	平均満足度指数 (指標達成度) 2011年:100% (100%) 2012年:100% (100%) 2013年:100% (100%) 2014年:	1-3-1.研修とOJTの実施 1-3-2.モニタリング会合の実施	1-3-1. →2011年:BTB KADCで実施したFF技術コース研修に全C/P(及び全普及員)が参加。 →2012年:PST州TASIにて実施したTSC3連携研修にて、23名の研修員(6州PDA職員+MOWRAM職員)が受講した(指導講師はAPPP C/P4名)。 →2011年~2014年: OJT及びアドホックな研修会、勉強会を実施 1-3-2. →毎月定期的に実施中。	4	2013年11月よりモニタリング会合にプロマネ会合も併合して実施中。	完了	
			1-4. 普及員に対する研修を実施する。	1-4-1.普及員22名への研修実施 1-4-2.モニタリング会合の実施	1-4-1. →2011年、KADCにて普及員23名へFFS技術研修(4か月コース)を実施(アンケート結果、72%が大いに満足)。 →2012年、BTB普及員19名に対し上級研修(4か月コース)を実施(アンケート結果、92%が大いに満足)。 →2011年~2014年: OJT及びアドホックな研修会、勉強会を実施 1-4-2. →月例モニタリング会合は小研修及び勉強会の場としても機能中	4	特記事項無し	月例モニタリング会合等を通じ普及員の能力向上を継続する。	
成果 2	対象コミュニティによる営農改善のための活動が促進される。	2-1. 80%以上の研修実施計画が実行される。	(指標達成度) 2011年:100%* 2012年:100%* 2013年:100% 2014年 *プロジェクト、コミュニティにより合同(コミュニティ投資計画に組込まれた形で実施)	2-1. AEAを実施し対象コミュニティの状況を把握する。	2-1-1. AEA報告書作成 →2011年:36コミュニティのAEA報告書を作成済み(PDAにも1セット36コミュニティ分供与済み)	4	特記事項無し	完了	
				2-2. AEAの結果を踏まえ、研修実施計画の作成を支援する。 ※活動2-2は、活動3-1と同一のもの。	2-2-1. 普及計画の準備・更新 ※活動2-2は、活動3-1と同一のもの。	2-2-1. ※活動3-1の進捗状況と実績を参照。	3	特記事項無し	完了見込み
		2-2. 対象コミュニティの半数以上において、コミュニティ投資計画に農業関連活動が含まれる。		2-3. 女性グループ、水利グループ、その他農民組織を通し研修実施計画の実施・モニタリング・改善を支援する。 ※活動2-3は、活動3-2、3-3と同一のもの。	2-3-1. FFS(セッション1~4)の実施・モニタリング・改善 ※活動2-3は、活動3-2、3-3と同一のもの。	2-3-1. ※活動3-2、3-3の進捗状況と実績を参照。	3	特記事項無し	完了見込み
				(CIP計画コミュニティ数(指標達成度) 2012年CIP:30コミュニティ(100%) *2011年に作業 2013年CIP:27コミュニティ(100%) *2012年に作業 2014年CIP:26コミュニティ(100%) *2013年に作業	2-4. 農業関連活動のコミュニティ開発計画へ組込みを支援する。	2-4-1. 19以上のコミュニティによる研修計画のCIPへの組み込み	2-4-1. 対象郡およびコミュニティに対するFFS(研修計画)とCIPに関する説明会を完了。 →2011年:6郡(21コミュニティ)のCIP会議で説明(2012年向けCIP) →2012年:9郡(30コミュニティ)に対しワークショップ開催(2013年向けCIP)	4	計画通り推移
		成果 3	参加農家の農業生産技術が改善される。	3-1. 研修参加農家のうち半数以上が研修活動において示される農業生産技術のうち少なくとも1種類を利用できる。	(採用技術数/人& 指標達成度) 2011年: 平均2.5技術/人(100%) 2012年: 平均7技術/人(100%) 2013年: 平均5技術/人(100%) 2014年: 2013年の技術別採用率 圃場均平化 82% 苗床作り 25% 種子選別 62% 種子消毒 52% 3週間苗移植 31% 条植え(2-3本苗)24% 施肥技術 82% 異品種除去46% 除草82% *2013年 End line survey 結果より。	3-1. デモ農家を決定する。	3-1-1. 普及計画の準備・更新 3-1-2.サイト・マップ準備・更新 3-1-3. 176デモ農家設置計画(2014年まで) 2011年41サイト 2012年45サイト 2013年45サイト 2014年45サイト	4	計画以上実施
3-2. 対象コミュニティのデモ農家に対して研修を実施する。	3-2-1. 農民圃場学校(FFS+FFD)1,535回 3-2-2. 参加農家延人数30,700人					農民圃場学校(FFS)実績 3-2-1. 一般農家研修回数(PG,SGGでのFFS含み合計数) 2011年:一般249回 (265回) 2012年:一般504回 (537回) 2013年:一般403回 (501回) 2014年:一般38回 (60回) (6月末) 合計1,194回(1,363回) (*2014年末累計予測:約1,750回)	3 3	干ばつと洪水被害の発生: →2011年:洪水(BTB, PST) →2012年:干ばつ(BTB, PST,KOC) →2013年:洪水(BTB)	完了見込み 完了見込み
	3-3. デモ農家が周辺農家に対し実施する研修を支援する。					3-2-2. 参加者延人数(PG,SGGでのFFS含み合計数) 2011年:4,018人 (4,295人) 2012年:7,556人 (7,999人) 2013年:6,270人 (7,575人) 2014年: 665人 (310人) (6月末) 合計17,844人(20,179人) (ANNEX11参照) (*2014年末累計予測:約27,500人)			
								2/3	

項目	PDM指標	PDM指標(実績・達成度)	活動内容(PDM活動)	到達目標	進捗状況と実績	達成率*1	活動遅延理由	今後の計画
			3-4. インバクト調査を実施する。	3-4-1. 年次報告書(Annual Report)作成	3-4-1. →2011年ー2013年End-Line 調査実施済み。同調査データ分析により Annual Report を作成・提出(→カ国MAFF & JICA))	3	計画通り推移	完了見込み
成果4	優良種子の生産・配布が促進される。	4-1. 保証種子が2014年までに年間100トン以上生産されるようになる。 2011年: 94.0 ton(94.0%) 2012年: 81.7 ton(81.7%) 2013年: 110.8 ton(100%) 2014年:	4-1. 優良種子の対象品種を選定する。	4-1-1. 優良種子生産対象の品種(早生種、中生種、晩生種)が選定される。	4-1-1. MAFF奨励10品種内から優良種子生産品種を選定。 →以下がプロジェクト活動枠の中でSGGが生産した品種。 早生種: IR 66, Chulsa 中生種: Phka Rumduol 晩生種: Rieng Chey, CAR 4, CAR 6	4	特記事項無し	完了
		4-2. 優良原種が2014年までに年間1トン以上生産されるようになる。 (生産量&指標達成率) 2011年: 3.3 ton (100%) 2012年: 3.3 ton (100%) 2013年: 4.4 ton (100%) 2014年:	4-2. 優良種子の生産グループに対し技術研修を行う。	4-2-1. 作期当たり以下の研修を行う: ①圃場検査・調整・出荷・販売など種子生産の全般に関わる研修。 ②種子準備、移植、追肥など栽培技術のための研修。(FFS)	4-2-1. ①2011年、2012年計画通り実施済み。 ②2011年-2013年まで計画通りFFSを実施済み。2014年は現在実施中。	3	計画通り推移	完了見込み
		4-3 優良種子を利用する農家が1,000名以上となる。 (農家数&指標達成率) 2011年: 41 戸 2012年: 867戸~944戸(86.7%以上) 2013年: 634戸~694戸(100%) 2014年: (見込み)746戸~831戸(100%) 2013までの累積: 1623 戸 ~1773戸 (*直播+移植合計推計値: 積算根拠は活動実績参考資料ANNEX19B参照)	4-3. 優良種子圃場のモニタリングを定期的に実施する。	4-3-1種子生産圃場のモニタリング。 4-3-2. 種子生産圃場基準(暫定)、生産物基準(暫定)を策定する。 4-3-3. 種子生産圃場基準(暫定)及び、生産物基準(暫定)に沿った検査の実施。	4-3-1. →2011年から継続的に普及員&グループリーダーがC/P支援の下検査・モニタリング票に基づき実施中。 4-3-2. →種子生産圃場基準(PJ基準)、生産物基準(PJ基準)を策定済み。 4-3-3. →種子生産圃場基準(PJ基準)及び、生産物基準(PJ基準)に沿った検査の実施(中)。	4	計画通り推移	基準策定は完了 基準の施行は2014年作付け期間中ongoing。
			4-4. 効果的な方法による優良種子の販売を支援する。	4-4-1. 販売促進活動の実施	4-4-1. →2011年ー2012年: 販売促進活動(チラシ配布、ポスター掲示、精米所や小売店への売り込みなど)を実施。SGG生産保証種子の名称決定(Samaki Seed)。 →2013年: BTB 3SGGでの契約栽培の促進と50トン生産・販売契約成立。ラジオ広報番組の制作と放送実施(ANNEX21参照)。	3	特記事項無し	メディア媒体を更に活用した生産物販売広報活動の実施(PJ最終年活動)。 完了見込み。
成果5	州政府、民間セクター、農家等の協働により、受益農家のインディカ米の流通が改善される。	5-1. 優良種子を利用して生産されたインディカ米の市場流通量の合計が2014年までに年間2,000トン以上になる。 (生産量& 指標達成率) 2011年: 2,413 ton(100%) 2012年: 1712 ton(86%) 2013年: 3,010 ton(100%) 2014年: (*ANNEX19C 積算根拠参照)	5-1. 農産物の流通改善のため、州政府・民間セクター・農家及びその他の関係機関の協働を支援する。	5-1-1. 現状把握調査の実施 5-1-2. 農家グループと精米業者、中間業者間の関係構築促進	5-1-1. →2011年-2012年: コモ流通調査実施。 5-1-2. →2013年: PGIによる精米業者訪問(6か所*)実施。 (*BTB3か所、PST2か所、KOC1か所) →2013年: SGGによる契約栽培に係る業者との会合実施。	3	n.a	完了見込み
		5-2. 対象3州において18以上の農家グループが農業資材の共同購入、プロジェクトのより導入された統一的な技術によるインディカ米生産、価格情報の共有、共同出荷もしくは共同販売などの共同作業を行う。 2011年: 3グループ (BTB州内3SGGs) 2012年: 6グループ (BTB州内3SGGs) (2PG(BTB州 1&PSAT州1) (KOC州内1preSGG) 2013年: 19グループ (4SGGs: BTB州3、KOC州1) (15PG: BTB州5、PST州9、KOC州1) 2014年: 19グループ (4SGGs: BTB州3、KOC州1) (15PG: BTB州5、PST州9、KOC州1)	5-2. 効果的な方法による農産物の流通・販売を支援する。	5-2-1. グループ化の手法を策定 5-2-2. グループ化推進(18グループ) 5-2-3. グループ化された農家による共同作業の促進。	5-2-1. グループ・ファンド・メカニズムを策定・導入した。 5-2-2. グループ化推進(設置実績) →2011年: BTB州3SGG →2012年: KOC州1SGG、BTB & PST州 計2 PG →2013年: BTB州4PG、PSAT州8PG、KOC州1PG 合計: 19グループ(内訳4SGG、15PG) 5-2-3. 共同作業の促進 →2011年: 3SGGで資材共同購入・生産物共同販売を実施。 →2012年~2013年: 4SGGで共同購入・共同販売を実施。 →2012年: 2PGにて資材共同購入・生産物共同販売を実施。 →2013年: 4SGG及び15PGにて資材共同購入、生産物共同販売(一部PGのみ))を実施。	3	(特記事項) 粳米販売市場傾向の変異(乾燥粳→湿粳)が急速に拡大しつつあるため、共同出荷/販売促進というPDM上の計画が成立しなくなりつつある。	メディア媒体を更に活用した生産物販売広報活動の実施(PJ最終年活動)。 完了見込み。
			5-3. 効果的な取り組みについて農林水産省本省及び3州の間でセミナー等により情報共有を行う。	5-3-1.	5-3-1. →2012年コミュニケーションワークショップ(成果2関連)にて各種PJ活動情報・技術情報を配布。 →2013年コミュニケーション支援機関・団体ワークショップ(成果2関連)にて各種PJ情報、技術情報を配布。	3	計画通り推移	2015年2月ないし3月に終了時セミナー実施予定 完了見込み。

注釈: 4.完了, 3.ほぼ完了(or完了見込み)、2.一部課題を残す、1.活動せず

2011年―2014年活動実績データ内訳（データ出典:2011-2014 End-Line Survey,他）

2014.6月30現在

成果指標 & 課題	農家カテゴリー	Battambang 州				4シーズン合計	Kampong Chhnang 州				4シーズン合計	Pursat 州				4シーズン合計	各年合計 (or平均)				総算 (各年:合計)				
		2011年	2012年	2013年	2014年		2011年	2012年	2013年	2014年		2011年	2012年	2013年	2014年		(FFS2011)	(FFS2012)	(FFS2013)	(FFS2014)					
FFS研修回数	デモ農家拠点FFS	209	409	298		農家別 小計	916	10	30	35		農家別 小計	75	30	65	70		農家別 小計	165	249	504	403	0	1,156	
	パイロット・グループ	PG未設置	5	25			30	PG未設置	PG未設置	5			5	PG未設置	5	45			50	-	10	75	0	85	
	種子 (SGG)	16	18	18			52	SGG未設置	5	5			10	SGG未設置	SGG未設置	SGG未設置			0	16	23	23	0	62	
	小計	225	432	341	0	総計	998	10	35	45	0	総計	90	30	70	115	0	総計	215	265	537	501	0	1,303	
FFS参加農家数 (累計) *W=Wet Season *D= Dry season	デモ農家	一般参加者数を含む				農家別 小計	一般参加者数を含む				農家別 小計	一般参加者数を含む				農家別 小計	一般参加者数を含む				0				
	一般FFS参加農家 (内訳)	3,085	5,597	4,403			13,085	251	699	604			1,554	682	1,260		1,263		3,205	4,018	7,556	6,270	0	17,844	
	パイロット・グループ	PG未設置	50	314			364	PG未設置	PG未設置	76			76	PG未設置	113		628		741	0	163	1,018	0	1,181	
	種子 (SGG)	277	230	197			704	SGG未設置	50	90			140	SGG未設置	SGG未設置		SGG未設置		0	277	280	287	0	844	
	小計	3,362	5,877	4,914	0	総計	14,153	251	749	770	0	総計	1,770	682	1,373	1,891	0	総計	3,946	4,295	7,999	7,575	0	18,869	
収 量 (ton/ha)	デモ農家	4.1	4.4	4.2		農家別 平均	4.2	4.4	4.2	4.9		農家別 平均	4.5	4.8	3.2	4.9		農家別 平均	4.3	4.5	4.3	4.4	0.0		
	一般FFS参加農家	2.6	2.7	3.2			2.8	2.8	3.0	3.9			3.2	3.0	2.4	3.5			3.0	2.7	2.9	3.3	0.0		
	パイロット・グループ	PG未設置	3.4	2.8			3.1	PG未設置	PG未設置	2.8			2.8	PG未設置	2.3	3.7			3.0	-	2.6	3.3	0.0		
収益 (US\$/ha (Net Income/ha))	デモ農家	\$628	\$850	\$605		農家別 平均	\$694	\$918	\$843	\$1,052		農家別 平均	\$938	\$724	\$567	\$1,024		農家別 平均	\$772	\$903	\$782	\$720	\$0		
	一般FFS参加農家	未調査	\$572	\$489			\$531	未調査	\$637	\$658			\$648	未調査	\$538	\$549			\$544	\$633	\$447	\$588	\$0		
	パイロット・グループ	PG未設置	\$569	\$522			\$546	PG未設置	PG未設置	\$384			\$384	PG未設置	\$408	\$656			\$532	-	\$513	\$601	\$0		
一つ以上の技術 採用度 (%)	デモ農家	100%	100%	100%		農家別 平均	100%	100%	100%	100%		農家別 平均	100%	100%	100%	100%		農家別 平均	100%	100%	100%	100%	0%		
	一般FFS参加農家	未調査	100%	100%			100%	未調査	100%	100%			100%	未調査	100%	100%			100%	-	100%	100%	0%		
	パイロット・グループ	PG未設置	100%	100%			100%	PG未設置	PG未設置	100%			100%	PG未設置	100%	100%			100%	-	#VALUE!	100%	0%		
研修満足度 (%) (満足以上の人数比)	デモ農家	100%	100%	100%		農家別 平均	100%	100%	100%	100%		農家別 平均	100%	100%	100%	100%		農家別 平均	100.0%	100%	100%	100%	0%		
	一般FFS参加農家	未調査	100%	100%			100%	未調査	100%	100%			100%	未調査	100%	100%			100.0%	-	100%	100%	0%		
	パイロット・グループ	PG未設置	100%	93%			97%	PG未設置	PG未設置	100%			100%	PG未設置	100%	100%			100.0%	-	100%	98%	0%		
保証種子生産量 (ton/year)	4 SGG+TAS	94	73	89.6		小計	256.6	0	5.5	12.8		小計	18.3	0	3.2	8.4		小計	11.6	94.0トン	81.7トン	110.8トン	0		
原種生産量 (ton/year)	4 SGG+TAS	3.3	1.6	3.5		小計	8.4	0	1.1	0		小計	1.1	0	0.6	0.9		小計	1.5	3.3トン	3.3トン	4.4トン	0		
インディカ米総生産量 (販売額換算)	(前提定義:2012年運営指導調査団との協議より) 農家の収入改善状況については、個々の農家により生産品目、生産量、販売量、自家消費量等が異なり、また一般に家計簿を記帳する習慣もないため、 稲作だけからの純収入の追跡調査は困難であることから、指標として総生産量を市場販売価格に換算し同額をもって収入増減の指標とすることとした。										ANNEX 13 A (核算根拠&内訳)参照					デモ農家→		\$2,086	\$2,271	\$2,191	\$0	(2010基準値) ←\$1,207			
																研修参加農家→		\$1,364	\$1,340	\$1,592	\$0	(2010基準値) ←\$1,207			
優良種子利用農家数 (1000名以上)	(前提) *1. SGGによる優良種子生産量から積算 *2. 種子使用量条件(移植/直播)考慮				ANNEX 13B (核算根拠&内訳)参照																41名	944~867名	694~634名	831~746名	(2011-14) 合計 2,571~2,339名
優良種子からの 生産物市場流通量 (年間2,000トン以上)	(前提) *1. SGGによる優良種子生産量から積算 *2. 種子使用量条件(移植/直播)考慮				ANNEX 13C (核算根拠&内訳)参照																-	2,413トン	2,034トン	3,010トン	
インバクト事例	ANNEX18 (インバクト事例)参照																								
連携協力	TSC3プロジェクト	終了時評価調査用プロジェクト事前資料の2-6参照																							
	BOP民間連携調査団	JC グループの現地社員2名(カンボジア人)が2013年一般FFS研修(バタンバン州バナン地区)に参加。更に同地区のSGGでの種子生産研修にも参加。(事前資料の2-6-2参照)																							
	他ドナー、NGO等	USAID HARVEST、GIZ、IVY(NGO)、他 (事前資料の2-7、2-8参照)																							

項 目	農家カテゴリー	Battambang					K.Chhnang					Pursat					3州合計							
		2011年	2012年	2013年	2014年	4シーズン合計	2011年	2012年	2013年	2014年	4シーズン合計	2011年	2012年	2013年	2014年	4シーズン合計	2011年	2012年	2013年	2014年	4シーズン合計			
優良農家表彰数 (ANNEX20 参照)	デモ農家	0	18	23		農家別 小計	41	0	1	2		3	0	3	7	農家別 小計	10	0	22	32	0	54		
	一般FFS参加農家	0	0	177			177	0	0	49		49	0	0	100			100	0	0	326	0	326	
	パイロット・グループ	0	0	12			12	0	0	3		3	0	0	33			33	0	0	48	0	48	
	合計	0	18	212	0		BTB 合計	230	0	1	54	0	KC 合計	55	0		3	140	0	PST 合計	143	0	22	406

指標3&4 デモ農家及びFFS参加農家の総生産額 積算根拠&内訳

PDM指標3：デモ農家のインディカ米の総生産量（販売価格換算）が増加する。

年	計算根拠	総生産額/戸
2010	(プロジェクト対象地域一般農家): 2.34トン/ヘクタール(*1全農地平均収量)×2.3ヘクタール(*2平均耕作面積)×897リエル/キロ(*3平均販売価格)÷4000リエル/＄=＄1,207/戸	(＄1,207/戸)
2011	デモ農家：3.93 トン/ヘクタール（全農地平均収量）×1.8ヘクタール（平均耕作面積）×1180 リエル/キロ（平均販売価格）÷4000リエル/＄=＄2,086/戸	＄2,086/戸
2012	デモ農家：3.32 トン/ヘクタール（所有全農地平均収量）×2.4ヘクタール（平均耕作面積）×1140 リエル/キロ（平均販売価格）÷4000リエル/＄=＄2,271/戸	＄2,271/戸
2013	デモ農家：3.48 トン/ヘクタール（所有全農地平均収量）×2.57ヘクタール（平均耕作面積）×969 リエル/キロ（平均販売価格）÷4000リエル/＄=＄2,191/戸	＄2,191/戸
2014		

PDM指標4：研修に参加した農家のインディカ米の総生産量（販売価格換算）が増加する。

年	計算根拠	総生産額/戸
2010	(プロジェクト対象地域一般農家): 2.34トン/ヘクタール(*1全農地平均収量)×2.3ヘクタール(*2平均耕作面積)×897リエル/キロ(*3平均販売価格)÷4000リエル/＄=＄1,207/戸	(＄1,207/戸)
2011	参加農家：2.72 トン/ヘクタール（平均収量）×1.7ヘクタール（平均保有面積）×1180 リエル/キロ（平均販売価格）÷4000リエル/＄=＄1,364/戸	＄1,364/戸
2012	参加農家：2.90 トン/ヘクタール（平均収量）×2.1ヘクタール（平均保有面積）×880 リエル/キロ（平均販売価格）÷4000リエル/＄=＄1,340/戸	＄1,340/戸
2013	参加農家：3.30 トン/ヘクタール（所有全農地平均収量）×2.0ヘクタール（平均保有面積）×965リエル/キロ（平均販売価格）÷4000リエル/＄=＄1,592/戸	＄1,592/戸
2014		

*1:2011年PDA統計

*2:2008年NCDD統計

注)2010年以外の数値元データは各年のプロジェクト終了時調査による。

指標4-3 優良種子利用農家数実績

PDM指標4-3: 優良種子を利用する農家が1000名以上となる。

年	計算根拠	農家数合計
2011	設置数41戸のデモ農家が優良種子を使用(種子はCARDIから調達)。	41
2012	<p>2011年SGG生産の優良種子利用農家数: デモ農家85戸、既設2PGメンバー33戸及び同候補農家442戸(小計560戸)</p> <p>「市場流通量からの推計値」: 2011年のSGGによる生産量93.9トンからプロジェクト使用量+緊急時配布分以外の市場に出回った約83トン分を、慣行直播栽培に換算(播種量120キロ/ヘクタール～150キロ/ヘクタール)した場合、利用農家数は384～307戸分(*所有水田面積3州平均1.8ヘクタール/戸: 2012 PDA統計)となり、デモ農家等合わせた総計は944戸～867戸*となる。 (*384～310戸分: →83トン÷120キロ(直播)÷1.8ヘクタール/戸=384戸, 83トン÷150キロ(直播)÷1.8ヘクタール/戸=307戸)</p> <p>(*実態としては直播の1/3以下の種子量で済む移植栽培も行われていること、更にプロジェクトでは直播の場合の適正種子量は80キロ/ヘクタールと指導中)から、実際の農家数はこれ以上の戸数となる)</p>	867～944
2013	<p>2012年SGG生産の優良種子利用農家数: デモ農家88戸、既設13PGメンバー194戸及び旧同候補農家84戸、自主設立グループ25戸(小計391戸)</p> <p>「市場流通量からの推計値」: 2012年SGGの種子生産量78.9トンからプロジェクト使用量(前述の424戸分+緊急時配布分合計13.3トン)以外の市場に出回った約65.6トン分については、推計値として、慣行農法による全量直播(播種量120キロ/ヘクタール～150キロ/ヘクタール)として換算した場合303戸～243戸分*となり、2013年はプロジェクト使用量と市場流通量合わせて694戸～634戸が優良種子を使用したことになる。 (*303～243戸分:→ 65.6トン÷120キロ(直播)÷1.8ヘクタール/戸=303戸, 65.6トン÷150キロ(直播)÷1.8ヘクタール/戸=243戸)</p>	634～694
2014	<p>2013年SGG生産の優良種子利用農家数: デモ農家85戸、2013年度表彰農家230戸、既設7PGメンバー91戸(SGGより自主購入68+PJ支給23)(小計406戸)</p> <p>「市場流通量からの推計値」: 2013年SGGの種子生産量110.8トンからプロジェクト使用量(前述の406戸分+緊急時配布分合計18.9トン)以外の市場に出回った約91.9トン分については、推計値として、慣行農法による全量直播(播種量120キロ/ヘクタール～150キロ/ヘクタール)として換算した場合425戸～340戸分となり、2013年はプロジェクト使用量と市場流通量合わせて831戸～746戸が優良種子を使用したことになる。 (*425～345戸分:→ 91.9トン÷120キロ(直播)÷1.8ヘクタール/戸=425戸, 91.9トン÷150キロ(直播)÷1.8ヘクタール/戸=340戸)</p>	746～831
総計		2,339～2,571

A-2

指標5-1 優良種子からの生産物流通量

PDM指標5-1: 優良種子を利用して生産されたインディカ米の市場流通量の合計が2014年までに年間2,000トン以上になる。

年	計算内訳	年間流通量(トン)
2012	<p>(2012年流通量)</p> <p>2012年作付け用保証種子利用量93.9トン(=2011年SGGでの生産量)からのインディカ米(食用米)総生産量は*3,005トンと推計され生産農家自家消費分*592トンを差し引くと2012年は2,413トンが市場に出たと推計される(2012年指標達成度100%)</p> <p>(積算根拠)</p> <p>●移植方式の場合: 種子総生産量93.9トン÷50キロ/ヘクタール(PJ基準播種量+10キロ)=1,878ヘクタール(作付け可能面積)</p> <p>直播方式の場合: 種子総生産量93.9トン÷120キロ/ヘクタール(慣行平均播種量)=783ヘクタール(作付け可能面積)</p> <p>●3州全体で移植方式3割、直播方式7割(*注1)の栽培実態と想定した場合、{(1.878ヘクタール×0.3)×3.0トン/ヘクタール(*注2)+{(783ヘクタール×0.7)×2.4トン/ヘクタール(*注3)}=3,005トンとなる。</p> <p>●自家消費分: 740農家[(1.878ヘクタール×0.3)+(783ヘクタール×0.7)÷平均1.5ヘクタール/戸]×572キロ/年{(消費量143キロ/人/年(*注4)×平均4人/家族(*注4))×1.4(注5)=約592トン</p>	2,413
2013	<p>(2013年流通量)</p> <p>2013年作付け用保証種子利用量78.9トン(=2012年SGG+TASでの生産量)からのインディカ米(食用米)総生産量は*2,523トンと推計され生産農家自家消費分*489トンを差し引くと2013年は1,712トンが市場に出たと推計される(2013年指標達成度86%)。成果指標未達成の要因は2012年の優良種子生産量がかなり落ち込んだためで、必然的にそこからのインディカ米の生産量も市場流通量も下がることとなった。</p> <p>(積算根拠)</p> <p>●移植方式の場合: 種子総生産量: 78.9トン÷50キロ/ヘクタール(PJ播種基準+10キロ)=1,578ヘクタール(作付け可能面積)</p> <p>直播方式の場合: 種子総生産量: 78.9トン÷120キロ/ヘクタール(慣行平均播種量)=657ヘクタール(作付け可能面積)</p> <p>●3州全体で移植方式3割、直播方式7割(注1)の栽培実態と仮定した場合、{(1.578ヘクタール×0.3)×3.0トン/ヘクタール(注2)}+{(657ヘクタール×0.7)}×2.4トン/ヘクタール(注3)=2,523トンとなる。</p> <p>●自家消費分: 622農家[(1.578ヘクタール×0.3)+(657ヘクタール×0.7)÷平均1.5ヘクタール/戸]×572キロ/年{(消費量143キロ/人/年(注4)×平均4人/家族(注4))×1.4(注5)=約489トン</p>	1,712
2014	<p>(2014年流通量見込み)</p> <p>2013年作付け用保証種子利用量110.8トン(=2013年SGGでの生産量)からのインディカ米(食用米)総生産量は*3,610トンと推計され、生産農家自家消費分*600トンを差し引くと3,010年はトンが市場に出る見込みと推計される。</p> <p>(積算根拠)</p> <p>●移植方式の場合: 種子総生産量: 110.8.トン÷50キロ/ヘクタール(PJ播種基準+10キロ)=2,216ヘクタール(作付け可能面積)</p> <p>直播方式の場合: 種子総生産量: 110.8トン÷120キロ/ヘクタール(慣行平均播種量)=923ヘクタール(作付け可能面積)</p> <p>●3州全体で移植方式3割、直播方式7割(注1)の栽培実態と仮定した場合、{(2,216ヘクタール×0.3)×3.0トン/ヘクタール(注2)}+{(923ヘクタール×0.7)}×2.5トン/ヘクタール(注3)=3,610トンとなる。</p> <p>●自家消費分: 749農家[(2,216ヘクタール×0.3)+(923ヘクタール×0.7)÷平均1.5ヘクタール/戸]×572キロ/年{(消費量143キロ/人/年(注4)×平均4人/家族(注4))×1.4(注5)=約600トン</p>	3,010

(*注1) 移植・直播比率: 公的統計データは存在しないためC/P聞き取りによる推測値

(*注2) 2012プロジェクト調査統計

(*注3) 対象地域平均単収 (*2012-2013MAFF統計)

(*注4) 2011MAFF統計

(*注5) インディカ米初米換算率 (MAFF統計)

(9)研修実績及び研修の評価/ Major Training Courses and Workshops

Training Title	Duration & Venue	Trainers & Advisors	Participants	Training Contents	Evaluation & Effect
TRAINING COURSE ON RICE CULTIVATION TECHNIQUES FOR C/PS & EXTENSION WORKERS IN 2011	Training 1: 3 days: 6-8 April Training 2: 2 days: 28 and 29 April Training 3: 2 days: 26 and 27 May Training 4: 2 days: 16 and 17 June (Venue: PDA-BTB and/or KADC ¹)	*Three (3) experienced C/Ps at PDA-BTB as trainer (un-experienced 6C/Ps as learners) *Experts as advisor	*22 extension workers	•10 rice varieties •Seed treatment •Nursery & Land Preparation •Line-transplanting •Dapog Seedling nursery method •Weeding & fertilization •Growth survey method	The extension workers who are to become instructors for FFS demo sites, were first of all trained on the FFS-techniques. 72% tainees were fully satisfied the contents of training(by questionnaire survey 2011).
Training for extension staff on seed production techniques	May-July 2011 (intermittently conducted)	*C/P in charge of seed as trainer *Expert as advisor	*3 extension workers in charge of SGGs in BTB	•Seed production techniques and quality standard •Rice varieties •Growth Testing method	The extension staff in charge of seed production were trained to initiate technical support to the SGGs in BTB.
ADVANCED TRAINING COURSE FOR EXTENSION WORKERS IN 2012	April-July, 2012 (Venue: PDA-BTB and /or KADC)	*Main initiative taken by C/Ps and extension workers *Experts as advisor	* 19 extension workers at PDA-BTB	•Comparative study for transplanting and direct sowing methods •Obtain experiment results on fertilization and planting density •Analysis and discussion on the result of experiment	The advance course was well organized and attended by C/Ps and extension workers. It further upgraded practical knowledge and abilities of APPP personnel. 92% tainees were fully satisfied the contents of training(by questionnaire survey 2012).
Training on Rice Cultivation Method through Farmers' Field School (FFS) in 2012 (Collaboration with TSC3 project)	Session 1: 3 days, 11-13 July Session 2: 3 days, 1-3 August Session 3: 3 days, 4-6 September Session 4: 2 days, 1-2 October Session 5: 3 days, 22-24 October (Venue: PDA-Pursat and TAS ²)	*Four(4) APPP C/Ps as trainer, *Experts as advisor	*TSC3'sC/Ps & Pursat extension workers, total 26 participants	•10 rice varieties •Seed treatment •Nursery & Land Preparation •Dapog Seedling nursery method •Line-transplanting •Weeding & fertilization •Others	In collaboration with TSC3 ³ project, APPP's 4 C/Ps acted as trainers for training of 12PDA Officials from 6 provinces to be familiarized with FFS-techniques.
Workshop on Rice Cultivation Training through Farmers' Field School and Commune Investment Program in 2012	20 July 2012 (Venue: PDA-BTB)	*C/Ps (PDA-BTB) as lectures *Experts as advisors	*Commune council members (30), district council members (9), provincial staff (1) (Battambang Province)	1) Introduction of APPP's FFS rice cultivation technologies ; 2)Budgeting of FFS; 3) Issues to sustainable agriculture and aspects to include in Commune Investment Program (CIP).	Target commune council members were familiarized with APPP's FFS training programs.
Workshop for Better Agricultural Service for Rice Farmers	26-27 September 2013		*90 participants in all: international donors, local NGOs, PDA/BTB, C/Ps and extension workers	1)Presentations; 2)APP's site visit; 3)FFS demonstration; 4)Panel discussions.	International donors and local NGOs shared their experience in rendering agricultural services for rice cultivation farmers.
Monthly Monitoring Meetings, being used as training opportunities	Held once a month regularly since 2011 to date. 31times of the meetings were held as of 30 June 2014.	*C/Ps, Experts	*10C/Ps, 26 extension workers, 4 Experts and 3 PJ staff	1)FFS monitoring system; 2)FFS techniques-related topics; 3)Seed production-related topics; 4)Farmer group management-related topics.	The meetings being used as opportunities of various trainings and study sessions, continuously upgraded skills and abilities of the extension workers and even C/Ps

1)KADC:Koming Puoy Agricultural Development Center, 2)TAS:Toul Lapov Agricultural Station,

3)TSC3:The Improvement of Agricultural River Basin Management and Development Project

14. 成果品リスト（プロジェクト期間中に作成された（及び今後作成される）成果品（技術マニュアル類、報告書類））

プロジェクト期間中に作成された（及び今後作成される）成果品（技術マニュアル類、報告書類）

分 類	成果品名	サイズ	作成時期	使用目的	内容	言語	印刷部数	配布先・主な使用対象者
広報&宣伝	プロジェクト概要	A4	2011年～適宜更新	一般広報	PJ概要（進捗）	和・英	PJ内印刷	PJ来訪者、JICA関係者
	種子販売促進用ポスター（3種）	A2	2012年9月	販売促進	SGG及び生産品種子の説明	クメール語	100	SGG、デモ農家、村内掲示板等
	種子販売促進用リーフレット	A4	2011年10月	販売促進	SGG及び生産品種子の説明	クメール語	20,000	FFS参加者、地域一般農家、精米所、他各種広報可能な機会に配布
	種子販売促進用ポスター	A2	2014年1月	販売促進	SGG及び生産品種子の説明	クメール語	300	村内掲示板等
普及教材	FFS用栽培技術ポスター （大型ビニールキャンバスシート印刷）	1.5m×2.3m	2011年4月	FFS	栽培技術フロー	クメール語	240	デモ農家、他公民館等
	FFS用技術ポスター（ステージ別拡大版2種） （大型ビニールキャンバスシートに印刷）	1.1m×2.3m	2012年4月	FFS	個別技術拡大版	クメール語	130	デモ農家、FFS参加者、PGメンバー
	「改訂版」FFS用栽培ステージ別ポスター （15種1セット）（ビニールキャンバスシートに印刷）	0.9m×1.4m	2014年5月	FFS	個別技術拡大版	クメール語	30セット	デモ農家、FFS参加者、PGメンバー
	SGG用栽培技術ポスター （大型ビニールキャンバスシートに印刷）	1.5m×2.3m	2011年4月	SGG	栽培技術フロー	クメール語	5	SGG
	栽培技術リーフレット	A4	2011年4月	FFS	栽培技術フロー	英・ク	20,000	FFS参加者、地域一般農家、精米所、他各種広報可能な機会に配布
	グループファンドメカニズムバナー （大型ビニールキャンバスシートに印刷）	1.5m×2.3m	2012年5月	PG	グループファンド解説図	クメール語	30	パイロットグループ（PG）
技術 マニュアル類	種子生産技術マニュアル APPP Recommended Seed Production Technology	A4	2011年12月	SGG	栽培・生産技術・検査基準	英・ク	PJ内印刷	種子担当C/P & 普及員
	稲作技術マニュアル APPP Recommended Rice Cultivation Technology	A4	2011年12月	C/P研修	イネ栽培技術一般	英・ク	PJ内印刷	C/P、PDA職員 & 普及員
	ドラムシーダー（人力牽引型直播機）マニュアル Drum Seeder Manual	A4	2014年3月	FFS, PG	DS使用方法と技術解説	英・ク	1200 (+5,000)	C/P、普及員、デモ農家、FFS参加者、PGメンバー
	課題別技術マニュアル（初版） Step up your knowledge on rice cultivation	A3	2014年3月	FFS, PG	農家及び普及員向け稲作課題別知識と技術解説	英・ク	4,000	C/P、普及員、デモ農家、FFS参加者、PGメンバー、一般農家
	農家カレンダー（栽培技術 & 営農） Farmer's Calender (Farming Management)	A3	2014年3月	FFS	農家営農記録（農業経費 & 稲作技術プロセス）	クメール語	4000 (+5,000)	普及員、デモ農家、FFS参加者、PGメンバー
	課題別技術マニュアル改訂版 Ver 2: Step up your knowledge on rice cultivation	A3	2014年12月	セミナー、普及全般	農家及び普及員向け稲作課題別知識と技術解説	英・ク	5,000	C/P、普及員、デモ農家、FFS参加者、PGメンバー、一般農家
	種子生産ガイドブック（新規） Guide Book on Quality Seed Production	A4	2014年12月	種子生産普及	栽培技術・検査基準	英・ク	5000	C/P、普及員、SGGメンバー

*赤字は今年中に作成見込み

	農家グループ形成及び運営ガイドライン Guideline for Farmer Group Formation and Management	A4	2014年12月	普及事業	基金活用によるグループ活動手法&プロセス, 組織設置・運営基準	英・ク	5,000	C/P, 普及員
	(C/P自主制作) 農家向け種子処理方法マニュアル Seed Treatment Manual for Farmers	A4	2014年8月	普及事業	種子処理技術	クメール語	5,000	C/P, 普及員、SGG、、PGメンバー、一般農家
報告書/研修テキスト類	年次報告書 Annual Report on Project Activities	A4	2011年 2012年 2013年	JICA&MAFF 報告用	FFS&PG Endline Survey 分析結果及びSGG活動総括	和・英・ク	-	JICA事務所・JICA本部 カ国MAFF GDA
	農民組織化報告書(石橋短期専門家)	A4	2011年3月	流通改善	精米所&農家グループ調査結果	和・英	-	JICA事務所・JICA本部 カ国MAFF GDA
	TSC3連携研修カリキュラム&栽培マニュアル	A4	2012年11月	C/P研修	研修プログラム&技術教材	英・ク	30	JICA事務所・JICA本部 カ国MAFF GDA
	コメ流通調査報告書	A4	2012年12月	流通改善	精米所等 ニーズ調査、農家の生産・社会経済面課題分析	和・英	-	JICA事務所・JICA本部
	コミュン投資計画(2013)に関する アンケート 調査報告	A4	2013年5月	コミュン活動支援	バットンバン州71コミュンのCIP組み入れ状況調査・分析	和・英	-	JICA事務所・JICA本部
	ワークショップ「稲作農家のためのより良い農業サービス」実施報告書	A4	2013年9月	コミュン活動支援	NGO,他国ドナー招聘によるコミュン支援	和・英	50	JICA事務所・JICA本部、MAFF GDA、PDA、WS参加NGO&USAID
器具/機材	簡易籾殻燻炭製造器	-	2014年5月	SGG	籾殻燻炭の製造	-	8台	SGG

APPPによる前プロジェクト継承技術の改善及び新規適用技術の導入実績

改善(改良)課題	改善(改良)内容
種子処理手法の改善 (種子選別及び温湯消毒)	1 従前プロジェクト(BRAND)当時、種子処理技術(種子選別及び温湯消毒)の指導において、種子選別には水汲み用のバケツを使い、温湯消毒には家庭用なべを利用して行う方法を指導してきた。これは各農家が個人で種子処理を行うことを前提にしていたためと思われる。APPPでは苗の病害虫防除の観点を重視し、病気の地域的発生・拡散予防の観点から地域農家が一斉に種子処理した方が効果的と判断し、キー農家(デモ農家)を中心に地域の農家が集まって集団で種子処理することを前提に、それに必要な資材として半切りドラム缶や大型タライ、安価なネット等を利用する方法を立案しデモンストレーション及び実技指導を行ってきた。また種子の選別においては従前から塩水選方式を指導してきたが、APPPでは大量の塩を使う塩水液以外の手法として尿素肥料の希釈液(比重1.1に調整)を使った種子選別法も発案し指導してきた。尿素希釈液は種子選別作業終了後に畑の肥料としても使え無駄にならないメリットがある。また、種子選別に係る肥料コスト負担も考慮し、淡水だけを使った水選方法も選択肢として併せ指導を行ってきた。
ダボッグ式育苗技術の導入	2 プロジェクト対象地域では大規模な自然災害(干ばつや洪水)の発生により、毎年のように播種期や生育初期或いは登熟期の稲に甚大な被害を与えている。このような被害水田での再移植には雨期の作付け可能期間の制約もあり、スピーディーな苗の再準備が求められることから苗床の設置場所を選ばず速やかに育苗できるダボッグ式育苗技術をプロジェクト開始初年度(2011)のC/P&普及員研修にて導入し、以降普及員を通じて少しずつ農家に普及を行ってきた。また、2012年の洪水期には被災農家への再移植用水稲苗の供給に必要な緊急支援要請がバットンバンPDAからプロジェクトに対しなされたため、PDA玄関前の広場全域を使い専門家の指導の下、10ha分のダボッグ苗床を3日間で緊急造成、2週間で育苗しPDAに供与した。これはC/PやPDA職員にとってはめったに経験できないダボッグ式育苗方式による大量育苗を行う機会として、技術移転の観点からも非常に効果的であった。
ドラムシーダー(DS) (人力牽引型播種機)の導入・普及	3 カンボジアでは直播(散播)による水稻栽培が広範囲に行われている。とりわけプロジェクト対象地域(コムーエン)の8割を占めるバットンバン州では作付けの95%以上が直播(散播)方式と言われている(PDA情報)。慣行農法としての長年の直播(散播)習慣からの脱皮は想像するほど容易なものではなく、また農家の移植方式への大きな抵抗感(人夫賃等コストや手間暇がかかる等)は想像以上であり、従前2つのプロジェクト時代(BAPEP、BRAND)から推進してきた当該地域での移植方式の普及は極めて困難であるとの認識に至った。その改善策として技術的検討を行った結果、ドラムシーダー(DS)の普及がより現実的である(*移植用人件費がかからず、稲の生育上からもより望ましい環境が作れ、価格的にも一般農家が十分手に入れられる)と判断され、またMAFFでも同様の認識からドラムシーダーの普及を図ろうと対応し始めたことから、プロジェクトとしてもプロジェクト2年次から同機材の利用・普及を積極的に進めてきた。2014年はブルサット州にも広めつつある。(*MAFF側のDS普及活動は2012年乾期のみでストップ)
籾殻燐炭製造器の制作と導入	4 プロジェクトでは当初より苗床造成やダボッグ式育苗法に籾殻燐炭利用を推奨してきた。しかしながらレンガ工場等で入手できるものは籾殻燐炭というより籾殻灰にちかく、苗床用には理想的ではないため、プロジェクトでデザインした比較的安価(115 \$ /1器)で製造できる簡易籾殻燐炭製造器を町のワークショップにて制作し、種子生産グループ向けに導入し始めた。これにより適正な籾殻燐炭がいつでもできるようになった。
普及手法・ツールの改善	5 FFDからFFSへ変更 従前BRAND プロジェクトでは技術普及はFFD(Farmers Field Day)と称する日を設定し、4コムーエン毎に農家を中心とした不特定多数のコムーエン及び村落関係者を招聘し1日の研修会(作付け期での種子処理手法、収穫期でのデモ農家の収量結果及び技術全体のお披露目会等)を開催するという普及方法であった。APPP開始後、普及方法を検討した結果、研修参加者の理解度及び技術の定着度を一層深められるようなよりシステマティックな普及方式に変える必要があると考え、栽培ステージ毎に分けた個別技術の研修(座学と実習)のためのカリキュラム編成、研修参加者の登録と毎回の出席(出欠確認を行う)等を前提にした学校方式(FFS)に変更(PDM変更)することをJICA本部に提案、同意されことから、APPPではFFSを主要な普及ツールとして一般農家、種子グループ(SGG)、パイロットグループ(PG)それぞれのカテゴリーの農家の技術研修を行ってきた。

6	<p>技術パンフレット(技術フロー解説大型シート(ビニールキャンバスシート))及びリーフレットの工夫:</p> <p>従前プロジェクトではA4版技術マニュアル(紙)を各村にある掲示板に貼付け一般向け普及を行っていたが、2011年当初、この手法をレビューした結果、各所の掲示板に貼ったマニュアルは幾重にも上張りされ、かつ雨水や土埃で変色し長期的に機能するような体をなしていなかった。そこで最低1年は野外使用でも耐性のある大型ビニール製キャンバスシート上に、APPPで検討・作成した写真多用の見てわかる栽培技術フローを印刷し、FFS研修に使用するとともに、普段はデモ農家の軒先に掲示し、通行人等一般人の目につくような形に改善した。また2011年度は数か所の公民館への張り出し依頼や、2012年は30コミュン関係者にも配布し軒先に掲示してもらおうよう依頼した。また、同じ内容の縮小版リーフレットも同時並行で作成、大量に印刷の上FFS全参加者に配布するとともにセミナー、ワークショップ、地域関係者集会・会議等のあらゆる機会を利用し広く配布を行ってきた。</p>
7	<p>デモ圃場前の展示標識パネルの改良:</p> <p>2011年～2012年まではデモ圃場前の表示パネルはデモ圃場名だけの標識中心であったが、2013年作付けシーズンからは栽培歴に加え主要技術も写真付きで掲示することで、何も知らない通行人(農民)でも直接稲の生育状況の観察と展示標識パネル上の栽培方法概要の両方が確認できるように改良した。</p>
8	<p>技術マニュアルの制作(5種):</p> <p>2011年にFFSの実施および種子生産農家グループへ(SGG)技術指導に必要な栽培マニュアル2種については、従前プロジェクト作成の一般栽培マニュアルでは不十分と考え、APPP独自に内容を大幅に改良しFFS用及びSGG用を作成し直した。更にこれを2年にわたり使用してきた結果、さらに課題別技術マニュアルの必要性が出てきたことから、新たに3種を作成した。これまでに作成した技術マニュアル類は以下の通り;</p> <p>2011年:①APPP Recommended Rice Cultivation Technology(A4版) ②APPP Recommended Seed Production Technology(A4版)</p> <p>2013年:③Step up your knowledge on Rice Cultivation (A3版) ④Drum Seeder Manual(A4版) ⑤Farmers Calender (A3版)</p> <p>2014年:⑥C/Pチームによる自主制作マニュアル(仮タイトル:Seed Treatment Manual for farmers) ⑦上記②の改訂版(Ver2:Step up your knowledge on Rice Cultivation (A3版) ⑧上記③の改訂版(新タイトル:Guide Book for Quality Seed Production) ⑨流通改善分野新規作成(タイトル:Guide line for Farmers Group Formation and Management)</p> <p>*作成に当たっては「目で見て理解できるマニュアル」化を意識して作成。</p>
9	<p>農家表彰制度の導入:</p> <p>FFS研修も一作付け期間を通じた長期戦で行うため、参加者の傾向として中間(2回目から3回目あたり)の出席率が下がる傾向が顕著にみられる。そこで参加者のモチベーション高揚のため、2013年から優秀農家表彰制度を導入した。(表彰内容及び実績はANNEX 20参照)</p>

Quality Rice Seed Production

Battambang Province

Year	Cropping Season	Planted Area (ha)	Number of Rice Seed Growers	Amount of Certified Seed Production (tons)	Amount of Registered Seed Production (tons)	Rice Yield (tons/ha)	Main Varieties	Main Activities	Achievements	Issues
2011	Dry Season	0.0	0	0.0	0.0	-	-	•Variety Selection •FFS	•Characteristics of 10 varieties were studied. •FFS: 16 times with 277 participants	-
	Rainy Season	37.0	68	94.0	3.3	2.6	Phka Rumdoul, Rieng Chey, CAR4	•Field & Seed Inspections •Facility Development & purchase of equipment	•Field Inspection: 12 times •Warehouse constructed for the 3 SGGs •A set of equipment was donated to the 3 SGGs.	
2012	Dry Season	5.1	14	15.1	0.0	3.0	IR66	•FFS	•FFS: 18 times with 230 participants •Field Inspection: 16 times	•Drought and flood in Moug Russei SGG
	Rainy Season	23.5	40	57.9	1.6	2.5	Phka Rumdoul, CAR4	•Field & Seed Inspections •Sales Promotion	•Sales Promotion: (1) Negotiated with a rice miller for contract (2) Distribution of brochure •Drying floor was constructed for Bavel SGG.	
2013	Dry Season	8.5	13	17.9	0.0	2.1	Chulsa	•FFS •Field & Seed Inspections	•FFS: 18 times with 197 participants •Field Inspection: 16 times	•Floods in Banan and Bavel SGGs
	Rainy Season	26.2	49	71.7	3.5	2.9	Phka Rumdoul	•Bookkeeping Training •Sales Promotion	•Sales Promotion: (1) Contracted with a rice miller for 50 tons of seed (2) Radio programs and CM broadcasted on seed sales (3) Installation of signboard	
2014	Dry Season	3.6	6	-	-	-	Chulsa	•FFS	•FFS: 20 times (planned) •Field Inspection: 16 times (planned)	-
	Rainy Season	33.5	47	-	-	-	Phka Rumdoul	•Field & Seed Inspections •Sales Promotion	•Sales Promotion: (1) Sales contracts with rice millers (2) Broadcast radio programs and CM (planned)	

Pursat Province

Year	Cropping Season	Planted Area (ha)	Number of Rice Seed Growers	Amount of Rice Seed Production (tons)	Amount of Registered Seed Production (tons)	Rice Yield (tons/ha)	Main Varieties	Main Activities	Achievements	Issues
2011	Dry Season	0.0	0	0.0	0.0	-	-	-	-	-
	Rainy Season	0.0	0	0.0	0.0	-	-			
2012	Dry Season	0.0	0	0.0	0.0	-	-	•Technical guidance •Renovation of facilities	•Office building renovated and bathroom constructed •Thresher, winnower, and hand tractor donated •More than 3 tons of quality seeds produced for the first time.	-
	Rainy Season	1.2	1	3.2	0.6	3.2	Phka Rumdoul			
2013	Dry Season	0.0	0	0.0	0.0	-	-	•Technical guidance •Renovation of facilities	•Warehouse and farm road renovation •Drying floor constructed •Installation of signboard	•Insufficient soil fertility
	Rainy Season	3.5	1	8.4	0.9	2.6	Phka Rumdoul			
2014	Dry Season	1.0	1	-	-	-	Chulsa	•Dissemination of seed production technique to farmers •Application of soil improvement materials	•FFS: 5 times (planned) •Field Inspection: 4 times (planned) •Sales Promotion: (1) Sales contracts with rice millers (2) Broadcast radio programs and CM (planned)	•Application of Calcium Silicate
	Rainy Season	6.3	6	-	-	-	Phka Rumdoul			

Kampong Chhnang Province

Year	Cropping Season	Planted Area (ha)	Number of Rice Seed Growers	Amount of Rice Seed Production (tons)	Amount of Registered Seed Production (tons)	Rice Yield (tons/ha)	Main Varieties	Main Activities	Achievements	Issues
2011	Dry Season	0.0	0	0.0	0.0	-	-	-	-	-
	Rainy Season	0.0	0	0.0	0.0	-	-			
2012	Dry Season	0.0	0	0.0	0.0	-	-	•FFS •Field & Seed Inspections	•FFS: 5 times with 50 participants •Field Inspection: 4 times •Thresher and winnower donated	-
	Rainy Season	2.1	10	5.5	1.1	3.2	Phka Chan Sen Sar, CAR4			
2013	Dry Season	0.0	0	0.0	0.0	-	-	•FFS •Field & Seed Inspections •Sales Promotion	•FFS: 5 times with 90 participants •Field Inspection: 4 times •Sales Promotion: (1) Contacted rice millers for sale promotion (2) Installation of signboard •Warehouse and drying floor constructed	•Mixed varieties in nursery
	Rainy Season	3.5	17	12.8	0.0	3.7	Phka Rumdoul, CAR4			
2014	Dry Season	0.0	0	0.0	0.0	-	-	•FFS •Field & Seed Inspections •Sales Promotion	•FFS: 5 times (planned) •Field Inspection: 4 times (planned) •Sales Promotion: (1) Sales contracts with rice millers (2) Broadcast radio programs and CM (planned)	-
	Rainy Season	3.0	12	-	-	-	Phka Rumdoul			

Achievement of Rice production & collective action by Pilot Groups

Battambang province

Year	Cropping Season	Planted area (ha)	Number of Pilot Groups	Number of farmers of PG	Rice Yield (t/ha)	Amount of Rice Production (t)	Main varieties	Number of PGs that carried out Collective Actions					Main Activities	Achievements	Issues
								Input purchase	Standard technology	Sharing price info.	Shipping or sales	Total			
2011	Rainy season	0	0	0	-	-	-	0	0	0	0	0	-	-	-
2012	Rainy season	10.0	1	10	3.4	34.0	Phka Rumduol	0	1	1	1	1	<ul style="list-style-type: none"> Organizing a new PG. Introduction of the group fund system. FFS and inspection. Support for marketing and sales. 	<ul style="list-style-type: none"> One new PG was organized. The group fund system was introduced to 1 PG. FFS: 5 times for 1 PG with 50 participants. Collective paddy sales were practiced by 1 PG. 	<ul style="list-style-type: none"> Drought in 1 PG. Practicing collective paddy sales was not welcomed by members.
2013	Rainy season	47.0	5	76	2.8	107.2	Phka Rumduol	1	5	3	0	5	<ul style="list-style-type: none"> Organizing new PGs. Introduction of the group fund system. FFS and inspection. Training on account bookkeeping. Support for marketing and sales. 	<ul style="list-style-type: none"> 4 new PG was organized and introduced the group fund system. Collective purchase of inputs was practiced by 1 PG. FFS: 25 times for 5 PGs with 314 participants. Visit to rice millers was conducted by 3 PGs for marketing. Training on account bookkeeping was practiced at each PG site. 	<ul style="list-style-type: none"> Serious floods especially in 2 PGs. Low paddy sales price. Improper record in group fund management.
2014	Rainy season	53.0	5	88	N.A.	N.A.	Phka Rumduol	4					<ul style="list-style-type: none"> FFS and inspection. Training on account bookkeeping. Support for marketing and sales. 	<ul style="list-style-type: none"> Collective purchase of inputs was practiced by 4 PGs. FFS: 25 times (planned). Drum seeders were introduced to 5 PGs. Training on account bookkeeping was practiced for 5 PGs together. Broadcast radio programs for sales promotion (planned). 	

Pursat province

Year	Cropping Season	Planted area (ha)	Number of Pilot Groups	Number of farmers of PG	Rice Yield (t/ha)	Amount of Rice Production (t)	Main varieties	Number of PGs that carried out Collective Actions					Main Activities	Achievements	Issues
								Input purchase	Standard technology	Sharing price info.	Shipping or sales	total			
2011	Rainy season	0	0	0	-	-	-	0	0	0	0	0	-	-	-
2012	Rainy season	23.0	1	23	2.3	N.A.	Phka Rumduol	0	1	1	1	1	<ul style="list-style-type: none"> Organizing a new PG. Introduction of the group fund system. FFS and inspection. Support for marketing and sales. 	<ul style="list-style-type: none"> 1 new PG was organized. The group fund system was introduced to 1 PG. FFS: 5 times for 1 PG with 129 participants. Collective paddy sales were practiced by 1 PG. 	<ul style="list-style-type: none"> Serious drought. Low paddy sales price. Practicing collective paddy sales not welcomed by members.
2013	Rainy season	67.5	9	135	3.7	243.6	Phka Rumduol	1	9	9	0	9	<ul style="list-style-type: none"> Organizing new PGs. Introduction of the group fund system. FFS and inspection. Support for marketing and sales. Training on account bookkeeping. 	<ul style="list-style-type: none"> 8 new PG was organized and introduced the group fund system. Collective purchase of inputs was practiced by 1 PG. FFS: 45 times for 9 PGs with 628 participants. Visit to rice millers was conducted by 9 PGs for marketing. Training on account bookkeeping was practiced for 9 PGs together. 	<ul style="list-style-type: none"> Outbreak of rice blast (70% of the PG members were affected). Low paddy sales price.
2014	Rainy season	75.5	9	151	N.A.	N.A.	Phka Rumduol & Somaly	9					<ul style="list-style-type: none"> FFS and inspection. Introduction of drum seeders. Support for marketing and sales. Instruction on account bookkeeping. 	<ul style="list-style-type: none"> Collective purchase of inputs was practiced by 9 PGs. FFS: 45 times (planned). Drum seeders were introduced to 6 PGs. Broadcast radio programs for sales promotion (planned). 	

*Rice yield in Pursat (2012) is based on a sample survey (end-line survey) results. Total amount of rice production of the group (2012) is not available in the survey.

Kampong Chhnang province

Year	Cropping Season	Planted area (ha)	Number of Pilot Groups	Number of farmers of PG	Rice Yield (t/ha)	Amount of Rice Production (t)	Main varieties	Number of PGs that carried out Collective Actions					Main Activities	Achievements	Issues
								Input purchase	Standard technology	Sharing price info.	Shipping or sales	total			
2011	Rainy season	0	0	0	-	-	-	0	0	0	0	0	-	-	-
2012	Rainy season	0	0	0	-	-	-	0	0	0	0	0	-	-	-
2013	Rainy season	4.8	1	16	2.8	13.4	Phka Rumduol	0	1	1	0	1	<ul style="list-style-type: none"> Organizing a new PG. Introduction of the group fund system. FFS and inspection. Support for marketing and sales. Training on account bookkeeping. 	<ul style="list-style-type: none"> 1 new PG was organized and introduce the group fund system. FFS: 5 times for 1 PG with 76 participants. Visit to rice millers was conducted by 1 PG for marketing. Training on account bookkeeping was practiced for 1 PG. 	<ul style="list-style-type: none"> Floods in 1 PG.
2014	Rainy season	5.7	1	19	N.A.	N.A.	Phka Rumduol	1					<ul style="list-style-type: none"> FFS and inspection. Instruction on account bookkeeping. Support for marketing and sales. 	<ul style="list-style-type: none"> Collective purchase of inputs was practiced by 1 PG. FFS: 5 times (planned). Broadcast radio programs for sales promotion (planned). 	

in 3 provinces (Total)

Year	Cropping Season	Planted area (ha)	Number of Pilot Groups	Number of farmers of PG	Rice Yield (t/ha)	Amount of Rice Production (t)	Main varieties	Number of PGs that carried out Collective Actions					Main Activities	Achievements	Issues
								Input purchase	Standard technology	Sharing price info.	Shipping or sales	total			
2011	Rainy season	0	0	0	-	-	-	0	0	0	0	0	-	-	-
2012	Rainy season	33.0	2	33	N.A.	N.A.	Phka Rumduol	0	2	2	2	2	<ul style="list-style-type: none"> Organizing new PGs. Introduction of the group fund system. FFS and inspection. Support for marketing and sales. 	<ul style="list-style-type: none"> 2 new PGs were organized and introduced the group fund system. The group fund system was introduced to 2 PGs. FFS: 10 times for 2 PGs with 179 participants. Collective paddy sales were practiced by 2 PGs. 	<ul style="list-style-type: none"> Drought in 2 PGs. Low paddy sales price. Practicing collective paddy sales was not welcomed by members.
2013	Rainy season	119.3	15	227	3.3	364.2	Phka Rumduol	2	15	13	0	15	<ul style="list-style-type: none"> Organizing new PGs. Introduction of the group fund system. FFS and inspection. Training on account bookkeeping. Support for marketing and sales. 	<ul style="list-style-type: none"> 13 new PG were organized and introduced the group fund system. Collective purchase of inputs was practiced by 2 PGs. FFS: 75 times for 15 PGs with 1,018 participants. Visit to rice millers was conducted by 13 PGs for marketing. Training on account bookkeeping was practiced. 	<ul style="list-style-type: none"> Serious floods in Battambang (especially 2 PGs). Outbreak of rice blast especially in Pursat Low paddy price. Improper record in group fund management.
2014	Rainy season	134.2	1	19	-	-	Phka Rumduol & Somaly	14					<ul style="list-style-type: none"> FFS and inspection. Training and instruction on account bookkeeping. Introduction of drum seeders. Support for marketing and sales. 	<ul style="list-style-type: none"> Collective purchase of inputs was practiced by 14 PGs. FFS: 75 times (planned). Drum seeders were introduced to 12 PGs (planned). Broadcast radio programs for sales promotion (planned). 	

(10) JCC開催実績/JCC Meeting Summaries during 2011-2013

JCC	Date	Venue	Major Agendas and Discussions
1st JCC	26 Jan. 2012	Meeting Room at MAFF	1)Activity Results of 2011 and Achievement of the Outputs in PDM:
			Six(6) presentations were made to report the progress of the project. As a result, project operation and the results were endorsed.
			2)Revision of PDM:
			The both sided agreed to adopt the revised PDM as Version 2.0. Main revisions included to set indicators with numerical targets.
			3)Update plan of activities by proposal of the “Rolling Plan”:
			As a result of the discussion, the proposed “Rolling Plan” which included numerical targets until the end of the project was accepted.
2 nd JCC (with Mid-Term Evaluation Report)	25 Oct. 2012	-do-	1)Progress reporting of 2012:
			Four(4) presentations were made to report the progress of the project.
			2) Revision of PDM:
			The both sided agreed to adopt the revised PDM 2.0 as Version 3.0. Main revision included to clarify “agricultural product” as “Indica Rice”.
			3) Mid-term evaluation report:
			As the conclusion, relevance, effectiveness and efficiency were evaluated “High” as all the perspectives felt well with steady progress and developing outputs. While, sustainability after the project termination was not yet evaluated defiantly though, as some of positive impacts were seen, further progress were expected to take place.
3rd JCC	13 Dec. 2013	-do-	1)Progress reporting of 2013:
			Four(4) presentations were made to report the progress of the project. One(1) presentation on “Market Demand for the 10 Prioritized Rice Varieties” was also made. Most of the discussion was concentrated on the issue of how to promote market demand and farmer’s recognition on the “10 Prioritized Rice Varieties”. Although there were no distinct answers made on the matter after all, but Chairman implies for seeking a possibility of nation wide survey on 10 varieties. Overall discussion was active.

広報実績(プロジェクトからのリリース分のみ) Achievement of Public Relations (News source released by APPP)

年 Year	月 Month	事業分野 Activity Category	News Paper / TV / Radio	内容 Contents of release
2013年 Year 2013	9月26日・27日 Sept26-27	コミュン活動 (Commune Activity)	全国放送テレビ Television(KTV)	プロジェクトが主催したバットアンバンに拠点のある国内外NGO及び他国ドナー (USAID)招聘による「稲作農家のためのより良い農業サービス」と題したワークショップの様子をニュース放映。 Workshop hosted by APPP was released as the news. Work shop was held with the participation of domestic, international NGOs and foreign donor (USAID) station in Battambon and PDA
	8月～11月 Aug - Nov	種子生産 Seed Production (SGG)	バットアンバン国営ラジオ局 National Radio Chamkar Chek (Battambang)	SGG生産種子の販売広報番組 (トーク番組1回/月×4か月)+(スポットコマーシャル(2分×10回×30日)) Sale promotion of SGG seeds by radio program ●Talk program: 1time/month×4months ●Spot commercial: 2min×10times/day×30days
	11月～12月 Nove - Dec	FFS 普及 Extension (FFS)	バットアンバン国営ラジオ局 National Radio Chamkar Chek (Battambang)	FFS技術紹介、トーク 番組(1/週×1.5か月) Talk program for the introduction of rice cultivation techniques promoted in FFS by APPP (1time /week ×6 weeks)
	11月27日 Nov 27	種子生産 Seed Production (SGG)	新聞(全国紙) Raksmey Compuchea (Nation wide News Paper)	種子倉庫、乾燥場、他施設整備にかかる施設開所・譲渡式(11/26)の様子、並びにプロジェクト活動紹介記事 News release on hand over ceremony(Nov,26) of new construction and inovation of seed production related facilities for Pursat PDA TAS
	11月28日 Nov 28	種子生産 Seed Production (SGG)	新聞(全国紙) Raksmey Compuchea (Nation wide News Paper)	種子倉庫、乾燥場、他施設整備にかかる施設開所・譲渡式(11/27)の様子、並びにプロジェクト活動紹介記事 News release on hand over ceremony(Nov,27) of new construction and inovation of seed production related facilities for Kampong Chhnann SGG
2014年 Year 2014 (Completed)	5月16日・18日 May 16-18	種子生産 Seed Production (SGG)	全国紙3紙(Nation wide 3 News Paper) 1.Campuchea Thmey 2.Koh Santepheap 3.Raksmey Campuchea	モンルセイSGGリーダーの2013年度最優秀農家賞受賞及び優良種子生産概況の紹介記事。 News of the best Farmer award for Seed Production in 2013 given to the group leader of Moung Russei SGG and introduction of quality seed production.
	6月9日 Jun 9	種子生産 Seed Production (SGG)	全国放送テレビ3社 (3 T.V companies) 1.Aspara TV 2.National TV 3.Bayon TV	プルサット州 PDA 付属TASでのFFS及び籾殻燐炭製造実習風景 A scene of FFS implementation and rice husk charcoal making at Pursat PDA Toul Lapov Agri Station(TAS)
	6月12日&13日 Jun 12&13	種子生産 Seed Production (SGG)	全国放送テレビ2社 (2T.V companies) 6/12: .CNC TV (Cambodian News Channel) 6/13: National TV (KTV)	(1) 種子選別・消毒の方法 Seed selection & hot water disinfection method (2) 苗代作りの方法 Seedling nursery bed making method (3) 籾殻燐炭作 Rice husk charcoal making method
	6月13日 Jun 13	種子生産 Seed Production (SGG)	全国紙新聞 Rasmei Kampuchea Daily (Nation wide News Paper)	(1) 種子選別・消毒の方法 Seed selection & hot water disinfection method (2) 苗代作りの方法 Seedling nursery bed making method (3) 籾殻燐炭作 Rice husk charcoal making method
	8月●日 August	種子生産 Seed Production (SGG)	全国紙新聞 Nation wide news paper	契約栽培(生産)の成立に係る広報記事 News release related to " Contract production" of SGG with rice miller was signed by both party

2014年 Year 2014 (Plan)	11月●日 November	種子生産 Seed Production (SGG)	全国紙新聞 Nation wide news paper	優良種子販売促進のための広報(収穫期に入っている現況アナウンス) News release for sale promotion announcing that harvest time is now around the corner.
	11月●日 November	種子生産 Seed Production (SGG)	テレビ放送 (T.V program) 1. TV company not fixed yet 2.	優良種子販売促進のための広報(収穫期に入っている優良種子圃場の風景と販売宣伝) TV news for sale promotion casting the seed paddy hanging heavy heads (ear) at harvest time.
	11月●日ー● 日 Nov,	種子生産 Seed Production (SGG)	国営ラジオ局(3州) National Radio in 3 provinces (Battambang, Pursat and K.Chhnang)	優良種子販売促進のための広報(収穫期に入っている優良種子圃場の写真と販売記事) News for sale promotion on releasing the picture of seed paddy hanging heavy heads (ear) at harvest time.
	9月 -11月 Sept-Nov	流通改善(PG)活動 Pilot Group activity	国営ラジオ局(3州) National Radio in 3 provinces (Battambang, Pursat and K.Chhnang)	内容検討中 Contents are under planning
	9月 -11月 Sept-Nov	流通改善(PG)活動 Pilot Group activity	全国紙新聞 Nation wide news paper	内容検討中 Contents are under planning
	9月 -11月 Sept-Nov	流通改善(PG)活動 Pilot Group activity	テレビ放送 (T.V program) 1. TV company not fixed yet 2.	内容検討中 Contents are under planning

2013優秀農家表彰実績 (Awarded Farmers by APPP in 2013)

農家分類 (Classification)	表彰(証書)タイトル (Title of Certificate)	州別表彰対象者数(Number of Awardee)				副 賞(Prize)	
		BTB	PST	KOC	Total	種子(Quality Seed)	肥料(Fertilizer)
卒業デモ農家 (Demo Farmer)	Master of Improved Rice cultivation Technology	23	7	2	32	20kg×32farmers=640kg	50kg×32farmers=1,600kg
FFS参加農家 (FFS participants)	Certificate of fully attending the training on rice cultivation technology	94	52	30	176	n.a	n.a
	Certificate of enthusiastically attending the training on rice cultivation technology	83	48	19	150	10kg×150farmers=1,500kg	n.a
PG メンバー (PG members)	Certificate of Best Farmer	5	13	1	19	20kg×19farmers=380kg	75kg×19farmers=1,425kg
	Certificate of Good Farmer	7	20	2	29	20kg×29farmers=580kg	50kg×29farmers=1,450kg
Total		212	140	54	406	3,100kg	4,475kg

2012優秀農家表彰実績 (Awarded Farmers by APPP in 2012)

農家分類 (Classification)	表彰(証書)タイトル (Title of Certificate)	州別表彰対象者数(Number of Awardee)				副 賞(Prize)	
		BTB	PST	KOC	Total	種子(Quality Seed)	肥料(Fertilizer)
卒業デモ農家 (Demo Farmer)	Master of Improved Rice cultivation Technology	18	3	1	22	20kg×22farmers=440kg	n.a

