

ザンビア共和国
農村振興能力向上プロジェクト
終了時評価調査報告書

平成 26 年 12 月
(2014年)

独立行政法人国際協力機構
ザンビア事務所

ザン事
JR
14-001

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序 文

独立行政法人国際協力機構（JICA）は、ザンビア共和国の要請に基づき、2009年12月から5年間の予定で技術協力プロジェクト「農村振興能力向上プロジェクト」（Rural Extension Service Capacity Advancement Project：RESCAP）を実施しています。

このプロジェクトが開始される前に、JICAは、住民参加による村落開発手法と持続的農業技術の導入を目的とした「孤立地域参加型開発計画」を2002年6月から2009年5月にかけてザンビア共和国政府と実施しました。同プロジェクトの実施を通して参加型村落開発の実用モデルが確立しましたが、その一方で、ザンビア共和国政府が独自で農村開発を進めていくためには、同政府の農業普及システムの包括的な改善と強化が必要であることが明らかになりました。この課題に対応するために実施されたのが RESCAP です。

RESCAPの協力期間の終了に向け、JICAは、ザンビア共和国政府側と合同でこれまでの実績や目標達成状況について総合的な評価を行うとともに、プロジェクト終了後の効果の持続・発展のための方策について協議するため、2014年8月31日から9月20日にかけて終了時評価調査を実施しました。

本報告書は、同調査団によるザンビア共和国側関係者との評価調査結果及び協議結果を取りまとめたものであり、本プロジェクト並びに関連・共通する国際協力の推進に活用されることを願うものです。

終わりに、本調査にご協力とご支援を頂いた内外の関係各位に対し、心から謝意を表します。

平成26年12月

独立行政法人国際協力機構
ザンビア事務所長 野田 久尚

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略 語 表

略 語	欧 文	和 文
2KR	Kennedy Round 2	食糧増産援助
ADEOs	Agriculture Diary for Extension Officers	普及員手帳
BEO	Block Extension Officer	ブロック普及員
CEO	Camp Extension Officer	キャンプ普及員
COMACO	Community Markets for Conservation	現地NGO
DAC	Development Assistance Committee	開発援助委員会
DOA	Department of Agriculture	農業局
EU	European Union	ヨーロッパ連合
FAO	Food and Agriculture Organization	国連食糧農業機関
FoDiS-R	Food Crop Diversification Support Project Focusing on Rice	コメを中心とした作物多様化推進プロジェクト
FTC	Farmers Training Centre	農民研修センター
FTI	Farm Training Institute	農業研修所
IFAD	International Fund for Agricultural Development	国際農業開発基金
JCC	Joint Coordination Committee	合同調整委員会
JICA	Japan International Cooperation Agency	国際協力機構
JOCV	Japan Overseas Cooperation Volunteer	青年海外協力隊
MAL	Ministry of Agriculture and Livestock	農業・畜産省
M/M	Minutes of Meetings	協議議事録
NAS	Needs Assessment Survey	ニーズアセスメント調査
NERICA	New Rice for Africa	ネリカ米
NGO	Non-Governmental Organization	非政府組織
OECD	Organization for Economic Cooperation and Development	経済協力開発機構
PACO	Provincial Agricultural Coordinator	州農業調整官
PAO	Principal Agricultural Officer	州農業官
PASViD	Participatory Approach to Sustainable Village Development	参加型持続的村落開発
PaViDIA	Participatory Village Development in Isolated Areas	孤立地域参加型村落開発プロジェクト
PDM	Project Design Matrix	プロジェクト・デザイン・マトリックス
PEA	Participatory Extension Approach	参加型普及アプローチ
PEP	Performance Enhancement Programme	活動強化計画

PLARDII	Project for Luapula Agriculture and Rural Development II	ルアプラ州農業農村開発計画フェーズII
PO	Plan of Operations	作業計画
RESCAP	Rural Extension Service Capacity Advancement Project	農村振興能力向上プロジェクト
S3P	Smallholders Productivity Promotion Programme	小規模農家生産性向上プログラム
SAO	Senior Agricultural Officer	郡上級農業官
SMS	Subject Matter Specialist	専門技術員
T-COBSI	Technical Corporation for Community Based Smallholder Irrigation	小規模農家のための灌漑システム開発計画調査
ZARI	Zambia Agriculture Research Institute	農業研究所

写



北部州関係者へのインタビュー (Kasama)



SAO 事務所：報告書の手交と面談を求める掲示



北部州 Kasama 郡農業研修所の養蜂場



農民・指導員によるマメ栽培の説明(Chinsali)

真



農民によるラインマーカーの説明 (Luwingu)



普及員による報告書提出のチェック・リスト



北部州 Kasama 郡農業研修所でのキノコ栽培



農民による小規模灌漑農業の説明(Chinsali)

評価調査結果要約表

1. 案件の概要	
国名：ザンビア共和国	案件名：農村振興能力向上プロジェクト
分野：生産安定・生産性向上/農村開発	援助形態：技術協力プロジェクト
所轄部署：ザンビア事務所	協力金額（評価時点）：7.18 億円
協力期間 R/D：2009 年 11 月 30 日締結 プロジェクト期間：2009 年 12 月～2014 年 12 月（5 年間）	先方関係機関：農業・畜産省農業局 (Department of Agriculture, Ministry of Agriculture and Livestock)
	日本側協力機関：なし
	他の関連協力：青年海外協力隊
<p>1-1 協力の背景と概要</p> <p>ザンビア共和国（以下、「ザンビア」と称する）では、農業開発が貧困削減のうえで不可欠である。人口の 60.5%が貧困ライン以下の生活を送っており、また 77.9%が農村地域に居住している。しかしながら、構造調整に伴う 2000 年代初頭の普及予算の激減により、政府の農業支援体制が脆弱化した結果、遠隔地の小規模農家を対象とする農業振興に困難が伴うこととなった。</p> <p>このような状況から、ザンビア政府は参加型持続的村落開発（Participatory Approach to Sustainable Village Development：PASViD）の実施を通じて農村部の貧困緩和を図るための技術協力を日本政府に要請した。その結果、当時の農業・協同組合省と JICA により、2002 年から 2009 年の間に孤立地域参加型村落開発計画（Participatory Village Development in Isolated Areas：PaViDIA）が実施された（PASViD 関連の活動との混同を避け、また PaViDIA の改善されたアプローチを PASViD から区別するために、新たな案件名が用いられた）。PaViDIA プロジェクトの実施を通じて、農業・畜産省（Ministry of Agriculture and Livestock：MAL）では孤立地域の参加型村落の実用モデルが確立されたものの、その一方で、PaViDIA アプローチを全国に普及・展開していくうえで、農業普及体制の組織的な弱さが障害となっていることが明らかとなった。その解決のために農業普及制度強化のための技術協力が新たに要請された。</p> <p>これを受け、JICA は 2009 年に詳細計画策定調査を実施してザンビア政府関係機関と討議を行い、2009 年 12 月から 2014 年 12 月の 5 年間を協力期間とする本「農村振興能力向上プロジェクト（Rural Extension Service Capacity Advancement Project：RESCAP）」が開始された。</p> <p>1-2 協力内容</p> <p>(1) 上位目標 対象地域における農家の生活の質が向上する。</p> <p>(2) プロジェクト目標 対象地域において、普及実施体制の改良と普及員の技術・知識の向上を通して、農業・畜産省が提供する普及サービスが改善される。以上の過程には、普及着手の契機を与える PaViDIA 手法をその一部とする参加型普及アプローチ（Participatory Extension Approach：</p>	

PEA) の適用が含まれる。

(3) 成果

成果 1：農家のための適切な技術が特定される。

成果 2：普及員の研修制度が確立する。

成果 3：プロジェクト対象地域の普及員の実践的な普及サービス能力が強化される。

成果 4：キャンプ/ブロック、郡、州による活動のモニタリング及び支援能力が強化される。

成果 5：農業・畜産省の普及サービス管理能力が強化される。

(4) 投入（評価時点）

日本側：総投入額 7.18 億円

専門家派遣：延べ 10 名（調査時点） 機材供与：約 1,500 万円

ローカルコスト負担：約 1 億 6,000 万円

研修員受入れ：29 名

相手国側：

カウンターパート配置 62 名（管理要員 2 名を含む）

オフィス・会議室等の提供

ローカルコスト負担：運転手雇用（北部州、2013 年 11 月以降）、光熱水費、清掃費等

2. 評価調査団の概要

調査者	（担当分野、氏名、所属）		
	団 長	佐藤 武明	JICA 客員専門員
	技術団員	中村 公隆	JICA 国際協力専門員
	評価計画	比嘉 勇也	JICA ザンビア事務所 所員
評価分析	寺尾 豊光	水産エンジニアリング株式会社	
調査期間	2014 年 8 月 31 日～2014 年 9 月 20 日	評価種類：終了時評価	

3. 評価結果の概要

3-1 実績の確認

成果 1 北部州及び Muchinga 州の対象郡において、農家のための適切な技術が特定される。

達成指標 1-1 対象地域において、10 件を超える適正技術及び適切な作物・品種が確認され、マニュアルとして取りまとめられる。

成果 1 は達成された。2014 年 5 月までに、対象州の農業局及び農業試験場の職員により、14 種類の適正技術が特定された。特定された各技術の内容及び特定に至る技術的プロセスは、マニュアル 5 件に取りまとめられた。

成果 2 普及員の研修制度が確立する。

達成指標 2-1 普及員研修の枠組みが開発される。

2-2 講師養成研修、新人普及員研修、現職普及員研修のための研修プログラムが農業・畜産省（農業局）によって計画・実施される。

2-3 本省及びすべての州から、20名を超える職員が講師となる。

成果2は達成された。普及員研修の体系化については、現任研修だけではなく、導入（新任）研修や管理職研修まで含む研修体系として整備された（指標2-1）。

対象州での普及員現任研修及び講師研修の実施を通じて、研修教材のパッケージ及び講師向けガイド（Training Resource Guide）が整備された。新人普及員研修は農業・畜産省の強い要望もあり、開発中のパッケージを活用して全国10州で実施された。これにより新任研修用のパッケージも作成された（指標2-2）。

研修講師の中核となるマスタートレーナーは、全国10州より選定され、延べ52名が任命された（指標2-3）。

成果3 プロジェクト対象地域の普及員の実践的な普及サービス能力が強化される。

達成指標 3-1 対象地域において、研修を受講した普及員のうち、80%を超える普及員の実践能力が向上する。

3-2 北部州及び Muchinga 州において、70%を超えるキャンプ/ブロック普及員が、2013/2014年の農期に最低5カ所の展示圃（デモ）を設置する。

3-3 北部州及び Muchinga 州において、2013/2014年の農期に、30%を超えるデモにおいて適正技術が適用される。

以下の指標達成の状況にみるように成果3は達成されている。2014年8月時点で、計13回の現任研修でチェックテストを実施し、延べ342名の受講者のうち、289名（84.5%）で研修内容の理解度向上が確認された。20～100問の理解度チェックテストが研修の初日と最終日に同じ問題で実施され、研修による理解の向上が確認された。向上率は前後で点数が改善された受講者数の全受講者数に占める割合により計算された（指標3-1）。

2013/2014年の農期（2013年10月から2014年3月ごろに至る雨期）に、対象郡で400を超えるデモ（展示圃）が設置された。北部州では、1人の普及員が最低5カ所（5種類）のデモを設置することが指導され、72%の普及員が5カ所以上のデモを設置した。そのうち9つのCampでは10カ所以上のデモを設置しており、最も多かったCampはChinsali郡のFTC Campで、18カ所のデモを設置している（指標3-2）。

2013/2014年の農期では、デモ総数に占める適正技術の割合は、平均して5割を超えている（指標3-3）。

成果4 キャンプ/ブロック、郡、州による活動のモニタリング及び支援能力が強化される。

達成指標 4-1 対象地域の州、郡レベルにおいて、規格化された様式による報告書の提出を行うキャンプ/ブロック普及員の割合が90%を超える。

4-2 対象地域のキャンプ/ブロック普及員が郡の職員から報告に対するフィードバックを受ける。

4-3 実施中のマイクロ・プロジェクトのモニタリングが、郡のモニタリング活動のなかに組み込まれ適切に報告される。

成果 4 はおおむね達成された。対象郡の普及員による 2009 年の報告書提出率は約 20% であった。2014 年 8 月の報告書の提出率は 81% までの増加をみた。評価時点では指標の 90% を満たしていないものの、プロジェクト終了までには達成可能と考えられる（指標 4-1）。

さらに重要なことは、関係者間でフィードバックの概念が統一され、それが報告書提出チェックリストという形にまとめられたことである。その結果、78% の普及員が定期的にフィードバックを受けるようになった（指標 4-2）。

成果 5 農業・畜産省の普及サービス管理能力が強化される。

達成指標 5-1 国家普及戦略が策定され、承認される。

5-2 普及サービス調和化の体制が確立される。

5-3 対象地域（州・郡）及び農業・畜産省本省（農業局）において、80% を超える職員が、同省の普及活動に係る管理能力は改善されたと感じている。

国家普及戦略第 1 次ドラフトは作成されている。関係者との意見交換会を実施するまでに時間を要するが、遅くとも 2015 年には採択される見込み（指標 5-1）。

普及サービス調和化の体制を確立するために、「小規模農家のための普及サービス提供に係る一般ガイドライン（2013 年 3 月）」が作成されている（指標 5-2）。

対象州・郡の普及担当職員 30 名余及び本省農業局関係職員 11 名に対して、本調査団はインタビュー調査を行った。その結果、全員が本プロジェクトが開始されて以降、農業・畜産省の普及サービスに係る管理能力は向上していると回答した（指標 5-3）。

プロジェクト目標 対象地域において、普及実施体制の改良と普及員の技術・知識の向上を通して、農業・畜産省が提供する普及サービスが改善される。以上の過程には、普及着手の契機を与える PaViDIA 手法をその一部とする参加型普及アプローチ（PEA）の適用が含まれる。

達成指標 1. 350 を超える村落が、PEA-PaViDIA アプローチによりマイクロ・プロジェクトを実施している。

2. 対象地域の農民の 80% が、普及サービスの改善を認識している。

以下の二つの指標の状況にみられるように、プロジェクト目標は達成されている。

目標の 350 村に対し、RESCAP 開始以来現在までに PEA-PaViDIA アプローチによるマイクロ・プロジェクトは 5 州 14 郡の 354 村で実施された（指標 1）。インパクト調査の結果（第 3.1 版）によれば、対象 3 州 1,000 戸のうち 79.5% の農家が普及サービスは改善されたと認識している（指標 2）。

3-2 評価結果の要約

(1) 妥当性：高い

- ・ 国家政策：プロジェクトはザンビア国の政策と合致しており、同政府のニーズに沿うものである。改定版第6次国家開発計画（Revised Sixth National Development Plan : R-SNDP、2013-2016）は、農業セクターの目標として、貧困層は農村部の小規模農家に集中している事実を踏まえ、リサーチ、普及サービスの拡大と分権化を通じた農業生産性の向上を強調している。
- ・ 受益者ニーズ：本プロジェクトは長期的に、小規模農家の生活の質を向上させることをめざしている。これは貧困削減に係る国家政策の目的に合致しており、最終受益者である小規模農家のニーズにも合致している。
- ・ 日本の ODA 政策：本プロジェクトは、農村開発に焦点を当てた貧困削減を目的としており、ザンビアに対する日本の国別援助計画と合致している。

(2) 有効性：高い

- ・ 適正技術の特定、研修事業やモニタリング体制の構築、展示圃場の開設など、成果のほとんどが農業・畜産省の普及体制の強化（プロジェクト目標）に貢献している。成果を構成する活動の意味がよく検討され、活動の内容は実際のニーズに合わせたものとなっている。研修やモニタリングでは対象州が拡大され、また普及員手帳（Agriculture Diary for Extension Officers : ADEOs）等の管理ツールが導入されたことにより、ニーズ合致の試みが結実するものとなった。現実に沿った活動内容がプロジェクト目標達成の程度を高めている。

(3) 効率性：高い

- ・ 当初6名体制であった長期専門家の投入は4年目以降から5名体制となった。西部州に配置された専門家ポスト（PaViDIA 実施支援）が PaViDIA の実施改善により不要となったことによる。機材供与、本邦研修等の投入は予定どおり行われた。
- ・ 適正技術の特定、研修事業やモニタリング体制の構築、展示圃場の開設、農業・畜産省管理能力の向上など、すべての成果において、活動範囲の拡大が計画され実施された。これらはマスタートレーナーの主導により行われた。一方、これらの活動拡大に対し日本側の投入は増えていない。このようなことが可能となったのは、専門家とザンビア側カウンターパート職員との意思疎通が深かったためと考える。

(4) インパクト：高いと見込まれる

- ・ 上位目標である対象郡の農家の生計向上が実現すれば大きなインパクトを与えることになるが、上位目標の発現には普及以外にもさまざまな要因が影響するので、現段階では発現の程度を数値で予測することは難しい。
- ・ 成果3でカバーされていない対象州以外のデモ実施、普及員現任研修の全国展開、農業・畜産省協同組合局による PaViDIA 実施郡への出荷支援、北部州における、Q-GIS、MS オフィス、アクセスなどのコンピュータ・ソフト・アプリケーション（ICT）研修などは、今後実施が継続し、あるいは実施段階に入れば、本プロジェクトが与えたその他のイン

パクトとなる。

(5) 持続性：高いと見込まれる

- ・政策面：改定版第6次国家開発計画（2013-2016）では、農業セクターの目標として、リサーチ、普及サービスの拡大と分権化を通じた農業生産性の向上を強調している。この政策は将来も継続すると考えられる。
- ・組織面：適正技術の特定、研修事業やモニタリング体制の構築、展示圃場の開設などの主要活動は、マスタートレーナーの主導により計画され実施されたところが多い。全省・全州をカバーするマスタートレーナー体制が構築されたことは、これらの活動を継続するうえで良い組織的条件となっている。農業・畜産省本省については、関係部局を通して普及管理体制のさらなる強化が必要である。
- ・財務面：普及予算が制限されている現状のなかで本プロジェクトは実施された。普及員の動員体制などを制限する予算不足は多年にわたり課題を与えている。この状況のなかで本プロジェクトでは、活動資金の一部をヨーロッパ連合（European Union：EU）や国際農業開発基金（International Fund for Agricultural Development：IFAD）などの協力パートナーや民間セクター等から得ている。例えば EU の活動強化計画（Performance Enhancement Programme：PEP）の財務支援を得て初任研修が実施された。これらは予算不足に対する臨時の対応策の一つを与えるものと考えられる。
- ・技術面：研修計画の作成、教材開発、適正技術特定サイクルの開発等は、マスタートレーナーや中堅職員が中心となって行われた。これらのタスクの実施に経験を積む職員が多いことから、技術面の持続性は高い。

3-3 効果発現に貢献した要因

(1) 計画内容に関すること：特になし。

(2) 実施プロセスに関すること

適正技術の特定、研修事業やモニタリング体制の構築、展示圃場の開設、農業・畜産省の管理能力の向上など、マスタートレーナーの主導により行われた。これにより活動内容への現状反映が深められ活動の持続性が高くなった。

3-4 問題点及び問題を惹起した要因

(1) 計画内容に関すること

成果5では、活動の要件定義に係る検討が不十分であった。農業・畜産省本省の普及体制管理能力を改善するために、どのようなプロジェクト活動が必要であるか、プロジェクト・デザイン・マトリックス（Project Design Matrix：PDM）では明確な情報が与えられていなかった。このため成果5の達成程度は他よりも低くなった。

(2) 実施プロセスに関すること

現任研修の研修用パッケージには畜産・水産の普及技術も含まれているが、畜産・水産分野の普及員は依然として少ない。デモやマイクロ・プロジェクトに養鶏など畜産を含め

る場合に大きな課題を与えている。

3-5 結 論

本プロジェクトでは、活動の意味や背景を問い、活動の内容を繰り返し検討することで、プロジェクトの内容を深める努力が行われた。特に研修とモニタリング体制に係る活動が対象州や関与する部局の拡大を伴ったことは、活動内容が実情に沿うようにプロジェクトの内容がよく検討され変更された結果である。農業・畜産省の普及体制を改善するうえで RESCAP が果たした役割は大きいと評価できる。以上から、本調査団は、予定どおり 2014 年 12 月にプロジェクトを終了することが適切と判断する。

3-6 提 言

(1) 国家普及戦略

国家普及戦略は普及の方向性を決める最も重要な政策であるが、現在はまだドラフトの段階である。農業・畜産省は早急に最終化を行い関係機関の承認を得るべきである。

(2) 予算確保

これまで、RESCAP の活動資金の一部は協力パートナー等から得ていたが、本来の持続性を確保するには、政府独自予算を段階的に増やすべきである。しかし、政府の財政は急には好転しないとみられるため、当面の間は他の協力パートナー等の支援を受けざるを得ないと考えられるが、中央レベルにおいては、これまでのように資金確保のモービライゼーションを日本人専門家に依存するのではなく、少なくとも農業・畜産省が独自に対応すべきである。

(3) 関係部局間の連携

本省、州、郡レベルにおいて、農業・畜産局、水産局、畜産局の連携を密にし、農作物のみならず、畜産・水産物の生産を含めた包括的な普及システムの実施体制の確立をめざすべきである。

(4) 普及員手帳 (ADEOs) の継続

ADEOs は普及員の重要なツールとなっており、ADEOs なしでは効果的な普及活動に困難を来すと考えられるため、2015 年版以降の印刷・配布を確実に行うべきである。

評価調査結果要約表（英文）

I. Outline of the Project		
Country: Republic of Zambia		Project title: Rural Extension Service Capacity Advancement Project (RESCAP)
Issue/Sector: Agriculture Development		Cooperation scheme: Technical cooperation
Division in charge : Zambia Office, JICA		Total cost: 716.7 million Yen
Period of Cooperation	R/D: 30 November 2009 Duration: December 2009 to December 2014 (5 years)	Implementation Organization: Department of Agriculture, Ministry of Agriculture and Livestock
		Supporting Organization in Japan:
Related Cooperation: Japan Overseas Cooperation Volunteer		
1. Background of the Project		
<p>Agricultural development is crucial for poverty reduction in Zambia. Of the 60.5% of its population living under the National Poverty Datum Line, 77.9% reside in rural areas. However, agricultural development has been a challenge to the small-scale farmers living in isolated areas where agricultural services became fragmented after drastic reduction of budget allocation to extension service operation in the Structural Adjustment Programme in early 2000s. Under this circumstance, the Government of Zambia requested the Government of Japan to implement a Technical Cooperation Project to alleviate rural poverty through Participatory Approach to Sustainable Village Development (PASViD), which was introduced by JICA Expert in 1999. This resulted in the implementation of the Participatory Village Development in Isolated Areas Project (PaViDIA) by the then Ministry of Agriculture and Cooperatives and Japan International Cooperation Agency (JICA) from 2002 to 2009.</p> <p>PAViDIA Project successfully introduced the practical participatory development model to the rural communities in isolated areas, but it also became evident that the structural weakness in the agriculture extension system would limit the expansion of the PAViDIA approach. Thus, the Government of Zambia requested Japan to implement another Technical Cooperation Project to strengthen the agriculture extension system.</p> <p>Responding to the request, JICA conducted the Preliminary Study in 2009 and had a series of discussions with the authorities concerned of the Government of Zambia. Both sides agreed on the framework of the project (see 2.2 below) as well as its title ‘Rural Extension Service Capacity Advancement Project-Through PaViDIA Approach- (RESCAP)’.</p>		
2. Project Overview		
(1) Overall Goal: Farmers’ quality of life is improved in the target areas.		
(2) Project Purpose:		
<p>Rural extension services provided by the Ministry of Agriculture and Livestock (MAL) are improved with the improved service delivery system, and skills and knowledge of extension officers including use of Participatory Extension Approach (PEA) -PaViDIA Approach (as an entry point) in the</p>		

target areas

(3) Outputs

Output 1: Appropriate technologies for farmers are identified in the target Districts of Northern/Muchinga Provinces.

Output 2: In-Service Training System for Extension Officers is institutionalized within MAL.

Output 3: Practical abilities of Extension Officers are improved in the target Provinces/Districts.

Output 4: Monitoring and backstopping capacity of camp/block, district and provincial level is strengthened.

Output 5: Management capacity of MAL's extension service is improved.

(4) Inputs

Japanese side:

Expert: 10 persons in total

Equipment: JPY 15 million

Local cost: JPY 160 million

Trainees received: 29 persons

Zambian side:

Counterpart: 64 persons

Local Cost: costs for driver, energy, etc.

Land and Facilities: Offices, meeting rooms and others

II. Evaluation Team

Members of Evaluation Team	Leader: Takeaki Sato, Senior Advisor, JICA	
	Holistic Analysis: Hiroataka Nakamura, Senior Advisor, JICA	
	Evaluation planning: Isaya Higa, Assistant Resident Representative, JICA Zambia Office	
	Evaluation Analysis: Toyomitsu TERA0, Fisheries Engineering Co., Ltd	
Period of Evaluation	1 September 2014 to 18 September 2014	Type of Evaluation : Terminal evaluation

III. Results of Evaluation

1. Summary of Evaluation Results

(1) Relevance: high

National policies:

RESCAP complies with the relevant national policies of Zambia and also meets the needs of the Government to execute the policies. Based on facts that poverty groups are found mostly in small-scale farmers in the rural areas, the Revised 6th National Development Programme 2013-2016 (R-SNDP) emphasizes, as objectives of the agriculture sector, to enhance productivity through expansion and decentralization of research and extension services.

Needs of beneficiaries:

In the long term, RESCAP is aimed at improvement of quality of small-scale farmers' life.

This goal meets the poverty reduction policies of the Government and also satisfies needs of farmers as the final beneficiaries.

ODA policy of the Japanese government:

RESCAP has an overall goal of poverty reduction through development of the rural areas. This complies with Country Assistance Policy for Zambia (2014).

(2) Effectiveness: high

Most of the outputs that include those of appropriate technologies, demos, training and monitoring system contributed to achievement of the project purpose – strengthening of the extension system of MAL. Meaning of the activities for these outputs was well reviewed and contents of the activities were made to be suited to the actual needs. Through expansion of the target provinces in training and monitoring, as well as introduction of ADEOs as a management tool, trials to meet the needs have become successful. The activities meeting the actual needs jacked up the extent of achievement of the project purpose.

(3) Efficiency: high

In the beginning of RESCAP, six (6) long term expert were despatched and after the 4th year, the number was reduced to five (5). This is because the expert assigned to implementation of PaViDIA Approach in Western Province became unnecessary as implementation of PaViDIA Approach had been much improved. Inputs of equipment and training in Japan were made as scheduled.

In all the outputs - those of appropriate technologies, demos, training, monitoring system and management of extension, scope of the activities were expanded and these were implemented at the initiative of master trainers. Meanwhile, it is stressed that for those expanded activities, the financial and material resources from Japan were not increased. This was made possible through deepened communication between Japanese experts and the counterpart personnel in MAL.

(4) Impacts: expected to be high

RESCAP would be able to give a great impact if it can contribute to improve farmer's livelihood as specified in the overall goal. It is however difficult at present to assess the extent of the achievement quantitatively, as the overall goal is affected by various factors other than the extension service delivery.

Other impacts attributed to the implementation of RESCAP can be counted if these are continued or can be brought to an implementation stage;

- Demos undertaken in other provinces that are not covered in Output 3
- In-service training (IST) to be conducted in 10 provinces without support by RESCAP
- Marketing support for micro projects to be planned by Cooperative Department of MAL in districts where PaViDIA are being implemented, and

- Computer software application trainings such as Q-GIS, MS Office, and MS Access in Northern Province have enabled field staff to draw maps of Camp by using computer.

(5) Sustainability: expected to be high

Policy aspect:

The Revised 6th National Development Plan 2013-2016 (R-SNDP) emphasises, as objectives of the agriculture sector, to enhance productivity through expansion and decentralisation of research and extension services. It is considered this policy will be maintained for the future.

Institutional aspect:

Main activities for appropriate technologies, demos, training, and monitoring system were structured and implemented at the initiative of master trainers. The master trainers are assigned from all the involved departments of MAL and 10 provinces. Such group of the master trainers constitutes a good institutional condition for continuing these activities. As for MAL HQ, further improvement of the management for extension service is needed over involved departments.

Financial aspect:

RESCAP has been implemented under a situation where budgets for the extension service are limited. Shortage of the budget has given challenges to mobility of the extension officers for many years. To settle the challenges, RESCAP has obtained a part of operation budgets from funding by cooperating partners and private sector. For example, the induction training was conducted with funding by PEP (EU). These can give a temporary measure to deal with shortage of budgets.

Technical aspect:

The master trainers and other experienced officers of MAL have had a leading role in preparation for plans of training, development of teaching materials, studies on cycle to identify appropriate technologies, and others. Since there are many officers experienced in undertaking these tasks, sustainability in technical aspect is high.

2. Factors that promoted materialization of effects

Most of the activities for the appropriate technologies, demos, training, monitoring system, and management of extension service were implemented at the initiative of master trainers. Through such process, the activities were able to incorporate the actual background conditions and also to develop a higher sustainability.

3. Factors that impeded materialization of effects

For Output 5, definition of requirements for the activities set out in the PDM was insufficient. It was unclear which activities were needed for improvement of MAL's capacity to manage extension services. By this reason, an extent of achievement of Output 5 was lower than other outputs.

Although training packages for the in-service training (IST) include teaching materials for livestock and fisheries, there is still a shortage of livestock and fisheries extension officers. This presents a serious challenge in case that poultry or other livestock farming is planned to include in demo or micro project for PaViDIA approach.

4. Conclusion

RESCAP gave full considerations on objectives and backgrounds behind its activities, and constantly strove to enrich its contents. The Project's ability to carefully examine and adapt its activities to the actual situations leads to the expansion of its target provinces and institutions, notably in capacity development for training and monitoring. RESCAP has played a significant role in improving the extension system of MAL, and is deemed to achieve its Project Purpose. Therefore, the Joint Evaluation Team concludes that it is pertinent that the Project be terminated in December 2014 as planned.

5. Recommendations

1. National Extension Strategy

The National Extension Strategy will be the most important policy that sets the course of the extension activities, but currently it is still in its draft stage. The strategy must be promptly finalized by MAL and approved by the Zambian Government.

2. Financing

Part of the RESCAP's activities were funded by cooperating partners, but in order to achieve true sustainability, the inputs from the Zambian government should be gradually increased. However, since the government's financial condition may not improve immediately, receiving funds from cooperating partners and other stakeholders can be considered as a necessary measure to sustain the activities initiated by RESCAP for the time being. The Joint Evaluation Team recommends that MAL Headquarters take the initiative and be able to mobilize resources without the assistance of Japanese experts.

In order to secure funds within the government when the circumstances makes it difficult to increase the overall budget, MAL should consider streamlining the ministry budget to ensure adequate resources for the extension activities.

3. Collaboration among MAL agencies

Collaboration among the Department of Agriculture, Department of Fisheries, Department of Livestock, Department of Cooperatives, and Zambia Agriculture Research Institute should be further strengthened at Headquarters as well as at Provincial and District levels, in order to establish the implementing system of comprehensive extension services that encompasses agriculture, livestock, and fisheries.

4. Continuation of ADEOs

Agricultural Diary for the Extension Officers (ADEOs) has proven to be an indispensable

tool for the extension officers to effectively and efficiently carry out their activities. Therefore, MAL should secure the timely publication and distribution of the ADEOs from 2015 onward.

第1章 終了時評価調査の概要

1-1 調査の目的

国際協力機構（以下、「JICA」と記す）と相手国の関係機関が共同で実施する技術協力プロジェクトの総合的な評価が終了時評価である。終了時評価は、協力期間終了の約半年前に実施され、終了時における目標達成の見込み、事業の効率性、今後の自立発展の見通し等の観点から、協力の実施状況の評価する。

農村振興能力向上プロジェクト（以下、「本プロジェクト」または「RESCAP」と記す）に対する本終了時評価調査の目的は以下のとおりである。

- (1) これまでのプロジェクト活動について、本プロジェクトの最新プロジェクト・デザイン・マトリックス（2012年11月5日付第7版。以下、「PDM」と記す）に基づき、実績達成のレベル、実施プロセスの適切性を検証する。
- (2) 経済協力開発機構/開発援助委員会（Organization for Economic Cooperation and Development : OECD/Development Assistance Committee : DAC）が定めた評価5項目（妥当性、有効性、効率性、インパクト、持続性）の視点から、プロジェクトの達成状況を分析する。
- (3) プロジェクト目標及び成果の達成に影響した阻害・貢献要因を抽出し分析する。
- (4) PDMに示されるプロジェクト目標及び上位目標の達成に向けて、必要な対処措置があればその提言を行う。
- (5) 他のプロジェクト及びプログラムの改善に適用可能な教訓を抽出する。

1-2 調査手法

(1) 合同評価調査

本終了時評価調査は日本及びザンビア共和国（以下、「ザンビア」と記す）の関係機関が合同して行った。合同評価調査団（以下、「本調査団」と称する）は、本プロジェクトの活動実施に直接関与していないJICAの4名及びザンビア政府農業・畜産省（以下、「MAL」と称する）の3名で構成された。調査団員の氏名、担当業務、所属先を1-3節に示す。

(2) 評価5項目による分析

本調査団は、討議議事録（R/D）（2009年11月30日署名）、PDM及び作業計画（Plan of Operations : PO）に沿って、本プロジェクトの達成状況を検討した。検討に際しては、実績報告書及び成果品の参照、現地調査及び関係機関、受益者、JICA専門家へのインタビュー調査を行った。以上の結果を踏まえ、OECD/DACの評価5項目に基づく評価分析を行った。評価5項目にいう評価視点を表1-1に要約する。

表 1 - 1 OECD 開発援助委員会の評価 5 項目

項 目	評価視点
妥当性	<p>プロジェクト実施の正当性、必要性を問う。</p> <ul style="list-style-type: none"> ・ 相手国の開発政策との整合性はあるか ・ 対象地域・社会のニーズに合致しているか ・ ターゲットグループのニーズに合致しているか ・ 日本の援助政策・JICA 国別事業実施計画との整合性はあるか ・ 相手国の対象分野・セクターの開発課題に対する効果を上げる戦略として適切か（プロジェクトのアプローチ、対象、地域などは適切な選択か）
有効性	<p>プロジェクトの効果を問う。</p> <ul style="list-style-type: none"> ・ プロジェクト目標は達成されているか（達成されるか） ・ プロジェクト成果の結果としてその達成はもたらされたか（もたらされるか） ・ プロジェクト目標に至るまでの外部条件の影響はあるか
効率性	<p>プロジェクト投入の成果への転換効率を問う。</p> <ul style="list-style-type: none"> ・ 投入はタイミングよく実施されたか ・ 投入の規模や質は適切か ・ 成果は達成されたか ・ 活動から成果に至るまでの外部条件の影響はあるか
インパクト	<p>プロジェクトの長期的、波及的効果を問う。</p> <ul style="list-style-type: none"> ・ 上位目標は達成されるか ・ 上位目標に至るまでの外部条件の影響はあるか ・ 予期しなかったプラス・マイナスの影響（波及効果も含む）はあるか ・ 上位目標の達成を貢献・阻害する要因は何か
持続性	<p>協力終了後の持続性を問う。</p> <ul style="list-style-type: none"> ・ プロジェクト目標、上位目標などのプロジェクトがめざしていた効果は、援助終了後も持続するか ・ 活動を円滑に実施するに足る組織能力があるか ・ 関連規制、法制度は整備されているか ・ 財政的に独立しているか、あるいは財政支援が継続しているか ・ 必要な技術が維持・普及されているか、資機材は適切に維持管理されているか

(3) データ収集方法と情報源

本終了時評価調査で用いられた情報の出所は以下のとおりである。

- 1) 投入、活動実績、成果の達成状況を示す実績報告書などプロジェクトが提供した資料
- 2) 関係機関、直接・間接の受益者、JICA 専門家へのインタビュー調査。インタビューを

行った関係機関・受益者は、農業普及員、郡農業調整官（DACO）、郡上級農業官（Senior Agricultural Officer : SAO）、州農業調整官（Provincial Agricultural Coordinator : PACO）、州農業官（Principal Agricultural Officer : PAO）、専門技術員（Subject Matter Specialist : SMS）、その他郡州レベルの農業局職員及び MAL 本省職員（特に農業局普及担当部門）などである。インタビューを行った受益者には小規模農家も含まれる。

3) プロジェクトサイト視察（Lusaka 州、Muchinga 州、北部州、北西部州、西部州における活動実施サイト）

1-3 調査団の構成

調査団の構成は、以下のとおり。

表 1-2 ザンビア側調査団

氏名	所属・役職
Mr. Katupa Chongo	Chief Agricultural Extension Officer, Department of Agriculture, Ministry of Agriculture and Livestock
Mr. Maketo Mubyana	Principal Cooperatives Officer-Training, Department of Cooperatives, Ministry of Agriculture and Livestock
Mr. Kondwani Gondwe	Senior Economist, Policy and Planning Department, Ministry of Agriculture and Livestock

表 1-3 日本側調査団

氏名	所属・役職
佐藤 武明（団長）	JICA 客員専門員
中村 公隆（技術団員）	JICA 国際協力専門員
比嘉 勇也（評価計画）	JICA ザンビア事務所 所員
寺尾 豊光（評価分析）	水産エンジニアリング株式会社

1-4 調査の日程

本終了時評価調査は 2014 年 8 月 31 日から 9 月 20 日の間に実施された。現地調査の訪問先には Kafue 郡（Lusaka 州）、Lukulu 郡（西部州）、Kasempa 郡及び Solwezi 郡（北西部州）、Luwingu 郡（北部州）、Chinsali 郡（Muchinga 州）が含まれる。現地調査日程の詳細を付属資料 3 に示す。

第2章 プロジェクトの概要

2-1 プロジェクトの背景

ザンビアでは、農業開発が貧困削減のうえで不可欠である。人口の60.5%が貧困ライン以下の生活を送っており、また77.9%が農村地域に居住している¹。しかしながら、構造調整に伴う2000年代初頭の普及予算の激減により、政府の農業支援体制が脆弱化した結果、遠隔地の小規模農家を対象とする農業振興に困難が伴うこととなった。

このような状況から、ザンビア政府は参加型持続的村落開発(PASViD)の実施を通じて農村部の貧困緩和を図るための技術協力を日本政府に要請した。その結果、当時の農業・協同組合省とJICAにより、2002年から2009年の間に孤立地域参加型村落開発計画(PaViDIA)が実施された(PASViD関連の活動との混同を避け、またPaViDIAの改善されたアプローチをPASViDから区別するために、新たな案件名が用いられた)。PaViDIAプロジェクトの実施を通じて、MALでは孤立地域の参加型村落の実用モデルが確立されたものの、その一方で、PaViDIAアプローチを全国に普及・展開していくうえで、農業普及体制の組織的な弱さが障害となっていることが明らかとなった。その解決のために農業普及制度強化のための技術協力が新たに要請された。

これを受け、JICAは2009年に詳細計画策定調査を実施してザンビア政府関係機関と討議を行い、2009年12月から2014年12月の5年間を協力期間とする「農村振興能力向上プロジェクト(RESCAP)」が開始された。

2-2 プロジェクトの概要

(1) プロジェクトの要約

1) 上位目標

対象地域における農家の生活の質が向上する。

2) プロジェクト目標

対象地域において、普及実施体制の改良と普及員の技術・知識の向上を通して、農業・畜産省が提供する普及サービスが改善される。以上の過程には、普及着手の契機を与えるPaViDIA手法をその一部とする参加型普及アプローチ(PEA)の適用が含まれる。

3) 成果

成果1: 北部州及びMuchinga州の対象郡において、農家のための適切な技術が特定される。

成果2: 普及員の研修制度が確立する。

成果3: プロジェクト対象地域の普及員の実践的な普及サービス能力が強化される。

成果4: キャンプ/ブロック、郡、州による活動のモニタリング及び支援能力が強化される。

成果5: 農業・畜産省の普及サービス管理能力が強化される。

¹ Central Statistical Office. 2012. *Living Condition Monitoring Survey Report 2006 & 2010*

(2) 実施機関

責任機関：農業・畜産省（Ministry of Agriculture and Livestock：MAL）

実施機関：農業局（Department of Agriculture：DOA）

(3) 協力期間

2009年12月から2014年12月（5年間）

第3章 プロジェクトの実績と実施プロセス

本調査団は、投入、成果やプロジェクト目標の達成指標など RESCAP の達成状況及び実施プロセスを検討した。検討の結果は以下のとおりである。

3-1 投入

3-1-1 日本側投入

日本側の主な投入を以下に挙げる。詳細は付属資料2の合同評価報告書添付資料2から4に示す。

(1) 専門家の派遣

長期専門家が6分野及び短期専門家が3分野において派遣された。詳細を次表に示す。

表3-1 長期専門家

No.	業務分野	氏名	派遣期間
1	チーフアドバイザー・組織管理	大野 政義	2010年6月17日～ 2014年12月14日
2	モニタリング・参加型農家活動促進	三好 崇弘	2010年1月28日～ 2014年11月30日
3	農業普及	佐々木 剛一	2010年1月1日～ 2014年10月31日
4	適性農業技術	奈良部 辰雄	2010年1月18日～ 2014年11月30日
5	業務調整・研修管理	長谷川 朋子	2009年12月15日～ 2011年12月14日
		浅田 博彦	2011年11月21日～ 2014年12月14日
6	西部州プロジェクト管理	白石 健治	2010年2月25日～ 2013年2月24日

表3-2 短期専門家

No.	業務分野	氏名	派遣期間
1	森林資源を用いた営農・養蜂	石塚 武夫	2011年1月8日～ 2011年2月8日
2	農業普及研修	大野 康雄	2012年1月10日～ 2012年2月21日
3	キノコ栽培	加藤 通明	2012年3月1日～ 2012年3月24日

(2) 現地業務費

プロジェクト開始時から終了時まで、JICA が負担することとなる現地業務費（在外事業強化費）は ZMW（ザンビア・クワチャ）9,631,206.11（約 1 億 6,000 万円）と集計される。内訳詳細を付属資料 2 の合同評価報告書添付資料 2 に示す。

(3) 供与機材

供与された機材は 4 輪駆動車両 3 台、コピー機、スキャナー、コンピュータなどである。詳細を付属資料 2 の合同評価報告書添付資料 3 に示す。

(4) 本邦研修

カウンターパート要員 29 名が JICA により実施された本邦研修を受講した。詳細を付属資料 2 の合同評価報告書添付資料 4 に示す。

3-1-2 ザンビア側投入

ザンビア側の投入は以下のとおりである。詳細を付属資料 2 の合同評価報告書添付資料 5 に示す。

(1) マスタートレーナーなどのカウンターパートの配置

プロジェクトを実施し活動を管理するために、MAL 本省、対象州及び対象郡などからマスタートレーナーなどのカウンターパート要員が配置された。人員の内訳詳細を付属資料 2 の合同評価報告書添付資料 5 に示す。

(2) 供与施設など

以下の専門家執務スペース及び役務が MAL から供与された。

表 3-3 MAL により供与された施設及び役務

場 所	施設・役務内容
本省（Lusaka 市内）	執務スペース
Lusaka 州	執務スペース
北部州（Kasama 郡）	執務スペース及びプロジェクト車両の運転手（2013 年 11 月以降）
西部州（Mongu 郡）	執務スペース（2013 年 2 月まで）

3-2 成果の達成状況

各成果の内容を以下に要約する。

成果 1：北部州及び Muchinga 州の対象郡において、農家のための適切な技術が特定される。

RESCAP でいう「適切技術」は、技術面のみならずコスト面でも小農が対応できる解決策であり、地元で入手可能な資源を使うことにより、小農の選択肢を広げ、生産性や効率性を増す技術

を指している。新作物/新技術の農家への紹介が普及サービスの柱と位置づけられ、普及活動により提供される新作物/新技術コンテンツを特定することが成果1のめざすところとなった。

農業局（DOA）とザンビア農業研究所（Zambia Agriculture Research Institute：ZARI）の連携を強化することも成果1の目的に含まれており、そのなかで農家のニーズや地域の潜在的可能性に基づいて、普及員が適正技術を自ら特定することを可能とするような仕組みやプロセスを開発する試みがなされた。

成果2：普及員の研修制度が確立する。

1999年以降は、MALとして体系的な研修を行うための予算も能力もなかった。そのため、成果2ではまず普及員への研修機会の提供のため、対象地域の州・郡レベルでの現任研修を実施し、それと並行して国レベルの体系的な研修制度の構築が進められた。

成果3：プロジェクト対象地域の普及員の実践的な普及サービス能力が強化される。

適性技術の特定と研修による普及員の能力向上とが展示圃の設置などデモの実施を通じて連結されるのが成果3と、RESCAPでは考えている。成果1の適正技術と成果2の研修が上位目標である農家の生活生計向上に向けて直結することから中核的な成果でもある。

成果4：各レベルにおける活動のモニタリング及び普及員への支援能力が強化される。

現場（キャンプ/ブロック）から州に至る組織全体としての普及サービスの品質向上のためには、普及活動の結果を把握し（モニタリング）、さらなる改善につなげる（フィードバックなどの支援）ための仕組み（Plan Do See）づくりが必要となる。すなわち、モニタリングにとどまらず普及活動全体の管理を自律的に行えるようにすることが成果4とされた。

成果5：農業・畜産省の普及サービス管理能力が強化される。

現場から郡・州レベルの活動を改善（成果4）していくだけでは抜本的な問題解決にはつながらない。事実、包括的な普及戦略が存在しないことや小規模農家が単に耕作面積ベースで定義されるなど、普及サービス提供の対象や方法が定まっていない状況が当初みられた。そのため、国レベル（本省）における普及活動全般の方向を定め、管理能力を強化することが成果5の目的とされた。

以上の5件の成果にみられる達成の状況を以下に要約する。

(1) 成果1の達成状況

成果1

北部州及び Muchinga 州の対象郡において、農家のための適切な技術が特定される。

指 標

対象地域において、10件を超える適正技術及び適切な作物・品種が確認され、マニュアルとして取りまとめられる。

成果1は達成された。2014年5月までに、対象州の農業局及び農業試験場の職員により、

14 種類の作物や適正技術が特定された（表 3-4 参照）。また、特定された各技術の内容及び特定に至る技術的プロセスは、以下のマニュアルに取りまとめられた。

- Pilot Demonstration Implementation Guideline
- Northern Province Crop Recommendation
- Appropriate Technology Manuals
- Progress Report on Pilot Demonstrations from 2010 to 2013
- Pilot Demo Log Sheet

適正技術は専門家とカウンターパートの協議により提案された 40 数種類の候補から、パイロットデモの結果を基に四つの視点 innovative, effective, feasible and influential で評価して特定した。また特定のためのプロセスは上掲の「ガイドライン」として整備された。ガイドラインに基づき、新しいパイロットデモが郡の農業局の主体的な提案により開始されている。これらには畜産・灌漑技術が含まれており、今後新たに適正技術として特定されることが見込まれている。

表 3-4 プロジェクト実施中に特定された適正技術

	適正技術	分類
1	ラインマーカーによる条植え（陸稲、シコクビエ）	農機具による生産性の向上
2	水田除草機の導入	農機具による労力低減
3	ゴマの新品種と搾油技術導入	新作目・新技術の導入
4	インゲンマメの新品種導入	新品種（高収量品種）の導入
5	マメ科植物（サンヘンプ）を利用した在来土壌肥沃農法の改善	緑肥植物による生産性の向上
6	シコクビエの新品種と焼畑農業脱却	新品種（高収量品種）の導入、環境保全農業（焼畑から常畑）
7	雨期トマト栽培（JOCV 協働）	新栽培手法の導入
8	キノコ栽培（JOCV 協働）	新作目の導入
9	森林資源を利用した養蜂技術（JOCV 協働）	新技術の導入
10	水力製粉（ガッターリ）	農家の労力低減
11	自生植物テフロシアの殺虫剤及び家畜用殺ダニ剤としての応用	自生植物の利用による生産性の向上
12	ジャガイモの新品種導入（灌漑栽培）	新品種（高収量品種）の導入
13	カラシナの新品種導入	新品種（高収量品種）の導入
14	自生植物ティソニアの緑肥利用	自生植物の利用による生産性の向上

JOCV : Japan Overseas Cooperation Volunteer（青年海外協力隊）

適正技術のうち、養蜂と稲作関連農機具のパイロットデモについては、国際 NGO の野生動物保護協会（Wildlife Conservation Society）が支援している非営利企業、Community Markets for Conservation（COMACO）と連携し、Chinsali 郡において技術情報の交換や研修への講師

派遣等を行ってきた。また、雨よけトマト（トマトの雨期栽培）、養蜂、キノコ栽培技術については、JOCV 及び「コメを中心とした作物多様化推進プロジェクト」（Food Crop Diversification Support Project Focusing on Rice : FoDiS-R）との連携を行っている。国際農業開発基金(IFAD)支援の小規模農家生産性向上プログラム(Smallholders Productivity Promotion Programme : S3P) やフィンランド政府支援の Luapula 州農業農村開発計画フェーズ II (Project for Luapula Agriculture and Rural Development II : PLARD II) など、Luapula 州で実施される農業開発プロジェクトとの技術情報の共有・交換も検討されている。

(2) 成果 2 の達成状況

<p>成果 2 普及員の研修制度が確立する。</p>
<p>指 標 2-1 普及員研修の枠組みが開発される。 2-2 講師養成研修、新人普及員研修、現職普及員研修のための研修プログラムが農業・畜産省（農業局）によって計画・実施される。 2-3 本省及びすべての州から、20 名を超える職員が講師となる。</p>

成果 2 は達成された。普及員研修の体系化については、現任研修だけではなく、導入（新任）研修や管理職研修まで含む研修体系として整備された（指標 2-1）。対象州での普及員現任研修及び講師研修の実施を通じて、研修教材のパッケージ及び講師向けガイド（Training Resource Guide）が整備された。新人普及員研修は農業・畜産省の強い要望もあり、開発中のパッケージを活用して全国 10 州で実施された。これにより新任研修用のパッケージも作成された（指標 2-2）。研修講師の中核となるマスタートレーナーは、全国 10 州より選定され、延べ 52 名が任命された（指標 2-3）。

プロジェクト目標達成に向けて果たす成果 2 の貢献の意義は大きい。研修制度は対象州での現任研修の実施から得られた経験に基づいて構築されており、普及員とその業務をとりまく現実の条件が反映されている。また、研修教材作成、講師育成、各種の研修実施など、研修制度の開発はすべて MAL の職員の手により行われている。

普及員現任研修は、プロジェクトが 2010 年に実施したニーズアセスメント調査（Needs Assessment Survey : NAS）の結果を基に、2011/2012 の農期の前から対象 3 州において開始された。Lusaka 州で 4 回受講者 80 名、北部州で 14 回受講者 444 名、西部州で 14 回受講者 301 名であった。州ごとに、交通の便、講師の有無、研修所施設などの状況が異なっていたため、研修はその州の事情に合わせて行われた。

対象州で普及員研修を実施し、研修実施における課題がある程度明らかになった時点で、プロジェクトは体系的な研修制度の構築に取りかかった。研修制度の構築に際してはカスケードモデルが採用された。その理由として、現職普及員研修の対象者が多く（本調査実施時点では全国で 1,800 名）、中央レベルでの集合研修や限られた上級講師複数名が全国・全郡を巡回研修するのは予算的に実施が難しいことが挙げられた。ただし、カスケード式で効果的かつ質の高い普及員能力強化を実施するためには、州や郡で十分な数の高い能力をもった講師を育成することが鍵となるため、講師研修（Training of Trainers : ToT）を充実させること

及び教材開発（Training Resource Guide）が必要であるとされた。そのため、州や郡の経験のある中堅職員を集めた州を越えた活動が提案され、マスタートレーナーを任命することが決まった。

マスタートレーナーは 2012 年に本省職員含め 20 名で発足し、2014 年には州レベルにおける研修運営強化のため州平均 3 名となるように追加任命が行われ、本省各局の職員を合わせて 45 名体制となった。2012 年から 2013 年にかけては、教材開発及び研修パッケージづくりのため、マスタートレーナーは州を越えた活動を行ってきた。成果 2 の活動にとどまらず、成果 4 や 5 の活動においても中心的な役割を担うようになっている。

講師研修（ToT）は、まず対象州 3 州で 2 回ずつ実施された。1 回目の講師研修は主に講師の知識の底上げを目的とし、普及員研修の内容を、講師となる職員の理解度の向上を目的に実施された。2 回目の講師研修は、実践的な講義のプレゼンテーション力に重点を置き、実習と講義両方を実習形式として行った。講師研修は 2014 年に対象州以外の 7 州でも実施された。

新任研修の全国実施は、2009 年のプロジェクトの計画当初では想定されていなかったが、農業局長からの強い要請もあり、マスタートレーナーが中心的役割を担い全国 10 州 300 名の新人職員（そのうち農業普及員は 220 名程度）に対して 4 日間の新任研修が行われた。費用の主たる部分はヨーロッパ連合（EU）が支援する MAL の活動強化プログラム（PEP）により負担された。

以上の活動を通じて、新任研修、管理職研修、技術研修など、研修の種類、研修対象者と目的及び年次別サイクルなど、MAL 全部局を対象とした普及研修体系の枠組みが構築された。

(3) 成果 3 の達成状況

成果 3 プロジェクト対象地域の普及員の実践的な普及サービス能力が強化される。
指標 3-1 対象地域において、研修を受講した普及員のうち、80%を超える普及員の実践能力が向上する。 3-2 北部州及び Muchinga 州において、70%を超えるキャンプ/ブロック普及員が、2013/2014 年の農期に最低 5 カ所の展示圃（デモ）を設置する。 3-3 北部州及び Muchinga 州において、2013/2014 年の農期に、30%を超えるデモにおいて適正技術が適用される。

以下の指標達成の状況にみるように成果 3 は達成されている。2014 年 8 月時点で、計 13 回の現任研修でチェックテストを実施し、延べ 342 名の受講者のうち、289 名（84.5%）で研修内容の理解度向上が確認された。20～100 問の理解度チェックテストが研修の初日と最終日に同じ問題で実施され、研修による理解の向上が確認された。向上率は前後で点数が改善された受講者数の全受講者数に占める割合により計算された（指標 3-1）。

2013/2014 年の農期（2013 年 10 月から 2014 年 3 月ごろに至る雨期）に、対象郡で 400 を超えるデモ（展示圃）が設置された。北部州では、1 人の普及員が最低 5 カ所（5 種類）のデモを設置することが指導され、72%の普及員が 5 カ所以上のデモを設置した。そのうち 9

つの Camp では 10 カ所以上のデモを設置しており、最も多かった Camp は Chinsali 郡の FTC Camp で、18 カ所のデモを設置している（指標 3-2）。

2013/2014 年の農期では、次表に示されるように、デモ総数に占める適正技術の割合は、平均して 5 割を超えている（指標 3-3）。

表 3-5 適正技術デモの設置割合

郡（Camp 数）	デモ総数	適正技術デモ数	割合（％）
Chinsali（17）	131	77	58.8
Siwangandu（9）	26	18	69.2
Kaputa（4）	39	23	59.0
Nsama（6）	50	23	46.0
Luwingu（13）	93	51	54.8

出所：RESCAP、2014 年 9 月

RESCAP による投入資材の支援を受けていない北部州対象郡以外の地域においても、デモの実施が広がっている。北部州では一連のサイクルを実施するためデモの投入資材の支援も行ってきたが、それらの投入を行わなかった Lusaka 州及び西部州では、独自の投入資材を確保しデモを実施した。

(4) 成果 4 の達成状況

成果 4 キャンプ/ブロック、郡、州による活動のモニタリング及び支援能力が強化される。
指 標
4-1 対象地域の州、郡レベルにおいて、規格化された様式による報告書の提出を行うキャンプ/ブロック普及員の割合が 90%を超える。
4-2 対象地域のキャンプ/ブロック普及員が郡の職員から報告に対するフィードバックを受ける。
4-3 実施中のマイクロ・プロジェクトのモニタリングが、郡のモニタリング活動のなかに組み込まれ適切に報告される。

成果 4 はおおむね達成された。対象郡の普及員による 2009 年の報告書提出率は約 20%であった。2014 年 8 月の報告書の提出率は 81%までの増加をみた。終了時評価の時点では指標の 90%を満たしていないものの、プロジェクト終了までには達成可能と考えられる（指標 4-1）。本件で特筆すべきことは、それまで関係者間でばらばらであったフィードバックの概念が統一され、報告書提出チェックリストのなかに視覚化されたことである。その結果として、本プロジェクトにより実施されたインパクト調査²（第 3.1 版）によれば、78%の普及員が定期的にフィードバックを受けるようになった（指標 4-2）。

PaViDIA アプローチにより実施されているマイクロ・プロジェクトのモニタリングは、既にガイドラインのなかで指示が出され報告書書式にも反映されている。したがって普及員の報

² ‘Impact Assessment Survey of RESCAP’、2014年3月から6月にかけて対象3州で実施。調査結果は2014年9月時点で第3.1版に取りまとめられている。

報告書の提出率が高レベルに維持されることにより、マイクロ・プロジェクトのモニタリングも達成できる（指標 4-3）。

以下の各事項にみるように、郡レベルのモニタリング体制は従前と比べ大いに強化されている。報告書提出率も従前の低率から大幅に改善された。PDM に示される活動をそのまま行うのではなく、その掘り起こしが丹念になされている。モニタリング体制強化への RESCAP の貢献は大きいといえる。以上から成果 4 はおおむね達成されたと判断した。

1) 普及マネジメントサイクルの提案

本プロジェクト実施以前の段階では、普及サービスのモニタリングは体系的に実施されていなかった。そのため本プロジェクトにより普及マネジメントサイクルが提案された。提案の内容は、毎年 6 月から 8 月に、郡、州、全国レベルで開催される農業展示会（Agriculture Show）を起点とした農業カレンダーに沿って、普及事業の年間計画を Plan-Do-See サイクルで考えるものであった。

2) マネジメントツールの開発と適用

普及マネジメントの実践のために、各種マネジメントツールが北部州の対象郡をモデルとして開発された。上記の普及マネジメントサイクルとこれらツールは、「Extension Management Guide」としてマニュアルに整理された。その後、第 6 回マスタートレーナーワークショップで全国に導入すべきツールがマスタートレーナーにより選択され、2014 年の全国郡上級農業官（SAO）研修を通じて全州全郡へ展開された。その後広く採用されたツールには、普及員手帳（ADEOs）、報告書提出チェックリスト及び報告書ファイリング、郡/ブロックミーティングの実施などが含まれた。

3) フィードバック方法の確立

普及員が提出する報告書に対して SAO が行うフィードバックの方法が検討され実施に移された。例えば、フィードバックのための連絡手段として、電話、SMS（ショートメッセージ）、レター、郡ミーティング、キャンプ訪問の 5 つが特定され共通認識が醸成された。フィードバック実施の有無に係る項目はレポート提出のチェックリストに含められ、報告書を受け取ったあとに行うべきことが明確にされた。

4) レポート様式の統一

普及員の報告書様式が統一された。北部州対象郡において実施された試行のあと、その様式を基に農業局としての統一様式が作成され、また普及員手帳に掲載されて全普及員に周知された。マイクロ・プロジェクトの報告と一般普及の報告との統合が図られ、PaViDIA 実施郡の四半期報告書にマイクロ・プロジェクトの実施状況を記述することが郡職員に推奨された。

5) SAO 研修と郡普及戦略

普及活動の予算不足もさることながら、郡レベルで普及事業を管理する SAO の管理能力と実践的知見に不十分なところがあり、郡における普及管理が効果的にできていない

状況があった。これを改善するために、2013年11月から2014年5月にかけて、全国103郡を対象に、郡管理職研修（SAO研修）が5日間にわたり州ごとに実施された。研修目的は、①業務内容と役割の再確認、②郡レベルでの管理職マネージャーとして必要な知識（国家政策、農業政策、普及行政の枠組み、普及員・施設・機材管理等）の習得、③郡普及戦略の作成方法の3つであった。以上のSAO研修はEU支援のPEP及びIFAD支援のS3Pから財務支援を受けて実施された。

(5) 成果5の達成状況

<p>成果5 農業・畜産省の普及サービス管理能力が強化される。</p>
<p>指 標</p> <p>5-1 国家普及戦略が策定され、承認される。 5-2 普及サービス調和化の体制が確立される。 5-3 対象地域（州・郡）及び農業・畜産省本省（農業局）において、80%を超える職員が、同省の普及活動に係る管理能力は改善されたと感じている。</p>

成果5では、農業局コミュニケーションの促進、官民連携及びNGO連携の推進、Farmer Register 支援、既存資源の棚卸しなどを通じて、MALの普及サービス管理能力の改善が図られた。以上の活動は、ほぼ完了しており、プロジェクト終了までには達成される見込みである。中間レビューで開始の遅れが指摘されていた国家普及戦略の策定についても、日本で技術研修を受けたMALのカウンターパートが主導となって策定を推進している。既に第1次ドラフトが完成しており、関係者との意見交換会の実施に時間を要するが、遅くとも2015年には正式に採択される見通しである。

1) 普及戦略策定

関係者との協議により、水産や畜産を含めたMAL全体の普及活動を網羅した「国家普及戦略」の策定支援を行うことになった。国家普及戦略は、MAL次官の指示で各局局長が任命したシニアスタッフがメンバーで構成される策定委員会により策定される。委員会はこれまでに3回開催され、国家普及戦略のドラフト第1版が作成された。今後、民間会社、NGO等の関係者との意見交換会を経て、最終版が完成・採択される。

2) 農業局コミュニケーションの促進

農業局の部内コミュニケーションの促進のためさまざまな措置が講じられた。例えば、普及担当部署（Advisory Service Branch）の定期会議開催と農業局年次会合開催、州から本省への四半期、年次報告書の提出率の改善、メーリングリスト作成支援、ファイル共有システムの活用、本プロジェクト及びMALウェブサイトの活用などである。

3) 官民連携及びNGO連携の推進

普及サービス提供のための官民連携及びNGOとの連携の促進に向けて、普及サービス調和委員会の開催支援、「小規模農家のための普及サービス提供に係る一般ガイドライン

(2013年3月)」の作成、同ガイドラインのパイロット実施支援、PEPとの連携による普及サービス調和フォーラムの開催支援、普及員手帳（ADEOs）印刷のための民間企業協賛の取り付け等が講じられた。

3-3 プロジェクト目標の達成状況

プロジェクト目標

対象地域において、普及実施体制の改良と普及員の技術・知識の向上を通して、農業・畜産省が提供する普及サービスが改善される。以上の過程には、普及着手の契機を与える PaViDIA 手法をその一部とする参加型普及アプローチ（PEA）の適用が含まれる。

指 標

1. 350 を超える村落が、PEA-PaViDIA アプローチによりマイクロ・プロジェクトを実施している。
2. 対象地域の農民の 80% が、普及サービスの改善を認識している。

以下の2つの指標の状況にみられるように、プロジェクト目標は達成されている。

- ① 目標の 350 村に対し、RESCAP 開始以来現在までに PEA-PaViDIA アプローチによるマイクロ・プロジェクトは 5 州 14 郡の 354 村で実施された（指標 1）。
- ② インパクト調査の結果（第 3.1 版）によれば、対象 3 州 1,000 戸のうち 79.5% の農家が普及サービスは改善されたと認知している（指標 2）。

本プロジェクトでは、活動の意味や背景を十分に確認し、設計当初よりも活動の内容を深める努力が行われた。研修（成果 2）とモニタリング体制（成果 4）に係る活動は、対象州や関与する MAL の部局の拡大を伴った。これは、活動内容が MAL の組織現状に沿うように繰り返し検討された結果、そのような拡大に至ったものである。例えば、全国 300 名余（農業普及員 220 名を含む）の MAL 新任職員に対する研修は、マスタートレーナー主導で研修内容が決められ実施されたこと、1999 年以来長期間中止されていた全省新任研修を復活できたこと等において、大きな意義をもつ。このように、2つの指標が要求する以上に、MAL の農村普及の体制や内容は改善されたといえる。

本プロジェクト（RESCAP）の活動は通常の実施サービスの強化であった。加えて、PaViDIA アプローチの実施に対しても、RESCAP は以下の観点で助力になっている。

- ・デモの実施：新しい村において行うデモ（展示圃など）は村へのアクセスを与える。PaViDIA と密接な連携によりデモが行われた。
- ・報告書チェックリストの導入：通常の実施サービスに加えて、PaViDIA アプローチのマイクロ・プロジェクトのモニタリングとフィードバックも同様に改善される。
- ・普及員能力向上：PaViDIA アプローチの促進やその実施段階での技術指導が可能となり、マイクロ・プロジェクトの有効性が増加する。

3-4 上位目標の達成状況

上位目標

対象地域における農家の生活の質が向上する。

指標

対象州において実施される世帯特性と営農に係る調査により聴取された 1,000 人の農家のうち、少なくとも 70% に社会経済的條件の改善がみられる。

現時点では、対象地域の農家の社会・経済状況の好転や生活の質の向上を確証できる情報は得られていない。しかし、普及サービスの改善が本調査やインパクト調査等で確認されていること、また本プロジェクトによって MAL の体制強化やそれに必要な MAL 側関係者の意識改善がなされていることから、上位目標は達成可能と判断される。

なお、本プロジェクトが実施したインパクト調査（第 3.1 版）によれば、対象郡では、平均的農家の生計は農業所得だけに依拠しておらず、小売り販売、臨時雇い給与など、その生計源は多様である。普及サービスの実施が農家の生計向上にどうつながるか、インパクト調査によれば、その因果関係は単純ではない。MAL 職員のなかには、普及サービスの実施が農家の生計向上に直結するものにとらえている者が多いが（付属資料 4 参照）、上位目標の達成状況を確認する際には、インパクト調査の結果にかんがみて、慎重な分析・検討を行うことが求められる。

3-5 実施プロセス

(1) 本プロジェクトでは、単に計画どおりに活動を実施するのではなく、包括的な視点から活動の目的や意義を認識し、臨機応変に調整や改善が行われた。その結果、活動はより現状及び対象者のニーズに即したものとなり、当初の見込み以上の成果を達成している。特に、研修及びモニタリング体制の改善に係る活動については、対象となる州や部局が R/D で設定されたマスタープランの範囲を大きく超える結果となった。また、これらの活動内容の検討がもっぱらマスタートレーナー主導で実施されたことは、本終了時評価の 5 項目評価にも重要な意味を与えている。

(2) RESCAP は、当初対象とされていた PaViDIA アプローチだけに特化せず、それ以外の普及アプローチ（例えばデモ）も対象に含めて組織強化を図ったが、これはプロジェクト目標の達成につながる妥当な判断であった。

また、RESCAP は PaViDIA アプローチを「エントリーポイント」と位置づけ、主眼は MAL の能力強化に置いていたが、その結果として RESCAP によるデモの実施、モニタリング強化、普及員能力向上等の成果は PaViDIA アプローチの普及にも大きく貢献することとなった。

(3) Department of Agriculture（これとは別に Department of Livestock Development がある）が実施機関であったためか、成果 1 にいう北部州の適正技術には、殺ダニ剤として用いるテフロシア（Tephrosia）の栽培を除き、畜産分野の技術は含まれなかった。一方、PaViDIA アプローチのマイクロ・プロジェクトには畜産が多数含まれている。その後、全国展開をめざした現職普及員研修用のパッケージには畜産・水産の普及技術も含まれるに至ったが、デモに養鶏など畜産を含める場合は、畜産普及員をリソース要員として使えるかが依然として大きな課題となっている。

(4) 成果 5 では、MAL 本省の普及体制管理能力の改善が図られた。成果 5 の達成ためにどのような活動が必要なのか、PDM では明示されていなかったが、これは、当初 MAL 本省のニーズが判然としなかったためと考えられる。その後プロジェクトの活動を通して、MAL 本省が有効な管理を行うには、現下の状況や問題所在の認識、実施計画の策定、普及員の動員に必要なリソースの確保、さらにそれらのモニタリング・評価の実施、といった分野の能力強化が必要であることが明らかになった。これらの要件定義について、2009 年のプロジェクト設計の際には検討が不十分であったことが、国家普及戦略の策定の遅延などをもたらす一因になったとも考えられる。

3-6 中間レビュー調査時の提言への対応

中間レビュー調査でなされた提言に対して後半期間で実施された対応については、付属資料 2 の合同評価報告書添付資料 6 を参照のこと。

第4章 評価5項目による分析

4-1 妥当性：高い

(1) 国家政策

プロジェクトはザンビア国の政策と合致しており、同政府のニーズに沿うものである。改定版第6次国家開発計画（R-SNDP 2013-2016）は、農業セクターの目標として、貧困層は農村部の小規模農家に集中している事実を踏まえ、リサーチ、普及サービスの拡大と分権化を通じた農業生産性の向上を強調している。

(2) 受益者ニーズ

本プロジェクトは長期的に、小規模農家の生活の質を向上させることをめざしている。これは貧困削減に係る国家政策の目的に合致しており、最終受益者である小規模農家のニーズにも合致している。

(3) 日本の ODA 政策

本プロジェクトは、農村開発に焦点を当てた貧困削減を目的としており、ザンビアに対する日本の国別援助計画と合致している。

4-2 有効性：高い

適正技術の特定、研修事業やモニタリング体制の構築、展示圃場の開設など、成果のほとんどが MAL の普及体制の強化（プロジェクト目標）に貢献している。成果を構成する活動の意味がよく検討され、活動の内容は実際のニーズに合わせたものとなっている。研修やモニタリングでは対象州が拡大され、また ADEOs 等の管理ツールが導入されたことにより、ニーズ合致の試みが結実するものとなった。現実に沿った活動内容がプロジェクト目標達成の程度を高めている。

例えば新任研修（全国研修は当初計画には含まれていなかった）の実施意義をみると、全国 300 名余（農業普及員 220 名を含む）の MAL 新任職員に対する研修は、1999 年以来長期間中止されていた全省新任研修を復活できたこともさることながら、新たに開発・構築された研修パッケージや講師陣により、全 10 州を対象とした研修が可能な体制となったこと、すなわち MAL には従前なかった普及体制の一角が構築されたことに意味がある。以上は RESCAP の有効性を高めた大きな要因である。同様に普及員手帳（ADEOs）等の管理ツールの導入にも意義が見いだせる。

4-3 効率性：高い

当初 6 名体制であった長期専門家の投入は 4 年目以降から 5 名体制となった。西部州に配置された専門家ポスト（PaViDIA 実施支援）が PaViDIA の実施改善により不要となったことによる。機材供与、本邦研修等の投入は予定どおり行われた。

適正技術の特定、研修事業やモニタリング体制の構築、展示圃場の開設、MAL 管理能力の向上など、すべての成果において、活動範囲の拡大が計画され実施された。これらはマスタートレーナーの主導により行われた。一方、これらの活動拡大に対し日本側の投入は増えていない。このようなことが可能となったのは、専門家とザンビア側カウンターパート職員との意思疎通が深かったためと考える。

新任研修は EU 支援の PEP との連携により行われ大幅なコスト低減が可能となった。全国 103 郡の SAO 研修も PEP と IFAD 支援の S3P による財務支援を受けた。また、北部州におけるデモの実施に際しては、日本の技術協力である FoDiS-R（稲作）、T-COBSI（Technical Corporation for Community Based Smallholder Irrigation：小規模灌漑）及び JOCV とのサイト共有などの連携が行われコスト低減と情報交換に資された。

4-4 インパクト：高いと見込まれる

上位目標である対象郡の農家の生計向上が実現すれば大きなインパクトを与えることになるが、上位目標の発現には普及以外にもさまざまな要因が影響するので、現段階では発現の程度を数値で予測することは難しい。

成果 3 でカバーされていない対象州以外のデモ実施、また、普及員現任研修の全国展開、MAL 協同組合局による PaViDIA 実施郡への出荷支援、北部州における、Q-GIS、MS オフィス、アクセスなどのコンピュータ・ソフト・アプリケーション（ICT）研修などは、今後実施が継続し、あるいは実施段階に入れば、本プロジェクトが与えたその他のインパクトとなる。

4-5 持続性：高いと見込まれる

(1) 政策面

改定版第 6 次国家開発計画（2013-2016）では、農業セクターの目標として、リサーチ、普及サービスの拡大と分権化を通じた農業生産性の向上を強調している。この政策は将来も継続すると考えられる。

(2) 組織面

適正技術の特定、研修事業やモニタリング体制の構築、展示圃場の開設などの主要活動は、マスタートレーナーの主導により計画され実施されたところが多い。全省・全州をカバーするマスタートレーナー体制が構築されたことは、これらの活動を継続するうえで良い組織的条件となっている。MAL 本省については、関係部局を通して普及管理体制のさらなる強化が必要である。

(3) 財務面

普及予算が制限されている現状のなかで本プロジェクトは実施された。普及員の動員体制などを制限する予算不足は多年にわたり課題を与えている。この状況のなかで本プロジェクトでは、活動資金の一部を EU や IFAD などの協力パートナーや民間セクター等から得ている。例えば、RESCAP による普及員の初任研修は、EU による PEP の財務支援を得て実施された。プロジェクト終了後も、当面のところは他ドナーの支援がつくことで活動の展開・持続の見込みは高い。他方、長期的には、ザンビア側による十分な予算手当てが課題となる。

(4) 技術面

研修計画の作成、教材開発、適正技術特定サイクルの開発等は、マスタートレーナーや中堅職員が中心となって行われた。これらのタスクの実施に経験を積む職員が多いことから、技術面の持続性は高い。

4-6 効果発現に貢献した要因

(1) 計画内容に関すること

特になし。

(2) 実施プロセスに関すること

適正技術の特定、研修事業やモニタリング体制の構築、展示圃場の開設、MALの管理能力の向上など、マスタートレーナーの主導により行われた。これにより活動内容への現状反映が深められ活動の持続性が高くなった。

4-7 問題点及び問題を惹起した要因

(1) 計画内容に関すること

成果5では、活動の要件定義に係る検討が不十分であった。MAL本省の普及体制管理能力を改善するために、どのようなプロジェクト活動が必要であるか、PDMでは明確な情報が与えられていなかった。このため成果5の達成程度は他よりも低くなった。

(2) 実施プロセスに関すること

現職普及員研修用パッケージには畜産・水産の普及技術も含まれているが、畜産・水産分野の普及員は依然として少ない。これは、デモやマイクロ・プロジェクトに養鶏や魚類養殖などを含める場合の制限要因となり得る。

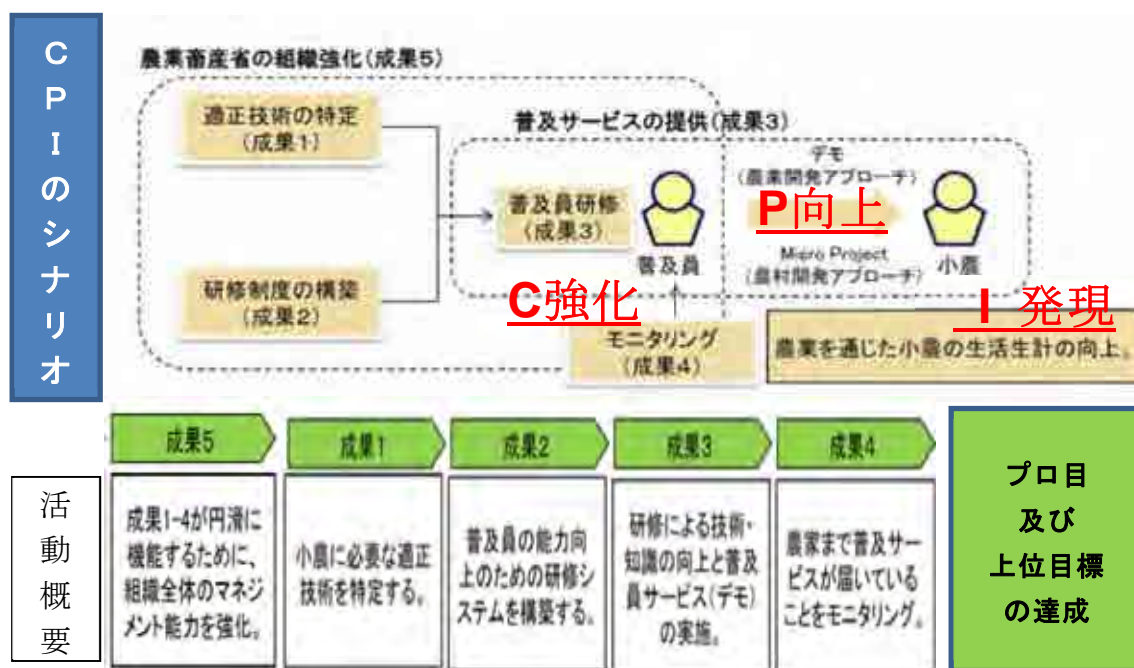
第5章 RESCAPが行ったMALのキャパシティ・ディベロップメントに関する考察

5-1 プロジェクトの協カコンセプトとめざしたモデル

RESCAPは「キャパシティ・ディベロップメント」のコンセプトに基づき、「Capacity, Performance, Impact (CPI) モデル」による「対象地域の農家の生活の質の向上」をめざしたプロジェクトである。

RESCAPのPDMは、2000年代よりJICA及び国連開発計画（UNDP）、EU等の開発パートナーが提唱してきた「キャパシティ・ディベロップメント（以下、「CD」）」のコンセプトと、これが包含する「CPIモデル」に基づいて、実施中も7回に及ぶ改善がなされてきた。ここで定義される「キャパシティ」とは、協力対象国の特定の開発課題の解決に必要なとされる「テクニカル・キャパシティ（課題解決に必要な知識・技術）」「コア・キャパシティ（課題に取り組む責任感、リーダーシップ等の意識に基づくマネジメント能力）」「環境基盤（2つのキャパシティ向上を促進するシステム）」の3つの要素から成り立つものであり、CDはこれら3要素の強化を示す。また、CPIモデルとは、開発課題の解決（この場合、PDM上の上位目標である「農村人口の生活の質の向上」）を「インパクト（I）」、そのための協力相手国を主体とする活動の改善やその結果としての目に見える成果（この場合、MALの普及サービスの向上）を「パフォーマンス（P）」、そしてパフォーマンスを生み出すための協力相手国自身の課題解決能力（上記で定義した3つの要素）を「キャパシティ（C）」にとらえ、「能力向上（C）→パフォーマンスの向上（P）→開発課題の解決（I）」に至るシナリオを指す。

このCPIモデルの観点からRESCAPのPDM（最新版ver.7）は図5-1のように解釈される。



出所：プロジェクト作成の図を評価団が一部修正

図5-1 RESCAPのPDMにおけるCPIのシナリオ（上）とPDM（下）

開始当初、プロジェクトは「普及のコンテンツ（成果1：適正技術）」「普及員によるコンテンツ習得と利用（成果2：普及員研修、成果3：デモ実施）」によって普及員のキャパシティ（C）を強化し、「普及員活動をモニタリングする環境基盤（成果4）」が構築されれば普及サービス〔パフォーマンス（P）〕は向上していくというシナリオを想定していた。しかし、実施が進むにつれ、普及サービスの面的な展開をめざすにあたっては個々の普及員の活動計画・実施の指針となるべきMALの普及戦略と計画（中央、州、郡）の策定が前提条件となることが分かった。そこで新たに成果5の指標に国家戦略の策定を加え、インパクト（I）（この場合、マイクロ・プロジェクト実施を含む普及サービスの向上による「対象地域の農家の生活の質の向上」）の発現のためのCD環境基盤の補強を行った。

こうした包括的かつ柔軟なプロジェクトの協力により、プロジェクト目標の指標（マイクロ・プロジェクトの実施件数、普及サービスの向上）は達成された。プロジェクト実施のインパクト調査結果（対象地域1,000世帯の農家へのインタビュー）によれば、79.5%の農家が普及サービスの向上を実感している。これはRESCAPのCDによるMALのパフォーマンス（P）向上を十分に裏付けている。

次にインパクト（I）に言及する。インパクトの発現状況は、普及員及び郡スタッフを主体としたマイクロ・プロジェクトの実施件数の目標値達成（対象地域において350件以上）からみてとれる。それはマイクロ・プロジェクトの実施がプロジェクト目標の指標としてだけでなく、上位目標達成の指標ともなり得るものだからである。その理由は次のとおりである。

RESCAPの実施以前にMAL（当時、農業・協同組合省：MACO）とJICAはPASViD、PaViDIAフェーズI、フェーズIIプロジェクトを実施、その結果、普及員を中心とするMALの積極的関与による参加型の農村開発アプローチPaViDIAを開発した。これはザンビア政府の標榜する普及手法Participatory Extension Approach（PEA）を具現化する手段としての位置づけを得、全国展開に必要な資金も外部から獲得した。しかし、当時PaViDIAアプローチによるマイクロ・プロジェクトの実施は日本人専門家の直接的介入なしに行うことができなかった。つまり、MALの普及サービス実施能力の不足がPaViDIAプロジェクトの実施を通じ明らかになったのである。これによって後継プロジェクトのRESCAPでは普及サービスにおけるMALのキャパシティ強化が協力の主眼となった。したがって、RESCAPにおける「MALを主体としたマイクロ・プロジェクトの実施」は、プロジェクトそのものの直接的なアウトプットというよりは、むしろMALのキャパシティ強化、そして普及サービス向上によって発現したアウトカムと解釈できる。

言い換えれば、MAL自身によるマイクロ・プロジェクト実施はCPIモデルにおけるインパクト（I）として、プロジェクトの上位目標「対象地域の農家の生活の質の向上」に直結することは明らかであり、上位目標の達成を十分示唆している。このように、協力終了間際の時点までに、キャパシティ（C）強化、パフォーマンス（P）向上、そしてインパクト（I）の一部発現が確認されたことにより、RESCAPがめざしたCPIモデルのシナリオと、その5年間の取り組みは妥当であったと考えられる。

5-2 キャパシティ・ディベロップメントのための活動サイクル中の仕掛け

前項におけるCPIモデルの説明のとおり、RESCAPはMALの普及員を農村人口の生活の質の向上のためのコア・アクターとして能力強化の主たるターゲットに据え、そのCD、またこれに必要な環境条件の整備を行った。CDのプロセスにおいて、プロジェクトは普及員の年間のルーティン

に“Plan-Do-See”、すなわち「計画－実施－モニタリング－評価」のサイクルを生み出すことで、テクニカル・キャパシティ（専門的な知識・技能）とコア・キャパシティ（仕事に対する意欲から発揮されるマネジメント能力）の改善を行った。

そのサイクルとは、

① 計 画

- a) 上司（郡レベル配属のSenior Agricultural Officer : SAO）との協議による郡の年間普及戦略・デモカレンダーの作成
- b) 郡の普及戦略に基づく普及員自身の担当キャンプの普及活動（デモ）計画の作成（普及員手帳ADEOsを利用）

② 実 施

- c) 活動実施に必要な技術研修の受講（現任研修）
- d) 担当キャンプにおける普及（デモ）の実施

③ モニタリング

- e) 担当キャンプへの巡回と経過の記録（普及員手帳ADEOsを利用）
- f) 郡への月例報告（普及員手帳ADEOsを利用）と上司からのフィードバック

④ 評 価

- g) 担当キャンプ住民にデモ成果を見せ、農家からその有効性等に関するフィードバックを得るフィールドデー実施
- h) デモ成果（産品）を評価する地域～全国レベルの農業祭への出品

である。

この結果、先に述べたとおり対象3州1,000世帯のうち、79.5%の農家が「普及サービスが改善された」と認識している。この背景には、プロジェクトがサイクルのなかに組み込んだ普及員のテクニカル・キャパシティとコア・キャパシティ向上の「仕掛け」が作用しているものと考えられる。

上記の業務の多くは普及員にとって新規に付加された業務である。したがって、開始当初は上司であるSAOから「やらされている」という感覚を否定することはできない。しかし、このサイクルに従って業務を続けていくうちに普及員の仕事に対する意識はより自発的なものへと変化すると考えられる。これはJICA農業・農村開発分野の技術協力の特長として近年検証が進められている発達心理学の「自己決定理論」（Deci & Ryan, 1985）を応用したCDの理論により説明することができよう。この理論では、現実には「興味」や「楽しさ」を感じられなくても取り組むことが必要な課題（この場合、普及員の仕事）について、「自分の意志で決めて行動している」と認識し、かつ「自分の取り組む課題が重要である」と認識することによって課題（仕事）に対処する意欲を向上させるための心理的な仕掛けが最も重要とされている。

その仕掛けとは、次の3つの基本的欲求の充足である。

- ① 自律性欲求：「やらされている」のではなく、「自分が決めてやっている」感覚

- ② コンピテンス欲求：「課題を上手にこなせている・上達している」感覚
- ③ 関係性欲求：「課題を課した人物と心理的につながっている」感覚

これら3つの欲求の充足の観点からRESCAPによる普及員の各活動の背景にある「仕掛け」を考察すると、

- ・「計画」段階においては、上司と普及戦略を議論し、決定、その後に自分の担当キャンプの普及計画を自ら作成することで「自律性欲求」が充足される。
- ・「実施」段階においては、自分の立てた計画に基づき自分に足りない知識・技能を現任研修によって習得し、習得した技術を担当キャンプの農家にデモを通じて披露することによって「コンピテンス欲求」が充足される。
- ・「モニタリング」段階においては、巡回により農家と共にデモの現状の観察・意見交換・指導をすることや、活動の進捗を上司（SAO）に報告しフィードバックを得ることで「関係性欲求」が充足される。
- ・「評価」段階においては、自分が決めて行ったデモの成果を担当する農家、上司、そしてその他の人々に評価されることにより「自律性欲求」「コンピテンス欲求」「関係性欲求」のいずれかに作用し、「次はもっとよくやろう」という意識を生み出す。

段階的に、そしてサイクルとして繰り返されるこれらの欲求の充足によって、普及員は外発的に仕事を「やらされている」意識から、自発的に「仕事に取り組む」意識に徐々に変容していくという仮説が導き出せる。すなわち、普及員の活動サイクルにおけるRESCAPの仕掛けが普及サービスの質の向上（テクニカル・キャパシティ強化と、これによるパフォーマンス向上）と、それを持続的に改善しようとする意識変容（コア・キャパシティ強化）に作用していると考えられる。

こうしたRESCAPの経験と教訓は農村開発分野をはじめとする技術協力におけるキャパシティ・ディベロップメントのモデルケースとして共有、多角的側面からの検証が行われるべき価値を大いに有している。これによって技術協力の質の向上が促進されるものと考えられる。

第6章 結 論

本プロジェクトでは、活動の意味や背景を問い、活動の内容を繰り返し検討することで、プロジェクトの内容を深める努力が行われた。特に研修とモニタリング体制に係る活動が対象州や関与する部局の拡大を伴ったことは、活動内容が実情に沿うようにプロジェクトの内容がよく検討され調整された結果である。MALの普及体制を改善するうえで RESCAP が果たした役割は大きく、プロジェクトはその目的を達成したと評価できる。以上から、本調査団は、予定どおり 2014 年 12 月にプロジェクトを終了することが適切と判断する。

第7章 提 言

(1) 国家普及戦略の策定

国家普及戦略は普及の方向性を決める最も重要な政策であるが、現在はまだドラフトの段階である。MAL は早急に最終化を行い関係機関の承認を得るべきである。

(2) 予算確保

これまで、RESCAP の活動資金の一部は他の開発援助機関等から得ていたが、本来の持続性を確保するには、政府独自の予算を段階的に増やすべきである。しかし、政府の財政は急には好転しないとみられるため、当面の間は他の援助機関等の支援を受けざるを得ないと考えられるが、中央レベルにおいては、これまでのように資金確保のモービライゼーションを日本人専門家に依存するのではなく、少なくとも MAL が独自に対応すべきである。

政府独自予算の確保の具体的な案としては、予算総額の増額が困難な状況下、省予算の 50% 以上を使っている補助金制度（Farmer Input Support Programme 及び Food Reserve Agency）を合理化し、その予算の一部を普及予算に充当することを検討すべきである。また現場レベルでは受益者負担も予算節減の方法として考えられ、例えば普及活動のコストの一部（食事など）を農家負担で賄うことを制度整備とともに検討すべきである。

(3) 関係部局間の連携

本省、州、郡レベルにおいて、農業局、水産局、畜産局、ザンビア農業研究所等の連携を密にし、農作物のみならず、畜産・水産物の生産を含めた包括的な普及システムの実施体制の確立をめざすべきである。

(4) 普及員手帳（ADEOs）の継続

ADEOs は普及員の重要なツールとなっており、ADEOs なしでは効果的な普及活動に困難を来すと考えられるため、2015 年版以降の印刷・配布を確実に行うべきである。

第8章 教 訓

プロジェクトは上位目標である「農村人口の生活の質の向上」の達成に至る道筋を常に念頭に置き、複数レベルにおける個人・組織・制度の総体としての MAL のキャパシティ・ディベロップメントを行ってきた。

とりわけ、普及員を農村人口の生活の質の向上のためのコア・アクターとして能力強化の主たるターゲットとし、そのキャパシティ・ディベロップメント、またこれに必要な環境基盤の整備を包括的に行った。

このプロセスにおいて、プロジェクトは普及員の年間のルーティンに Plan-Do-See（もしくは、計画－実施－モニタリング－評価）のサイクルを導入することで、専門的な知識・技能を向上させる仕組みをつくった。

これとともに、普及員の仕事に対する意識変容を促す心理的な仕掛け（「自分が決めて、やっている」感覚、「自分が成長、上達している」感覚、「上司や農家から自分が評価され、信頼を得ている」感覚が充足されることにより自律的動機づけがなされる。詳細は5－2節を参照）をルーティンの随所に盛り込んでいた。このような仕組みや仕掛けにより、普及員が自発的に普及に取り組み、パフォーマンスを改善し、持続的に農村人口の生活の質の向上に貢献していく状況が発現しつつある。

一方で、個々の普及員の活動計画・実施の指針となるべき国家普及戦略はプロジェクト終了間際においても今なおドラフトの段階である。MAL が普及サービスの向上に組織的にコミットし、RESCAP の取り組みを自発的に継続する前提条件を整えるという観点では、MAL は国家普及戦略の策定を早期に完了すべきであった。そのためには、MAL 本省が抱える課題を早い段階で特定・分析し、対応を検討しておくことが有益であったと考えられる〔3－5 実施プロセス（4）参照〕。

RESCAP の経験は、農村開発分野におけるキャパシティ・ディベロップメントのモデルケースとして共有し、多くの側面から検証が行われるべき価値を大いに有しているといえよう。

第9章 団長所感

(1) RESCAP の意義

本プロジェクトは長く続いた PaViDIA の後継案件として、農業・畜産省（主に農業局）の普及に関する能力強化を目的に実施されてきた。これまでのザンビア・日本双方の努力により大きな成果を収めている。

関係者との協議や対象州における現地調査を通じてまず感じたことは、本省及び州・郡の幹部をはじめ現場の普及員に至るまで、彼らの仕事に対する姿勢が以前より前向きになってきたことである。インタビューでも、ほぼ全員が仕事に対する心構え（マインドセット）が変わり、モチベーションが上がったと答えている。農家も普及員の指導により各種技術を習得し自信をもって営農ができるようになり、普及員に対しても信頼感をもっていることが認められた。改良農具、キノコ栽培、養蜂などの適正技術や普及員手帳などの移転された技術そのものはもちろん重要であるが、技術協力の真髄は旧 JICA 設立時の標語でもあった「人作り、国作り、心のふれあい」の「人作り」の部分である。RESCAP はまさにこの部分に力点を置いて、自分たちで計画づくりから実施・評価までをできるように、専門家が種々の活動を舞台裏で支えるという役割を担ってきたといえよう。技術や制度そのものは時代が変われば使えなくなるものも出てくるであろうが、それを操る人間がしっかりしていれば農村の社会・経済は持続・発展するはずである。その意味で、RESCAP に関与した人々がプロジェクト終了後も、その精神を受け継いで活動が低下することのないようにさらなる努力を続けていくことが必要である。

(2) プロジェクト終了後の課題

プロジェクト終了からその先を長期的に考えた場合、ザンビア側による予算手当ての問題は残る。普及システム強化の柱でもある研修プログラムの一部は、EU などの開発パートナーに依存している状況であり、本当の意味での独り立ちはしていない。提言でも述べたように当面は他からの援助を受けながら普及制度強化を行わざるを得ない状況であるが、持続性の確保は、ザンビア側が少しでも自分たちの予算を増やしていくことができるかどうかにかかっている。本件に関し、ザンビア側は口では努力すると言ってはいるものの疑問は残る。これまでザンビアは農業分野にかかわらず開発パートナーの援助にどっぷりと漬かっており、自分たちが汗をかくという面が弱いように感じる。開発パートナーが継続して援助を続けることができない場合も考え、この点においてもマインドセットチェンジを行い、今から準備することが必要である。

農業・畜産省全体の予算のパイはそう拡大しないであろうから、具体的には補助金制度の合理化による予算の捻出が考えられる。実際に補助金が小農のためになっているかという点と必ずしもそうではないという話も聞いており、合理化の余地はあると考えられる。もちろん補助金行政は政治的な面もあり簡単に変更することはできないかもしれないが、この点に関しては欧米各国や国際機関も改善すべきとの提言を機会あるごとに出しているとのことでもあり、ぜひメスを入れてほしいものである。その促進材料としては、一日も早く国家普及戦略を完成させ、それをもって普及の重要性を省内で共有することが必要である。技術・制度的には RESCAP によりほぼ満足する結果が出ていることから、予算の面での問題を解決し長

期的な持続性を保つことができるようになることを期待する。

付 属 資 料

1. 合同評価報告書の受諾に係る協議議事録 (M/M)
2. 合同評価報告書
3. 現地調査日程
4. 質問票に対するカウンターパートからの回答

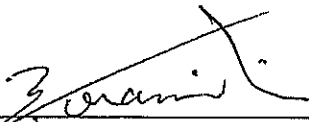
**MINUTES OF MEETING
ON
THE TERMINAL EVALUATION
FOR
RURAL EXTENSION SERVICE CAPACITY ADVANCEMENT PROJECT
-THROUGH PaViDIA APPROACH-
(RESCAP)
IN THE REPUBLIC OF ZAMBIA**

Japan International Cooperation Agency (hereinafter referred to as 'JICA') organized a mission headed by Mr. Takeaki Sato and visited the Republic of Zambia (hereinafter referred to as 'Zambia') from 31 August to 20 September, for the purpose of conducting the Terminal Evaluation of the Rural Extension Service Capacity Advancement Project -Through PaViDIA Approach (hereinafter referred to as 'the Project').

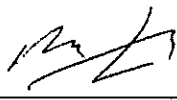
The Joint Review Team (hereinafter referred to as 'the Team'), which consists of four members from JICA and three members from Zambia, was formed. After intensive study and analysis of the activities and achievements of the Project, the Team prepared the Joint Terminal Evaluation Report (hereinafter referred to as 'the Report'). The Report was presented at the Joint Coordinating Committee (hereinafter referred to as 'JCC'), that was held on 18 September 2014.

The JCC accepted the Report and agreed to take necessary actions recommended by the Team in order to ensure the achievement of the Project Purpose and to accomplish the Overall Goal of the Project.

Lusaka 18 September 2014



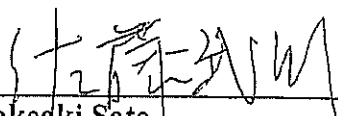
Mr. Yoshihide Teranishi
Chief Representative
Zambia Office
Japan International Cooperation Agency



Mr. Peter K. Lungu
Director
Department of Agriculture
Ministry of Agriculture and Livestock
The Republic of Zambia

2. 合同評価報告書

THE JOINT TERMINAL EVALUATION REPORT
FOR
RURAL EXTENSION SERVICE CAPACITY ADVANCEMENT PROJECT
-THROUGH PaViDIA APPROACH-
(RESCAP)
IN THE REPUBLIC OF ZAMBIA



Mr. Takeaki Sato
Leader, Japanese Evaluation Team
Senior Advisor
Japan International Cooperation Agency



Mr. Katupa Chongo
Leader, Zambian Evaluation Team
Chief Agricultural Extension Officer
Department of Agriculture
Ministry of Agriculture and Livestock
The Republic of Zambia

Lusaka

17th September 2014

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Annex 6 Follow-up for recommendations by Mid-term Review Team

Abbreviations

2KR	Kennedy Round 2
ADEOs	Agriculture Diary for Extension Officers
BEO	Block Extension Officer
CEO	Camp Extension Officer
COMACO	Community Markets for Conservation
C/P	Counterpart Personnel
DOA	Department of Agriculture
EU	European Union
FAO	Food and Agriculture Organization
FoDiS-R	Food Crop Diversification Support Project Focusing on Rice
FTC	Farmers Training Centre
FTI	Farm Training Institute
IFAD	International Fund for Agricultural Development
JCC	Joint Coordination Committee
JICA	Japan International Cooperation Agency
JOCV	Japan Overseas Cooperation Volunteer
MAL	Ministry of Agriculture and Livestock
MP	Micro Project
M/M	Minutes of Meetings
NAS	Needs Assessment Survey
NERICA	New Rice for Africa
NGO	Non-Governmental Organization
PACO	Provincial Agricultural Coordinator
PAO	Principal Agricultural Officer
PaViDIA	Participatory Village Development in Isolated Areas
PDM	Project Design Matrix
PEA	Participatory Extension Approach
PEP	Performance Enhancement Program
PLARDII	Project for Luapula Agriculture and Rural Development II
PO	Plan of Operations
RESCAP	Rural Extension Service Capacity Advancement Project
S3P	Smallholders Productivity Promotion Programme
SAO	Senior Agricultural Officer
SMS	Subject Matter Specialist
T-COBSI	Technical Corporation for Community Based Smallholder Irrigation
WFP	World Food Programme
ZARI	Zambia Agriculture Research Institute

I. OVERVIEW OF THE JOINT TERMINAL EVALUATION

1. Objectives of the Terminal Evaluation

Terminal Evaluation is a comprehensive evaluation of Technical Cooperation Projects implemented by Japan International Cooperation Agency (hereinafter referred to as 'JICA') and its partners. Projects are evaluated from various perspectives including achievement of objectives, operational efficiency, and prospects of sustainability. The objectives of the Terminal Evaluation of 'Rural Extension Service Capacity Advancement Project-Through PaViDIA Approach-' (hereinafter referred to as 'the Project' or 'RESCAP') are:

- (1) To verify the level of the Project's achievements and appropriateness of its implementation process while using its Project Design Matrix (PDM) as a point of reference.
- (2) To evaluate the performance of the Project from the viewpoints of OECD/DAC's Five Evaluation Criteria, i.e. Relevance, Effectiveness, Efficiency, Impact, and Sustainability.
- (3) To identify factors that promoted the effectiveness of the Project and contributed to the achievement of its outcomes, as well as the factors that hindered the achievement of outcomes.
- (4) To make recommendations on the measures to be taken in order to achieve the Project Purpose and attain the Overall Goal as set in the PDM.
- (5) To draw lessons that can be applied to improve other projects and programmes.

2. Evaluation Methods

(1) Joint Evaluation

The Project was evaluated jointly by the Japanese and Zambian sides. The Joint Evaluation Team (hereinafter referred to as 'the Team') consisted of four (4) members from the Japanese International Cooperation Agency (hereinafter referred to as 'JICA') and three (3) members from the Ministry of Agriculture and Livestock (hereinafter referred to as 'MAL') who were not directly involved with the Project's activities. Names, designation and organisation of the Team members are shown in Section 3.

(2) Evaluation Criteria

The Team reviewed the achievements of the Project in accordance with the Record of Discussions (30 November 2009), PDM, and the Plan of Operations (hereinafter referred to as 'PO'). The reviewing process included analysis of reports and other materials, field surveys, and interviews with stakeholders including the staff of relevant institutions, beneficiaries, and JICA Experts. The Team evaluated the results based on OECD/DAC's Five Evaluation Criteria, of which descriptions are given in the Table 1.1. below.

Table 1.1. The Five OECD/DAC Evaluation Criteria

Item	Description
Relevance	The extent to which the aid activity is suited to the priorities and policies of the target group, recipient and donor. Matters to be examined may include: <ul style="list-style-type: none"> • To what extent is the objective of the project still valid? • Are the activities and outputs of the project consistent with the overall goal and the attainment of its objectives? • Are the activities and outputs of the project consistent with the intended impacts and effects?
Effectiveness	A measure of the extent to which an aid activity attains its objectives. Matters to be examined may include: <ul style="list-style-type: none"> • To what extent were the objectives achieved / are likely to be achieved? • What were the major factors influencing the achievement or non-achievement of the objectives?
Efficiency	Efficiency measures the outputs - qualitative and quantitative - in relation to the inputs. It is an economic term which signifies that the aid uses the least costly resources possible in order to achieve the desired results. Matters to be examined may include: <ul style="list-style-type: none"> • Were activities cost-efficient? • Were objectives achieved on time?
Impact	The positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators. Matters to be examined may include: <ul style="list-style-type: none"> • What has happened as a result of the project? • What real difference has the activity made to the beneficiaries?
Sustainability	Sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Matters to be examined may include: <ul style="list-style-type: none"> • To what extent will the benefits of a project continue after donor funding ceased? • What were the major factors which influenced the achievement or non-achievement of sustainability of the project?

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(3) Sources of information

Sources of information used in the Terminal Evaluation were as follows:

- 1) Materials provided by the Project, such as reports of the inputs, activities, and the outputs of the Project.
- 2) Interviews with the stakeholders including JICA experts, their Zambian counterparts, cooperating partners, direct beneficiaries (e.g. extension officers, District Agricultural Coordinators, Senior Agriculture Officers, Provincial Agricultural Coordinator, Principal Agriculture Officers, other District and Provincial staff such as Subject Matter Specialists, and MAL HQ staff (especially staff of Advisory Service Branch of DOA)), and direct beneficiaries such as small scale farmers.
- 3) Direct observations in the field: Field visits were conducted in Lusaka Province, Muchinga Province, Northern Province, North Western Province, and Western Province.

3. Members of the Joint Evaluation Team

Table 1.2. Members from the Zambian Side

Name	Designation and Organisation
Mr Katupa Chongo	Chief Agricultural Extension Officer, Department of Agriculture, Ministry of Agriculture and Livestock
Mr Maketo Mubyana	Principal Cooperatives Officer-Training, Department of Cooperatives, Ministry of Agriculture and Livestock
Mr Kondwani Gondwe	Senior Economist, Policy and Planning Department, Ministry of Agriculture and Livestock

Table 1.3. Members from the Japanese Side

Name	Designation and Organisation
Mr Takeaki Sato (Mission Leader)	Senior Advisor, Japan International Cooperation Agency (JICA)
Mr Hirotaka Nakamura (Holistic Analysis)	Senior Advisor, JICA
Mr Toyomitsu Terao (Evaluation and Analysis)	Consultant, Fisheries Engineering Co. Ltd.
Mr Isaya Higa (Evaluation Planning)	Assistant Resident Representative, JICA Zambia Office

4. Schedule of the evaluation

The Terminal Evaluation by the Joint Evaluation Team was undertaken from 1st to 17th September, including field visits to Kafue District (Lusaka Province), Lukulu (Western Province), Kasempa and Solwezi Districts (North Western Province), Luwingu District (Northern Province), and Chinsali District (Muchinga Province). The detailed schedule is attached as Annex 1.

II. OUTLINE OF THE PROJECT

1. Background of the Project

Agricultural development is crucial for poverty reduction in Zambia. Of the 60.5% of its population living under the National Poverty Datum Line, 77.9% reside in rural areas¹. However, agricultural development has been a challenge to the small-scale farmers living in isolated areas where agricultural services became fragmented after drastic reduction of budget allocation to extension service operation in the Structural Adjustment Programme in early 2000s. Under this circumstance, the Government of Zambia requested the Government of Japan to implement a Technical Cooperation Project to alleviate rural poverty through Participatory Approach to Sustainable Village Development (PASViD), which was introduced by JICA Expert in 1999. This resulted in the implementation of the Participatory Village Development in Isolated Areas Project (PaViDIA) by the then Ministry of Agriculture and Cooperatives and Japan International Cooperation Agency (JICA) from 2002 to 2009. (The term 'PaViDIA' was coined to distinguish the improved approach from the former PASViD and to avoid confusion with other PASViD related initiatives.)

PAViDIA Project successfully introduced the practical participatory development model to the rural communities in isolated areas, but it also became evident that the structural weakness in the agriculture extension system would limit the expansion of the PAViDIA approach. Thus, the Government of Zambia requested Japan to implement another Technical Cooperation Project to strengthen the agriculture extension system.

Responding to the request, JICA conducted the Preliminary Study in 2009 and had a series of discussions with the authorities concerned of the Government of Zambia. Both

¹ Central Statistical Office. 2012. Living Condition Monitoring Survey Report 2006 & 2010.

sides agreed on the framework of the project (see 2.2 below) as well as its title 'Rural Extension Service Capacity Advancement Project-Through PaViDIA Approach-(RESCAP)'.

2 The Framework of RESCAP

Overall Goal: Farmers' quality of life is improved in the target areas.

Project Purpose:

Rural extension services provided by the Ministry of Agriculture and Livestock (MAL) are improved with the improved service delivery system, and skills and knowledge of extension officers including use of Participatory Extension Approach (PEA) -PaViDIA Approach (as an entry point) in the target areas.

Expected Outputs:

- (1) Appropriate technologies for farmers are identified in the target Districts of Northern/Muchinga Provinces.
- (2) In-Service Training System for Extension Officers is institutionalized within MAL.
- (3) Practical abilities of Extension Officers are improved in the target Provinces/Districts.
- (4) Monitoring and backstopping capacity of camp/block, district and provincial level is strengthened.
- (5) Management capacity of MAL's extension service is improved.

3. Implementing Agencies

Department of Agriculture, under the responsibility of the MAL, implements the project with JICA.

4. Duration of the Technical Cooperation

The duration of the Project is five years from December 2009 to December 2014.

III. IMPLEMENTATION PROCESS AND ACHIEVEMENTS

The Team reviewed the performance of the Project, such as inputs and indicators of outputs, to measure the achievement of the Project Purpose and to confirm the appropriateness of implementation process. The results are as follows:

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1. Inputs

1.1. Inputs from the Japanese Side

Major inputs from the Japanese side are as follows. Details of the inputs from the Japanese side are shown in ANNEX 2 to 4.

(1) Dispatch of Experts

Long-term experts in six (6) fields and short-term experts in three (3) fields were dispatched by JICA, as shown below.

Table 3.1 List of JICA Experts (long-term)

No.	Expertise	Name	Dispatch period
1	Chief Advisor/Organisational Management	Masayoshi Ono	17 June 2010 to 14 December 2014
2	Monitoring/Participatory Farmers' Activities Promotion	Takahiro Miyoshi	28 January 2010 to 30 November 2014
3	Agricultural Extension	Goichi Sasaki	1 January 2010 to 31 October 2014
4	Appropriate Farmer's Technology	Tatsuo Narabu	18 January 2010 to 30 November 2014
5	Coordinator/Training Management	Tomoko HASEGAWA	15 December 2009 to 14 December 2011
		Hirohiko ASADA	21 November 2011 to 14 December 2014
6	Project Management in Western Province	Kenji SHIRAISHI	25 February 2010 to 24 February 2013

Table 3.2 List of JICA Experts (short-term)

No.	Expertise	Name	Dispatch period
1	Farm Management Utilizing Forestry Resources/Bee Keeping	Takeo Ishizuka	8 January 2011 to 8 February 2011
2	Agricultural Extension Training	Yasuo Ono	10 January 2012 to 21 February 2012
3	Mushroom Production	Michiaki Kato	1 March 2012 to 24 March 2012

(2) Local Operational Cost

Local operational cost allocated by JICA for the implementation of the Project throughout its duration (from December 2009 to December 2014) is ZMW 9,444,891.36. Details are provided in Annex 2.

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(3) Provision of Equipment and Materials

Equipment and materials including three large four-wheel drive vehicles, photocopier/printer, scanner, and computers have been provided. Details are provided in Annex 3.

(4) Technical Training for the Counterparts of RESCAP

Technical trainings were provided for 29 counterparts of RESCAP through JICA's Technical Training scheme. See Annex4 'Technical Training Conducted in Japan' for details.

1.2. Inputs form the Zambian side

Inputs from the Zambian side are as follows. Details are shown in Annex 5.

(1) Assignment of Master Trainers and Other Counterpart Personnel

Master Trainers and other counterpart personnel from MAL HQ, the targeted provinces and districts to implement and manage the project have been assigned to the Project as shown in Annex 5.

(2) Facilities and Services

Following facilities and services were provided by MAL.

Table 3.3 Facilities and Services Provided by MAL

MAL Office	Contents of provision
Headquarters (Mulungushi House)	Office space
Lusaka Province	Office space
Northern Province (Kasama)	Office space and a driver for the project vehicle (since November 2013)
Western Province (Mongu)	Office space (closed in February 2013)

2. Outputs

(1) Output 1: Appropriate technologies for farmers are identified in the target Districts of Northern/Muchinga Provinces

RESCAP defined 'appropriate technology' as a feasible and affordable solution to the technical challenges faced by the small scale farmers, e.g. technology that widens their options, increases productivity, or improves efficiency through utilization of locally available resources. The introduction of appropriate technologies to the farmers was considered by RESCAP as the main pillar of the extension services, i.e. appropriate technology is the content that needs to be delivered through the extension services.

The objective of the Output 1 was not merely to identify new farming technologies, but

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also to further strengthen the collaboration between the Department of Agriculture (DOA) and Zambia Agriculture Research Institute (ZARI) and develop a system and a process which enables extension officers to identify appropriate technology by themselves, based on farmers' needs and local potentials.

(2) Output 2: In-Service Training System for Extension Officers is institutionalized within MAL

There had been no systematic training for Extension Officers in MAL since 1999. RESCAP conducted in-service trainings for the selected Extension Officers at the provincial and district level while developing the holistic training system at the national level.

(3) Output 3: Practical abilities of Extension Officers are improved in the target Provinces / Districts

Output 3 establishes the direct link between the outcomes of Output 1 and 2 to the Overall Goal of improving farmers' quality of life. Based on the outcomes from Output 1 and 2, the ability of the Extension Officers to provide service to the farmers was improved through in-service trainings (Output 2) and through on-the-job trainings including introduction of appropriate technologies (Output 1).

(4) Output 4: Monitoring and backstopping capacity of camp/block, district and provincial level is strengthened

In order to maintain and improve the quality of the extension services, there should be a management system that can facilitate its 'Plan, Do, See' process. Output 4 ensures that monitoring of extension services will be carried out at camp/block, district, and provincial level, and that the feedback and backstopping mechanism is put into place.

(5) Output 5: Management capacity of MAL's extension service is improved

Output 5 aims to strengthen the comprehensive extension system at the national level, without which the improvements made at the camp/block, district, and provincial level (Output 4) may not be sustained or expanded. Initially MAL lacked a comprehensive extension strategy and even its target, i.e. the 'small-scale farmer', was defined only on basis of area cultivated. Output 5 will enable MAL to set course and manage the overall extension services at the national level, which in turn will bolster the implementation structure at the camp/block, district, and provincial level.

The status and levels of achievements for these five outputs of RESCAP are summarized as follows:

2.1. Achievement of Output 1

Output 1	Appropriate technologies for farmers are identified in the target Districts of Northern/Muchinga Provinces.
Indicators	1-1 More than 10 new appropriate technologies and suitable crops/varieties are identified and compiled as manuals in the target Districts of Northern/Muchinga Provinces

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Output 1 has been achieved. By May 2014, fourteen (14) new appropriate technologies were identified by the officers of DOA and ZARI in target provinces. Manuals on appropriate technologies as well as identification process were produced, including: *'Pilot Demonstration Implementation Guideline'*, *'Northern Province Crop Recommendation'*, *'Appropriate Technology Manuals'*, *'Progress Report on Pilot Demonstrations from 2010 to 2013'*, and *'Pilot Demo Log Sheet'*.

Fourteen (14) appropriate technologies were identified from 40 candidates. The candidates were tested on pilot demos and the results were screened from the viewpoints of innovativeness, effectiveness, feasibility, and influence. The process of identification was compiled into *'Pilot Demonstration Implementation Guideline'*. Under the initiative of the district office of MAL, new demos have been implemented using the *'Pilot Demonstration Implementation Guideline'*. These new demos include livestock production and irrigation technologies. It is expected that the number of appropriate technologies will further increase.

For the pilot demo of beekeeping and rice farming equipment, RESCAP coordinated with Community Markets for Conservation Cooperative (COMACO) in Chinsali District, and exchanged technical information and sent lecturers for training at their site. For beekeeping, mushroom cultivation and others, RESCAP also coordinated with Japan Overseas Cooperation Volunteers (JOCVs) and Food Crop Diversification Support Focusing on Rice (FoDiS-R). Information sharing or technology exchange is being considered with other development projects implemented in Luapula Province. Such projects include the Smallholders Productivity Promotion Programme (S3P) of International Fund for Agriculture Development (IFAD) and the Programme for Luapula Agriculture and Rural Development II (PLARDII) assisted by the Government of Finland.

2.2. Achievement of Output 2

Output 2	In-Service Training System for Extension Officers is institutionalized within MAL
Indicators	2-1 Training Framework for Extension officers is developed. 2-2 Training Programmes for Training of Trainers, In-Service Training and Induction Training are designed and implemented by MAL (Department of Agriculture/DoA) 2-3 More than 20 staff became trainers at Headquarter and all Provinces.

Output 2 has been achieved. The training framework developed includes not only In-

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Service Training (IST) for Extension Officers, but also Induction Training and Management Training (indicator 2-1). Through implementation of IST and Training of Trainers in the target provinces, training packages for IST and 'Training Resource Guide' for trainers were developed. Induction Training was conducted nationwide by request from MAL, and produced another training package (indicator 2-2). From all 10 provinces, a total of 52 Master Trainers were assigned (indicator 2-3).

Contribution of Output 2 in achieving the Project Purpose is significant. The training system has been built on experience gained from the initial implementation of IST in the target provinces, and thus reflects the actual conditions surrounding the Extension Officers and their services. The training system has been developed entirely by the officers of MAL. The process included development of teaching materials, training of trainers, and implementation of various trainings.

Trials of In-Service Training (IST) took place from 2010 to 2011. From the experience gained through these trials, a cascade approach was adopted. Since 2012, a series of workshop was held and Master Trainers were assigned. The Master Trainers developed teaching materials and prepared a nationwide training system, enabling MAL to implement Induction Training for all 10 provinces. Training of Trainers was first implemented for the target 3 provinces, and later for the remaining 7 provinces. From latter half of 2013 to 2014, under the leadership of the Master Trainers, concept of the training framework was prepared for all the departments of MAL.

Based on results of Needs Assessment Survey in 2010, the first series of IST (pilot IST) was conducted before the cropping season of 2011/2012 for three target provinces; 4 sessions in Lusaka Province for the total of 80 trainees, 14 sessions in Northern Province for the total of 444 trainees, and 14 sessions in Western Province for the total of 301 trainees. The trainings were adapted to the conditions and requirements of each province, such as presence of trainers, training facility, and accessibility.

Since there are over 1,800 extension officers presently serving in Zambia, it was considered unfeasible in terms of cost to conduct IST, either by gathering many participants to one place or by sending lecturers to all 103 districts. For this reason, the cascade approach was adopted. In order to implement the cascaded training system, it is necessary to raise enough competent lecturers at province and district level. Therefore, well developed Training of Trainers (ToT) system, as well as 'Training Resource Guide' used as training materials, were deemed necessary. For fulfilling this necessity, inter-provincial actions by experienced officers of MAL from province and district were

proposed, and thus the master trainers were assigned to prepare and implement the cascaded training.

Initially, 20 Master Trainers were appointed. Additional Master Trainers were appointed in 2014 so that on average, there would be three Master Trainers per province to enhance their management capacity for trainings. At present, there are 45 Master Trainers including the officers from most of the Departments in MAL Headquarters. From 2012 to 2013, Master Trainers collaborated beyond provincial boundaries to develop training materials and training packages. Now the Master Trainers are not only contributing to the Output 2, but also playing a pivotal role in strengthening the capacity of Extension Officers (Output 4) and improving the management capacity of MAL (Output 5),

Training of Trainers (ToT) was started by conducting two trainings in each of the three target provinces. The first training was aimed at raising the knowledge level of trainers, and the curriculum for the in-service training for the Extension Officers was applied. The second training was aimed mainly at enhancement of presentation skills for lecturing, and training was focused on both practise and lecture. In 2014, ToT was also conducted in remaining seven provinces that were not targeted in PDM.

Implementation of induction training was not included in RESCAP when it was designed in 2009. Responding to a request from DOA, RESCAP conducted induction training for 300 newly appointed staff of MAL, which included around 220 extension officers of DOA, in all the provinces in 2013. The induction training took 4 days in each province and the Master Trainers played the leading part of lectures. Main portion of the training cost was funded by the EU through its Performance Enhancement Program (PEP).

Through a process of the above activities, the concept of training framework covering all the departments of MAL was formulated, components of which include objective and target of training, annual cycle of training implementation, and types of training such as induction, management, and technical training.

2.3. Achievement of Output 3

Output 3	Practical abilities of Extension Officers are improved in the target Provinces/Districts.
Indicators	3-1 More than 80% of the trained Extension Officers increase the level of practical knowledge in the target Provinces/Districts. 3-2 More than 70% of Camp Extension Officers (CEOs)/Block Extension Officers (BEOs) set up at least 5 demonstrations in

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	2013/2014 season in the target Districts of Northern/Muchinga Provinces. 3-3 More than 30% of demonstrations are applied with Appropriate Technologies in 2013/2014 season in the target Districts of Northern/Muchinga Provinces.
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Output 3 was achieved as shown by the following indicators.

As of August 2014, check tests have been conducted in 13 In-Service Trainings. The check test was carried out by asking 20 to 100 questions on the first day of the training and then asking the same questions again on the last day. Among the 342 trainees, 289 (84.5%) scored higher on the second round, indicating improved comprehension (Indicator 3-1).

In the 2013/2014 cropping season (rainy season from October 2013 to March 2014), more than 400 demonstration plots were set out in the target districts. In Northern Province, extension officers were instructed to set up at least five demos. As a result, the Extension Officers who developed five or more demos reached 72% of all the Extension Officers in the target districts. Ten (10) or more demos were set out at nine camps, with maximum of 18 demos being set up in the FTC Camp in Chinsali District (Indicator 3-2).

Among those demos, more than 50% were set up to introduce the Appropriate Technologies identified by RESCAP, as shown in Table 3.4. (Indicator 3-3).

Table 3.4. Rate of Demos on Appropriate Technologies (AT) in 2013/14 season

District (Number of camps)	Total Number of demos	Number of demos on Appropriate Technology	%
Chinsali (17)	131	77	58.8%
Shiwangandu (9)	26	18	69.2%
Kaputa (4)	39	23	59.0%
Nsama (6)	50	23	46.0%
Luwingu (13)	93	51	54.8%

Source: RESCAP, September 2014.

RESCAP provided the necessary materials to set up demos in the Northern Province, but demos were also set up in other provinces where RESCAP did not provide the materials. In Lusaka Province and Western Province, some of the districts obtained the necessary materials and developed demos by themselves.

2.4. Achievement of Output 4

Output 4	Monitoring and backstopping capacity of Camp/Block, District and
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	provincial level is strengthened.
Indicators	<p>4-1 The rate of report submission by CEOs/BEOs, District and Provincial level with the standardized reporting formats reaches more than 90% in the target Provinces/Districts in 2014.</p> <p>4-2 CEOs and BEOs receiving feedbacks from District staffs in the target Provinces/Districts.</p> <p>4-3 Monitoring of the on-going micro projects is fully integrated as part of District Monitoring activities and properly reported</p>

Output 4 has been mostly achieved. The rate of report submission by the Extension Officers in the target districts was 20% in 2009. The submission rate has increased to 81% by August 2014, and although it did not meet the Project's target of 90% (Indicator 4-1), the Evaluation Team considers the target to be achievable in the near future. More importantly, the concept and procedure of feedback was integrated in the system and visualized in the report submission checklist. This is reflected in the fact that 78% of the extension officers are receiving feedback more frequently than they did 3 years ago, according to the Impact Assessment Survey Draft 3.1 (Indicator 4-2).

Monitoring of the Micro Projects implemented through PaViDIA approach has been integrated into the *Extension Guidelines*, and is reflected in the reporting format. Therefore, proper monitoring of the Micro Projects (Indicator 4-3) can be achieved if the rate of report submission by the Extension Officers remains high.

In conclusion, the Joint Evaluation Team considers Output 4 to be mostly achieved. Some of the quantitative goals, such as report submission rate indicated in the Project Design Matrix (PDM) are yet to be met, but the Project has made a significant change in terms of quality. By seeing through activities and indicators set in the PDM and focusing on underlying objectives, the Project has holistically strengthened the monitoring system for extension services through outcomes that include the following:

(1) Extension Management Cycle was introduced

Before the implementation of RESCAP, monitoring of the extension services was not carried out in systematic manner. Therefore, RESCAP proposed the Management Cycle for extension services; a framework for annual action plan based on 'Plan-Do--See' cycle that is in line with the agriculture calendar that starts from 'Agriculture Shows' that are held at district and provincial levels between June and August.

(2) Various Management Tools were developed and disseminated

To assist the management of the extension services, various tools were developed

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through the RESCAP's interventions in the Northern Province. Manual for utilising these tools, together with the Management Cycle described in (1) above, was compiled as 'Extension Management Guide'. At the 6th Master Trainer Workshop, a number of 'Essential Tools' were selected by the Master Trainers, and were disseminated through the nationwide training of Senior Agriculture Officers (SAOs) in 2014. Widely adopted tools include 'Agriculture Diary for Extension Officers (ADEOs)', Report Submission Checklist, organised filling of reports, and District/Block Meetings.

(3) Feedback system was established

System for SAOs to provide feedbacks on the reports submitted by Extension Officers was put into place. For example, the means to provide feedback, e.g. telephone, SMS, letter, district meeting and camp visits, were identified and shared among the actors. Feedback was also included in the Report Check List, to remind SAOs to provide a feedback when they receive a report.

(4) Reporting format was standardized

The format of Extension Officer's report was standardized. After a trial in Northern Province, DOA set the nationwide format and included in the ADEOs. The format includes column for PaViDIA Micro Projects, with recommendations for the district offices to include the progress of PaViDIA Micro Projects in their quarterly reports.

(5) SAO Training and development of District Extension Strategy

There had been a situation in which management for extension services at the district level was ineffective due to inadequate practical knowledge and management skills of Senior Agriculture Officer as manager of extension service at district Level and funding gap to implement key extension activities. . To improve the situation, a series of district management training for SAO in all 103 districts was conducted from November 2013 to May 2014. The SAO Management Training had three objectives; 1) to reconfirm the duties and roles of SAO, 2) to gain knowledge necessary for the manager of extension services at the district level. This includes national policies, agriculture policies, framework of extension administration, management of Extension Officers, and facilities and equipment, and 3) to learn how to formulate district extension strategy. The trainings were conducted in collaboration with PEP of EU and S3P of IFAD which provided funding support.

2.5. Achievement of Output 5

Output5	Management capacity of MAL's extension service is improved.
Indicators	5-1 National Extension Strategy is developed and endorsed 5-2 Extension Harmonization Mechanism is developed.

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	5-3 More than 80% of the MAL (DoA) staff in extension service in the target Provinces/Districts and the DoA HQ feel the improvement of the management capacity of MAL's extension service.
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The 'draft (version 1)' of National Extension Strategy has been prepared and is currently waiting to be discussed by the stakeholders (Indicator 5-1).

For harmonizing activities by various extension providers, RESCAP developed 'General Operational Guidelines for Agricultural Extension Service Providers for Small-Scale Farmers in Zambia, March 2013' (Indicator 5-2).

The Joint Evaluation Team conducted interviews with MAL officers involved in the extension services (11 from the MAL Headquarters and more than 30 from the Province and District Offices), and all interviewees stated that MAL's capacity on managing extension services have been improved since the implementation of RESCAP (Indicator 5-3).

In Output 5, MAL's capacity for extension service management was expected to improve through activities including the preparation of National Extension Strategy, strengthening of communication within DOA, cooperation between the public and private sectors, collaboration with NGOs, support for farmer registration, inventorying of the existing resources of MAL. Most of these activities have been completed. It is expected that Output 5 will be fully achieved when the National Extension Strategy is officially endorsed by the Zambian government.

After discussions with the departments of MAL, National Extension Strategy has come to cover not only for extension service of DOA but also for extension service of Livestock, Fisheries Department and other departments involved in MAL. The working committee for formulating the strategy was organized from senior staff of the departments involved. The committee members were nominated by the department directors under instruction of the MAL Permanent Secretary. The committee has been held 3 times so far, and the draft of "version 1" has been provided. The draft is planned to be presented to an extension forum for review and discussion which is attended by the private sectors and NGOs.

For strengthening communication mechanism of DOA, various measures were facilitated, which include regular meeting of Advisory Service Branch, annual meeting of DOA, improvement of submission rate of quarterly and annual reports from provincial DOA, provision of mailing list, introduction of shared filing system, and

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utilization of websites of MAL and RESCAP.

Developing cooperation between the public and private sectors in field of the extension service, measures that have been undertaken are support for holding of a committee for harmonization of extension service, provision of “General Operational Guidelines for Agricultural Extension Service Providers for Small-Scale Farmers in Zambia, March 2013”, support for pilot implementation of the guideline, assistance for holding of a forum for harmonization of extension service in collaboration with PEP, and obtaining of cooperation from private companies for budgeting of printing cost of ADEOs.

3. Achievement of the Project Purpose

Project purpose	Rural extension services provided by the Ministry of Agriculture and Livestock (MAL) are improved with the improved service delivery system, and skills and knowledge of extension officers including use of Participatory Extension Approach (PEA) -PaViDIA Approach (as an entry point) in the target areas.
Indicators	<ol style="list-style-type: none"> 1. Over 350 villages are implementing micro projects with PEA-PaViDIA Approach 2. More than 80% of Farmers in the target areas acknowledge the improvement of extension service.

As shown in following two indicators, the project purpose has been achieved. Since beginning of RESCAP, the micro project by PEA-PaViDIA Approach has been implemented at 354 villages in 14 districts of the five provinces (indicator 1). Impact Assessment Survey of RESCAP (Draft 2.0) was conducted in 3 target provinces in March to June 2014. According to results of the survey, among sampled 1,000 farmers in the target areas, 79.5% of farmers acknowledge the improvement of extension service (indicator 2).

In RESCAP, a considerable effort has been made for deepening contents of the project activities more than those initially designed in PDM, by confirming meaning and background of activity and by elaborating contents of activity. The activities for training (Output 2) and monitoring (Output 4) has been accompanied with extending of the target provinces and enlarging of the MAL’s departments involved. This was achieved by repeated review of activities so that they can reflect the reality of institutional conditions of MAL. For an example, the induction training in 2014 has significance that it had been suspended for a long time since 1999, and the master trainer-led curriculum development and training were conducted. Much more than an extent to which the indicators required, the extension system and its contents of MAL have been improved.

To that effect, agricultural extension system of MAL has been significantly improved beyond the indicators in PDM.

RESCAP can be helpful for implementation of PaViDIA in following points;

- Installation of demos: for access to new village, demo opens an entry. Demo is undertaken under close coordination between RESCAP and PaViDIA Approach.
- Report check list: monitoring and feedback for the micro projects of PaViDIA Approach can also be improved as well as regular extension service.
- Capacity building of extension officers: through improved promotion of PaViDIA Approach and technical guidance for its implementation, effectiveness of the micro project can be increased.

4. Prospect for attaining the Overall Goal

Overall goal	Farmers' quality of life is improved in the target areas.
Indicators	At least 70% of 1,000 farmers interviewed through Households Characteristics and Agricultural Practices Survey in the target areas/provinces improve their social and economic conditions.

At present, there is no information on improvement of quality of farmers' life in the target areas in terms of their social and economic conditions, it is difficult to assess on achievement of the overall goal. For an example, in terms of the economic conditions, it was found by the impact survey by RESCAP that the source of farmers' livelihood is varied and depends not only on agriculture income but also on small-scale retail, temporary employment and others. Furthermore, according to the impact survey, causal relation between implementation of the extension service and improvement of farmer's livelihood is rather complicated. Therefore, an assessment survey for the above indicator will need to be conducted carefully.

5. Implementation Process

5-1. RESCAP has paid a considerable effort for deepening contents of the project activities by respecting meaning and background of activity, and thus in the training and monitoring, the target provinces were extended, and the departments involved were increased. As a result, the scope of the project was expanded from the Master Plan provided in the R/D. The process for implementing the deepened activities was undertaken on the initiative of the master trainers, and this gives greater significance to some of the five criteria analysis in this Terminal Evaluation.

5-2. In view of RESCAP, PaViDIA Approach is realized just as one of regular extension

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tools. That is to say, all the extension tools including PaViDIA Approach were evenly targeted when strengthened. This way is adequate. However, through implementation of demos, strengthening of monitoring and capacity building of extension officers, RESCAP has been involved in or helpful to PaViDIA Approach.

5-3. The appropriate technologies developed in Northern Province (Output 1) did not include those for livestock except a technology on tephrosia for use of miticide, probably because DOA is the main implementation agency for the project. This makes a sharp contrast with the fact that many of the micro projects of PaViDIA Approach are aimed at livestock production. Afterwards, training packages for in-service training (IST) have come to include teaching materials for livestock and fisheries as well. However, there is still a shortage of livestock and fisheries extension officers. .

5-4. For Output 5, it is unclear whether the activities set out in the PDM were sufficient to achieve its objective, i.e. improvement of MAL's capacity to manage extension services. Strong management may require enhanced capacities for assessing situations and challenges, planning activities, securing or mobilizing resources, monitoring and evaluation. These requirements were not fully explored when the project was designed in 2009, and may have led to some of the shortcomings such as delay in the development of National Extension Strategy.

6. Follow-up on the Suggestions made by the Mid-term Review Team

For the measures taken after Mid-term Review, see Annex 6.

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IV. RESULTS OF THE EVALUATION

1. Relevance: High

National policies: RESCAP complies with the relevant national policies of Zambia and also meets the needs of the Government to execute the policies. Based on facts that poverty groups are found mostly in small-scale farmers in the rural areas, the Revised 6th National Development Programme 2013-2016 (R-SNDP) emphasises, as objectives of the agriculture sector, to enhance productivity through expansion and decentralisation of research and extension services.

Needs of beneficiaries: In the long term, RESCAP is aimed at improvement of quality of small-scale farmers' life. This goal meets the poverty reduction policies of the Government and also satisfies needs of farmers as the final beneficiaries.

ODA policy of the Japanese government: RESCAP has an overall goal of poverty reduction through development of the rural areas. This complies with Country Assistance Policy for Zambia (2014).

2. Effectiveness: High

Most of the outputs that include those of appropriate technologies, demos, training and monitoring system contributed to achievement of the project purpose – strengthening of the extension system of MAL. Meaning of the activities for these outputs was well reviewed and contents of the activities were made to be suited to the actual needs. Through expansion of the target provinces in training and monitoring, as well as introduction of ADEOs as a management tool, trials to meet the needs have become successful. The activities meeting the actual needs jacked up the extent of achievement of the project purpose.

The significance of implementation of induction training, which was not included in the original project, can show an example. The induction training was conducted for around 300 newly recruited officers of MAL in 2013. The training successfully revived the former induction training that had been suspended for a long time since 1999. Furthermore, the training system for the whole 10 provinces has been built through newly developed training package and lectures – i.e., training components of the extension system that were lacking in MAL have been developed. The training is a major factor that improved effectiveness of RESCAP. Similar significance can be shown in introduction of the management tools that include ADEOs and report check list.

3. Efficiency: High

In the beginning of RESCAP, six (6) long term expert were despatched and after the 4th year, the number was reduced to five (5). This is because the expert assigned to implementation of PaViDIA Approach in Western Province became unnecessary as implementation of PaViDIA Approach had been much improved. Inputs of equipment and training in Japan were made as scheduled.

In all the outputs - those of appropriate technologies, demos, training, monitoring system and management of extension, scope of the activities were expanded and these were implemented at the initiative of master trainers. Meanwhile, it is stressed that for those expanded activities, the financial and material resources from Japan were not increased. This was made possible through deepened communication between Japanese experts and the counterpart personnel in MAL.

The induction training was implemented in collaboration with PEP supported by EU, and a considerable amount of training costs was borne by PEP. The implementation of the SAO Management Training Workshops for all 103 District SAOs was also financially supported by PEP and S3P. In some of the demos in Northern Province, the sites have been shared with other Japanese ODA programs such as FoDIS-R, T-COBSI and JOCVs, which enables the project to reduce costs and exchange information as needed.

4. Impacts: Expected to be high

RESCAP would be able to give a great impact if it can contribute to improve farmer's livelihood as specified in the overall goal. It is however difficult at present to assess the extent of the achievement quantitatively, as the overall goal is affected by various factors other than the extension service delivery.

Other impacts attributed to the implementation of RESCAP can be counted if these are continued or can be brought to an implementation stage;

- Demos undertaken in other provinces that are not covered in Output 3
- IST to be conducted in 10 provinces without support by RESCAP
- Marketing support for micro projects to be planned by Cooperative Department of MAL in districts where PaViDIA are being implemented, and
- Computer software application trainings such as Q-GIS, MS Office, and MS Access in Northern Province have enabled field staff to draw maps of Camp by using computer.

5. Sustainability: Expected to be high

Policy aspect: The Revised 6th National Development Plan 2013-2016 (R-SNDP) emphasises, as objectives of the agriculture sector, to enhance productivity through expansion and decentralisation of research and extension services. It is considered this policy will be maintained for the future.

Institutional aspect: Main activities for appropriate technologies, demos, training, and monitoring system were structured and implemented at the initiative of master trainers. The master trainers are assigned from all the involved departments of MAL and 10 provinces. Such group of the master trainers constitutes a good institutional condition for continuing these activities. As for MAL HQ, further improvement of the management for extension service is needed over involved departments .

Financial aspect: RESCAP has been implemented under a situation where budgets for the extension service are limited. Shortage of the budget has given challenges to mobility of the extension officers for many years. To settle the challenges, RESCAP has obtained a part of operation budgets from funding by cooperating partners and private sector. For example, the induction training was conducted with funding by PEP (EU). These can give a temporary measure to deal with shortage of budgets.

Technical aspect: The master trainers and other experienced officers of MAL have had a leading role in preparation for plans of training, development of teaching materials, studies on cycle to identify appropriate technologies, and others. Since there are many officers experienced in undertaking these tasks, sustainability in technical aspect is high.

V. CONCLUSION

RESCAP gave full considerations on objectives and backgrounds behind its activities, and constantly strove to enrich its contents. The Project's ability to carefully examine and adapt its activities to the actual situations leads to the expansion of its target provinces and institutions, notably in capacity development for training and monitoring. RESCAP has played a significant role in improving the extension system of MAL, and is deemed to achieve its Project Purpose. Therefore, the Joint Evaluation Team concludes that it is pertinent that the Project be terminated in December 2014 as planned.

VI. RECOMMENDATIONS

1. National Extension Strategy

The National Extension Strategy will be the most important policy that sets the course of the extension activities, but currently it is still in its draft stage. The strategy must be promptly finalized by MAL and approved by the Zambian Government.

2. Financing

Part of the RESCAP's activities were funded by cooperating partners, but in order to achieve true sustainability, the inputs from the Zambian government should be gradually increased. However, since the government's financial condition may not improve immediately, receiving funds from cooperating partners and other stakeholders can be considered as a necessary measure to sustain the activities initiated by RESCAP for the time being. The Joint Evaluation Team recommends that MAL Headquarters take the initiative and be able to mobilize resources without the assistance of Japanese experts.

In order to secure funds within the government when the circumstances makes it difficult to increase the overall budget, MAL should consider streamlining the ministry budget to ensure adequate resources for the extension activities.

3. Collaboration among MAL agencies

Collaboration among the Department of Agriculture, Department of Fisheries, Department of Livestock, Department of Cooperatives, and Zambia Agriculture Research Institute should be further strengthened at Headquarters as well as at Provincial and District levels, in order to establish the implementing system of comprehensive extension services that encompasses agriculture, livestock, and fisheries.

4. Continuation of ADEOs

Agricultural Diary for the Extension Officers (ADEOs) has proven to be an indispensable tool for the extension officers to effectively and efficiently carry out their activities. Therefore, MAL should secure the timely publication and distribution of the ADEOs from 2015 onward.

VII. LESSONS LEARNED

Elaborating the itinerary to achieve its overall goal "improvement of smallholders' livelihoods", the Project engaged in the capacity development of MAL, which is comprised of individuals, organizations, and institutions as a whole.

Since the Project perceived extension officers as core agent for rural livelihood improvement, it set them as its major target group of capacity development. Also, the Project spent its efforts to create the enabling environment.

Through this process of capacity development, the Project introduced the cycle that consists of “Plan – Do – See” into their routine work throughout a year. This generated the system which enables extension officers to smoothly acquire technical knowledge and skill.

In addition, the Project incorporated in the cycle of work a number of tips which encourage the officers to change their mind-sets, and enhance their commitment to their extension work. These tips are supposed to operate psychologically by satisfying the three essential desires which motivate humans: self-determination; competence; and relatedness (Deci & Ryan, 1985). Associating such tips with the system, the Project generated the outcomes that extension workers engage spontaneously in their own work, keep motivated to improve their performance, and continuously make their contributions to lifting the life quality of their target Camps.

On the contrary to the progress spearheaded by the Project in the strategic planning of extension activities at field and district level, the national strategy for extension service was drafted but yet to be finalized in spite that the Project is nearly reaching its end. The MAL HQs should have formulated this strategy earlier before the end of cooperation so as to clarify its organizational commitment. MAL’s commitment should be the prerequisite for the outputs and the impacts generated by RESCAP to be well sustained at all levels.

RESCAP is a model case of holistic capacity development. Its experience should be shared widely regardless of the development sectors, and worth conducting multidisciplinary studies.



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**Annex I Terminal Evaluation Schedule
31st August - 20th September 2014**

	Date	Time	Mission Members and Activities				
			Mr. Sato (Leader)	Mr. Nakamura (Member)	Consultant (Member)	MAL Members	JICA Zambia (Messrs. Higa and/or Chibamulilo)
31-Aug-14	Sun	AM			Arrives Lusaka		
		PM			Meeting with JICA and RESCAP Experts		Meeting with JICA Zambia and RESCAP Experts
1-Sep-14	Mon	AM			Courtesy Call to JICA Rep Meeting with the MAL Members, JICA Zambia and RESCAP Experts	Meeting with JICA Consultant, JICA Zambia staff and RESCAP Experts	Meeting with JICA Consultant, MAL Members and RESCAP Experts
		PM			Move to Kafue Meeting with DACO & SAO Kafue District	Move to Kafue Meeting with DACO & SAO Kafue District	Move to Kafue Meeting with DACO & SAO Kafue District
2-Sep-14	Tue	AM			Leave Lusaka for Lukulu	Leave Lusaka for Lukulu	Leave Lusaka for Lukulu
		PM			Arrive Lukulu District Meeting with DACO & SAO Lukulu	Arrive Lukulu District Meeting with DACO & SAO Lukulu	Arrive Lukulu District Meeting with DACO & SAO Lukulu
3-Sep-14	Wed	AM			Lukulu - (Kaoma) - Kasempa	Lukulu - (Kaoma) - Kasempa	Lukulu - (Kaoma) - Kasempa
		PM			Meeting with SAO Kasempa	Meeting with SAO Kasempa	Meeting with SAO Kasempa
4-Sep-14	Thu	AM			Visit to Micro Project Villages in Kasempa	Visit to Micro Project Villages in Kasempa	Visit to Micro Project Villages in Kasempa
		PM			Kasempa - Solwezi	Kasempa - Solwezi	Kasempa - Solwezi
5-Sep-14	Fri	AM			Meeting with PACO/PAO Northwestern Province Meeting with SAO Solwezi District	Meeting with PACO/PAO Northwestern Province Meeting with SAO Solwezi District	Meeting with PACO/PAO Northwestern Province Meeting with SAO Solwezi District
		PM			Visit to Micro Project Villages in Solwezi District	Visit to Micro Project Villages in Solwezi District	Visit to Micro Project Villages in Solwezi District
6-Sep-14	Sat	AM			Leave Solwezi	Leave Solwezi	Leave Solwezi
		PM	Arrive at Lusaka 21:10 (SA066)		Arrive Lusaka	Arrive Lusaka	Arrive Lusaka
7-Sep-14	Sun	AM			Report Writing		
		PM	Meeting with JICA Zambia and RESCAP Experts	Arrive Lusaka Meeting with JICA Zambia and RESCAP Experts	Report Writing Meeting with JICA Zambia and RESCAP Experts		
8-Sep-14	Mon	AM	Courtesy Call to JICA Rep Courtesy Call to PS and Director of DoA Meeting with MAL Evaluation Team members	Courtesy Call to JICA Rep Courtesy Call to PS and Director of DoA Meeting with MAL Evaluation Team members	Courtesy Call to JICA Rep Courtesy Call to PS and Director of DoA Meeting with MAL Evaluation Team members	Courtesy Call to JICA Rep Courtesy Call to PS and Director of DoA Meeting with MAL Evaluation Team members	Courtesy Call to JICA Rep Courtesy Call to PS and Director of DoA Meeting with MAL Evaluation Team members
		PM	Meeting with /Interview MAL staff	Visit to ZARI Mt. Makulu (FoDiS-R)	Meeting with /Interview MAL staff	Meeting with /Interview MAL staff	Meeting with /Interview MAL staff
9-Sep-14	Tue	AM	Meeting with PACO/PAO Lusaka Province Observation of Provincial Workshop with SAOs (TBC)	Visit to ZARI Mt. Makulu (FoDiS-R)	Meeting with PACO/PAO Lusaka Province Observation of Provincial Workshop with SAOs (TBC)	Leave Lusaka for Kasama	Leave Lusaka for Kasama
		PM	Meeting with EU (PEP) Meeting with IFAD (S3P)		Meeting with EU (PEP) Meeting with IFAD (S3P)	Arrive Kasama	Arrive Kasama

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Annex 1 Terminal Evaluation Schedule
31st August - 20th September 2014

Date	Time	Mission Members and Activities					
		Mr. Sato (Leader)	Mr. Nakamura (Member)	Consultant (Member)	MAL Members	JICA Zambia (Messrs. Higa and/or Chibamulilo)	
10-Sep-14	Wed	7:00-9:40 12:00	Lusaka - Kasama by air Meeting with PACO/PAO Northern Province	Lusaka - Kasama by air Meeting with PACO/PAO Northern Province	Lusaka - Kasama by air Meeting with PACO/PAO Northern Province	Meeting with PACO/PAO Northern Province	Meeting with PACO/PAO Northern Province
		PM	Meeting with /Interview MAL Northern Provincial staff	Meeting with /Interview MAL Northern Provincial staff	Meeting with /Interview MAL Northern Provincial staff	Meeting with /Interview MAL Northern Provincial staff	Meeting with /Interview MAL Northern Provincial staff
11-Sep-14	Thu	AM	Move from Kasama to Luwingu Meeting with DACO/SAO Luwingu	Visit to Misamfu Research Station	Move from Kasama to Luwingu Meeting with DACO/SAO Luwingu	Move from Kasama to Luwingu Meeting with DACO/SAO Luwingu	Move from Kasama to Luwingu Meeting with DACO/SAO Luwingu
		PM	Observation of Demos and interview CEOs Back to Kasama		Observation of Demos and interview CEOs Back to Kasama	Observation of Demos and interview CEOs Back to Kasama	Observation of Demos and interview CEOs Back to Kasama
12-Sep-14	Fri	AM	Move from Kasama to Chinsali Meeting with/Interview MAL Muchinga Province and Chinsali District	Move from Kasama to Chinsali Meeting with/Interview MAL Muchinga Province and Chinsali District	Move from Kasama to Chinsali Meeting with/Interview MAL Muchinga Province and Chinsali District	Move from Kasama to Chinsali Meeting with/Interview MAL Muchinga Province and Chinsali District	Move from Kasama to Chinsali Meeting with/Interview MAL Muchinga Province and Chinsali District
		PM	Observation of Demos/Micro Projects and interview CEO Stay Chinsali	Observation of Demos/Micro Projects and interview CEO Stay Chinsali	Observation of Demos/Micro Projects and interview CEO Stay Chinsali	Observation of Demos/Micro Projects and interview CEO Stay Chinsali	Observation of Demos/Micro Projects and interview CEO Stay Chinsali
13-Sep-14	Sat	AM	Leave Chinsali Back to Kasama	Leave Chinsali Back to Kasama	Leave Chinsali Back to Kasama	Leave Chinsali Observation of Demos/Micro Projects and interview CEO	Leave Chinsali Back to Kasama
		PM	Report Writing	Report Writing	Report Writing	Leave Kasama	Report Writing
14-Sep-14	Sun	AM	Report Writing	Report Writing	Report Writing		Report Writing
		PM	Report Writing	Report Writing	Report Writing	Arrive Lusaka	Report Writing
15-Sep-14	Mon	10:00-12:40	Kasama - Lusaka by air	Kasama - Lusaka by air	Kasama - Lusaka by air	No activity	Kasama - Lusaka by air
		15:00 - 17:00 19:00 -	Evaluation Team Meeting Meeting with JICA Zambia and RESCAP experts	Evaluation Team Meeting Meeting with JICA Zambia and RESCAP experts	Evaluation Team Meeting Meeting with JICA Zambia and RESCAP experts	Evaluation Team Meeting Meeting with JICA Zambia and RESCAP experts	Evaluation Team Meeting Meeting with JICA Zambia and RESCAP experts
16-Sep-14	Tue	AM	Evaluation Team Meeting	Evaluation Team Meeting	Evaluation Team Meeting	Evaluation Team Meeting	Evaluation Team Meeting
		PM	Evaluation Team Meeting	Evaluation Team Meeting	Evaluation Team Meeting	Evaluation Team Meeting	Evaluation Team Meeting
17-Sep-14	Wed	AM	Preparation for JCC	Preparation for JCC	Preparation for JCC	Preparation for JCC	Preparation for JCC
		PM	Preparation for JCC	Preparation for JCC	Preparation for JCC	Preparation for JCC	Preparation for JCC
18-Sep-14	Thu	AM	JCC	JCC	JCC	JCC	JCC
		PM	Report Writing	Report Writing	Report Writing		
19-Sep-14	Fri	AM	Report Writing	Report Writing	Report Writing		
		PM	Report to JICA Report to EOJ	Report to JICA Report to EOJ	Report to JICA, Report to EOJ, Leave Lusaka		Report to JICA Report to EOJ

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**Annex 1 Terminal Evaluation Schedule
31st August - 20th September 2014**

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	Date	Time	Mission Members and Activities				
			Mr. Sato (Leader)	Mr. Nakamura (Member)	Consultant (Member)	MAL Members	JICA Zambia (Messrs. Higa and/or Chibamulilo)
20-Sep-14	Sat		Leave Lusaka	Leave Lusaka			

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Annex 2 Local Operation Cost

Unit: ZMW

	JFY2009	JFY2010	JFY2011	JFY2012	JFY2013	JFY2014	Total
General	199,615.32	1,389,353.73	1,094,514.76	1,842,808.78	1,931,274.22	1,313,340.00	7,770,906.80
Air fair	0.00	16,008.90	35,716.20	11,807.20	23,862.00	0.00	87,394.30
Other travel expenses	19,944.80	209,061.10	338,199.50	160,687.00	198,051.05	47,250.00	973,193.45
Remuneration	14,787.20	107,182.95	91,251.80	165,709.00	141,144.22	50,225.37	570,300.54
Meeting	1,624.00	12,988.90	15,728.12	3,090.00	0.00	0.00	33,431.02
Local consultants	0.00	0.00	0.00	0.00	0.00	195,980.00	195,980.00
Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	235,971.32	1,734,595.57	1,575,410.38	2,184,101.98	2,294,331.49	1,606,795.37	9,631,206.11

Remark: JFY2014 shows budget amounts.

Annex 3 Provision of Equipment and Materials

No.	Purpose of Use	Name of Machinery	Product No.	Price	Installation Place	Current Condition
1	Transport	Vehicle	Nissan Patrol	45,500USD	MAL HQ	Working
2	Transport	Vehicle	Nissan Patrol	45,500USD	PACO Office in Northern Province	Working
3	Transport	Vehicle	Toyota Landcruiser	317,866ZMW	PAO Office Western Province	Working

Annex 4 Technical Training Conducted in Japan

Year	Name	Position	Office	Remark
2011	1 Mr. Albert Chalabesa	Deputy Director (Advisory Service)	MAL/DOA HQ	Retired
	2 Mr. Martin Muyunda	Principal Extension Methodology Officer	MAL/DOA HQ	
	3 Mr. Mwiya Mukungu	Principal Agricultural Officer	MAL/DOA Western	
	4 Mr. Michael Chishimba	Senior Crops Officer	MAL/DOA Northern	Retired
	5 Mr. Henry Kapesa	Senior Extension Methodology Officer	MAL/DOA Northern	
2011	1 Mr. Louis Chikopela	Principal Monitoring & Evaluation Officer	MAL/DOA HQ	
	2 Mr. Clive Matengu	Senior Agricultural Officer	MAL/DOA Luwingu	
	3 Mr. Trevor Chikuta	Senior Agricultural Officer	MAL/DOA Mporokoso	
	4 Mr. Simon Masenga	Senior Agricultural Officer	MAL/DOA Lukulu	
	5 Mr. John Chirundila	Agricultural Assistant (CEO)	MAL/DOA Luwingu	
	6 Mr. Lungu Joseph Chilombo	Agricultural Supervisor (BEO)	MAL/DOA Lukulu	
	7 Ms. Beatrice Kangwa	Agricultural Assistant (CEO)	MAL/DOA Lukulu	
	8 Ms. Precious Mulengu	Agricultural Assistant (CEO)	MAL/DOA Mporokoso	
2012	1 Mr. Henry Mgomba	Principal Farm Management Officer	MAL/DOA HQ	
	2 Mr. Belvin Mutanga	Senior Agricultural Officer	MAL/DOA Shang'ombo	
	3 Ms. Gloria Ngoma Siwale	Principal Agricultural Supervisor	MAL/DOA Kafue	
	4 Mr. Christopher Mulenga	Agricultural Assistant (CEO)	MAL/DOA Kaputa	
	5 Ms. Josephine Kasonda Mulenga	Agricultural Assistant (CEO)	MAL/DOA Kasama FI	
	6 Ms. Getrude Muyabe	Agricultural Assistant (CEO)	MAL/DOA Kasama	
	7 Ms. Mitracy Mbala	Agricultural Assistant (CEO)	MAL/DOA Senanga	
	8 Mr. Mukata Liswaniso	Agricultural Assistant (CEO)	MAL/DOA Shang'ombo	
2013	1 Mr. Charles Sondashi	Deputy Director (Advisory Service)	MAL/DOA HQ	
	2 Mr. Pascal Chipasha	Principal Agricultural Officer	MAL/DOA Lusaka	
	3 Mr. Charles Kapalasha	Principal Agricultural Officer	MAL/DOA Lusaka	
	4 Ms. Rebeca Nalungwe	Senior Crops Officer	MAL/DOA Western	
	5 Mr. James Mithi	Ag. Senior Agricultural Officer	MAL/DOA Kaputa	
	6 Mr. Lamek Chola	Senior Agricultural Officer	MAL/DOA Chinsali	
	7 Mr. Rose Shangala	Senior Agricultural Officer	MAL/DOA Mbala	
	8 Ms. Nalukui Mukebesa	Principal Agricultural Supervisor	MAL/DOA Chongwe	

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Annex 5 Assignment of Master Trainers and Other Counterpart Personnel

Department	Station	Name	Position	Period (working with RESCAP activities)	Main Activities of RESCAP
Agriculture	HQ	Ms. Mary Chipili	Director DoA	2009.12 - 2013.11	Project management
Agriculture	HQ	Mr. Peter Lungu	Director DoA	2013.11 - present	Project management
Agriculture	HQ	Mr. Albert Chalabesa	D/Director	2009.12 - 2012.5	Project management
Agriculture	HQ	Mr. Charles M Sondashi	D/Director	2012.9 - present	Project management
Agriculture	HQ	Mr. Ernest Shingalili	Chief Extension Officer	2012.4 - 2012.11	Leader of Master Trainer
Agriculture	HQ	Mr. Katupa Chongo	Chief Extension Officer	2014.5 - present	ToT and IST roll out
Agriculture	HQ	Dr. Martin Muyunda	Principal Extension Methodologist	2009.12 - present	Extension Strategies, Extension Management, ToT and IST roll out.
Agriculture	HQ	Mr. Louis Chikopela	Principal Agricultural Officer (M/E)	2011. 4 - present	Monitoring, Extension Management.
Agriculture	HQ	Mr. Henry Mgomba	Principal Farm management Officer	2012.4 - present	Leader of Master Trainer, Induction Training, SAO Management workshop, ToT and IST roll out.
Agriculture	HQ	Ms. Karen Mukuka	Chief Food and Nutrition Officer	2009. 12 - present	
Agriculture	HQ	Ms. Nancy Sakala	Principal Food and Nutrition Officer	2011. 4 - present	SAO Management workshop
Agriculture	HQ	Mr. Aaron Simwanza	Principal Food Processing Officer	2009.12 - present	SAO Management workshop
Agri-Business	HQ	Kapepula Kaunda	Principal Agricultural Economist, Agri Business, Cooperatives	2009.12 - present	Needs Assessment Survey, Master Trainer
Cooperatives	HQ	Maketo Mubyana	PCO	2009.12 - present	PaVIDIA, Needs Assessment Survey
Agriculture	HQ	Mwanza Morton	PAO-Veg.	2012.6 - present	Master Trainer
Agriculture	HQ	Kalamatila Rasford	PAO Land Mgt	2012.6 - present	Master Trainer
Fisheries	HQ	Vernatious Mulenga	Chief Fisheries	2014.4 - present	Master Trainer
Livestock	HQ	Munsanje Danny	Snr. Liv. Officer	2012.6 - present	Master Trainer
HR	HQ	Chibiya Remmy	SHRDO	2014.4 - present	Master Trainer
ZARI	HQ	Malikopo Allan	Researcher	2009.12 - present	Appropriate Technology
Agriculture	Central	Kanyata Muchwa	SAO(Kapiri-Mposhi)	2014.4 - present	Master Trainer
Agriculture	Central	Mangisha Gabriel	Senior Field Crop Officer	2014.4 - present	Master Trainer
Livestock	Central	Kabichi Peter	Senior Liv. Officer(Luano)	2014.4 - present	Master Trainer
Agriculture	Copperbelt	Simbule Veronica	Principal-Masaiti FI	2012.6 - present	Master Trainer
Fisheries	Copperbelt	Alex Kefi Shula	Senior Research Officer	2014.4 - present	Master Trainer
Agriculture	Copperbelt	Kabwe Alex	SAS	2014.4 - present	Master Trainer
Agriculture	Eastern	Kaputa Kennedy	SEMO	2012.6 - present	Master Trainer
Agriculture	Eastern	Adamson Mwale	SAO	2014.4 - present	Master Trainer
Agriculture	Eastern	Daka Daitso	SAO	2014.4 - present	Master Trainer
Agriculture	Luapula	Mr. Dominic Namanyungu	Senior Extension Methodologist, Luapula Province (Formerly SAO, Kafue District)	2009.12 - present	Master Trainer, PaVIDIA
Agriculture	Luapula	Mr. Albu Mulumi	SAO(Samfya District)	2009.12 - present	Former Master Trainer, PaVIDIA
DACO	Luapula	Musonda Ngonga	DACO(Lunga)	2014.4 - present	Master Trainer
Cooperatives	Luapula	Ngize Dawson	Coop. Inspector	2014.4 - present	Master Trainer
Agriculture	Lusaka	Mr.B Noombo	Principal, Challimbana FTI	2009.12 - 2013.2	Master Trainer, PaVIDIA, Appropriate Technology(Mushroom)
Agriculture	Lusaka	Mr. Shadreck Mungaraba	PACO, Lusaka Province	2009.12 - present	-
Agriculture	Lusaka	Mr. Pascal Chipasha	PAO, Lusaka Province	2010 - present	Monitoring, Extension Management.
Agriculture	Lusaka	Mr. John Hikaneyemu	Senior Technical Officer, Lusaka Province	2009.12 - present	Impact Assessment Survey, Master Trainer
Agriculture	Lusaka	Mr. James Mwale	Senior Agricultural Officer, Lusaka Province	2010 - present	Impact Assessment Survey
Agriculture	Lusaka	Bwalya Chanda	PAS(Chongwe)	2014.4 - present	Master Trainer
Agriculture	Lusaka	Kasunga Kela	SAO(Chilanga)	2014.4 - present	Master Trainer
Agribusiness	Muchinga	Chewe Mutale	DMDO	2014.4 - present	Master Trainer
Livestock/vet	Muchinga	Mwami Malambo	Liv Techn	2014.4 - present	Master Trainer
Agriculture	Northern	Mr. Andrew Banda	PACO(since November 2011)	2010 - present	
Agriculture	Northern	Mr. Charles Kapalashya	PAO	2009 - 2013	Extension Management
Agriculture	Northern	Mr. Michael Chisimba	Senior Crop Husbandry Officer	2009.12 - 2013.6	Appropriate Technology
Agriculture	Northern	Mr. Innocent Mulauzi	Senior Land Husbandry Officer	2010 - present	Appropriate Technology
Agriculture	Northern	Mr. Henry Kapesa	Senior Extension Methodologist	2009.12 - present	Monitoring, Extension Management. PaVIDIA, Master Trainer
Agriculture	Northern	Mr. Kenneth Zulu	Senior Irrigation Officer, Technical Service Branch	2010 - present	Appropriate Technology
Agriculture	Northern	Mr. Francis Bwalya	Irrigation Specialist, Technical Service Branch	2010 - present	Appropriate Technology
ZARI	Northern	Ms. Rachel Mskita	Cereal breeder, Misamfu Research Station, ZARI	2010 - present	Appropriate Technology
ZARI	Northern	Mr. Kennedy Muimul	Dean breeder, Misamfu Research Station, ZARI	2010 - present	Appropriate Technology
ZARI	Northern	Mr. Chitambi Musika	Rice breeder, Misamfu, ZARI	2010 - present	Appropriate Technology
ZARI	Northern	Mr. Sonwell Mungalu	Rice agronomist, Misamfu Research Station, ZARI	2010 - present	Appropriate Technology

Annex 5 Assignment of Master Trainers and Other Counterpart Personnel

Department	Station	Name	Position	Period (working with RESCAP activities)	Main Activities of RESCAP
Fishery	Northern	Mr. J. Mumbake	Livestock Officer, Department of Livestock and fishery	2010 - present	Appropriate Technology
ZARI	Northern	Mr Richard Kaunda	Soil Researcher, Misamfu, ZARI	2010 - present	Appropriate Technology
Agriculture	Northern	Mr. Kelvin Simukoko	Senior Technical Officer (Irrigation)	2010 - present	Appropriate Technology GIS
Agriculture	Northern	Matengu Clive	SAD (Mporokoso District)	2012,6 - present	Master Trainer
Agriculture	Northern	Zulu Andy	SAS	2014,4 - present	Master Trainer
Agribusiness	Northwestern	Munachusa Dennis	SMDO	2014,4 - present	Master Trainer
Cooperative	Northwestern	Musema Dickson	SCO	2014,4 - present	Master Trainer
Agriculture	Northwestern	Mubambwe Simbarashe	PAO	2012,6 - present	Master Trainer, Extension Management, PaVIDIA
Agriculture	Southern	Mungandi Sepiso	DACC(Zimba)	2012,6 - present	Master Trainer
Agriculture	Southern	Sikota Sara Goma	Ext Methodol(Monze)	2012,6 - present	Master Trainer
Agriculture	Southern	Kachasa Mwape	SAO(Namwala)	2012,6 - present	Master Trainer
Agriculture	Western	Mr. Sibso Mulele	Senior Food and Nutrition Officer, Western Province	2010 - present	Master Trainer, PaVIDIA, Monitoring
Agriculture	Western	Dr. Shimainga Shimainga	PACO (Western)	2009 - 2012	Project management
Agriculture	Western	Mr. Mwiya Mukungu	PAO (Western)	2010 - present	Monitoring, Extension Management
Agriculture	Western	Mr. Richard Rikando	Planning Officer	2009 - 2013	
Agriculture	Western	Mr. Valentine Michelo	Senior Land Husbandry Officer	2009 - 2013	Monitoring, PaVIDIA
Agriculture	Western	Mr. Peter Kamusaki	Senior Mechanization Engineer	2009 - 2013	Monitoring, PaVIDIA
Agriculture	Western	Mr. Kasakura Chad	Senior Irrigation Engineer (since Mar 2012)	2009 - 2013	Monitoring, PaVIDIA
Agriculture	Western	Mwila Chama	Principa-Namushakende FI	2013 - present	Master Trainer
Agriculture	Western	Nalungwe Rebecca	SCO	2013 - present	Master Trainer

Annex 6 Follow-up on the Suggestions made by the Mid-term Review Team

(1) Monitoring Expert at MAL HQ

To apply the monitoring system that was developed in the target areas to all the 10 provinces, it was planned to assign Monitoring Expert to MAL HQ. After consultation with DOA, the expert was assigned concurrently to MAL HQ and Lusaka Province.

(2) Coordination among Department of Agriculture and other departments under MAL

The committee for National Extension Strategy was organized from officers of the involved departments of MAL, which strengthened coordination among DOA and other departments in HQ. For training in provinces, the master trainers were assigned from different departments. This improved coordination among the departments in provincial level.

(3) Decentralization of funding release for Micro Projects

Since the 2012/13 crop season, funding for the micro projects has been made through a lump-sum appropriation to Provincial MAL.

(4) Size of MPs

Similarly, approval for amount of cash grant for the micro project was transferred to Provincial MAL. Afterwards, average amount of seed money for sub-micro project has become to 5,000 to 7,000 KWT.

(5) Logistical support and capacity development for extension officers

There was no increase of the budgets allocated for extension service and training as of 2014 fiscal year. However, around 220 extension officers were newly recruited by MAL in 2013. Their induction training was conducted with support from RESCAP.

(6) Finalization of National Extension Strategy

National Extension Strategy was drafted as activity of Output 5 but not finalized yet.

(7) Strong coordination among various JICA supported projects of MAL

As one session of IST in the target provinces, training for rice farming was conducted by FoDiS-R, and in Northern Province irrigation training was conducted by Zambian counterpart personnel of T-COBSI.

(8) Review of indicators of PDM

As a result of discussions at time of the Mid-term Review Study, among the indicators in PDM, numeric figure was given to indicators of Output 3.

3. 現地調査日程

現地調査日程（2014年8月31日～9月20日）

月 日	団長/技術団員	評価分析	評価計画
8月31日 (日)	-	専門家と打合せ	
9月1日 (月)	-	ザンビア側評価団員との打合せ、現地調査 (Kafue 郡)	
9月2日 (火)	-	現地調査 (Lukulu 郡)	National Staff 参加
9月3日 (水)	-	現地調査 (Kasempa 郡)	//
9月4日 (木)	-	//	//
9月5日 (金)	-	現地調査 (Solwezi 郡)	//
9月6日 (土)	-	移動 (Solwezi→Lusaka)	//
9月7日 (日)	専門家と打合せ	資料作成	専門家と打合せ
9月8日 (月)	ザンビア側評価団員との打合せ、農業・畜産省 (MAL) 本省関係者からの聞き取り調査、Performance Enhancement Programme (EU) からの聞き取り調査		
9月9日 (火)	MAL 次官表敬、Performance Enhancement Programme (EU) インタビュー		
9月10日 (水)	現地調査 (Kasama 郡)		
9月11日 (木)	現地調査 (Luwingu 郡)		
9月12日 (金)	現地調査 (Chinsali 郡)		
9月13日 (土)	調査団打合せ、合同評価報告書案作成		
9月14日 (日)	調査団打合せ、合同評価報告書案作成		
9月15日 (月)	移動、合同評価報告書案作成		
9月16日 (火)	合同評価報告書案作成、MAL 関係者面談		
9月17日 (水)	合同調整委員会 (Joint Coordination Committee : JCC) 準備		
9月18日 (木)	合同調整委員会 (JCC) への評価結果報告		
9月19日 (金)	大使館報告 (評価分析団員帰国)		
9月20日 (土)	団長帰国	-	-

4. 質問票に対するカウンターパートからの回答

Rural Extension Service Capacity Advancement Project Answers from Officers of MAL, Provinces and Districts to Questionnaire for Terminal Evaluation in September 2014

I. Achievements

1. Project purpose - status of achievement

(1) Do you think extension service in rural areas has been improved compared to 2010? If so, what are the significant improvements? Please explain with concrete words and/or examples.

- Yes, extension services have improved in the rural areas. While in 2010 the number of visits and time spent with farmers was low, today, CEOs make frequent visits to farmers and spend more time with them, on average, 3 to 5 hours/day compared to 1 to 2 hours/day. The other portion of time is for preparation and traveling to farmers' sites from the camp.
- The use of ADEOs or field note books; CEOs are able to come with demo calendars.
- YES: There is systematic planning up to camp level with the availability of district extension strategies. There is well defined demo settings and coming up with appropriate technologies through the system of pilot demos and ordinary demos. Documentation of activities and record keeping has improved.
- Tremendous improvement. More demos than before. Staff equipped with adequate knowledge during management meetings which contributed much to information transfer
- The extension service has improved in that field extension workers now have the extension diaries which they use to plan their activities effectively. They also have camp maps, zones and agricultural commodities per zones to know where they need to concentrate in zone.
- Yes as seen in: 1) Improvement in report submission from as low as 30% to over 75%, 2) Improvement in the quality and quantity of demonstrations by extension officers. Quantity as increased more than 100% in all districts implementing the RESCAP initiated strategies. Farmers were actively involved in planning, implementation monitoring and evaluation of the technologies demonstrated on, 3) Improvement in information sharing through meetings. Provincial Agricultural Office holds weekly meeting for sharing plans and implementation of activities on a weekly basis. 4) Because of the trainings (In Service Trainings) extension officers in RESCAP target Districts had shown great improvement and confidence to facilitate to famers on appropriate technologies/commodities

- Yes, there have been improvements in extension work management and enhancement of planning using ADEOs, Extension strategies, meetings and demo calendars in the district and this has trickled down to the farmers in terms of increased production and productivity.
- Yes to some appreciable but varying extent because the District and field functions/activities have been revitalized and staff are able to make clear work plans and action plans. Most field staff have participated in ISTs where they have learnt more on extension methodology, including technical and facilitation skills relevant for training farmers. Quarterly reports are now uniform and are submitted on a more regular period. Meetings are also being held.
- The management has improved through the introduction of ADEOs, SAO managements meetings and management tools such as Report submission checklist and Report filling.
- Yes it has improved. Important tools for effective extension service delivery have been developed. Through the use of the ADEOs Extension Officers are able to plan and execute their plans (e.g. Plan and set up Demos) and also monitor and evaluate performance and report to their supervisors in an organized and systematic manner (comprehensive reporting formats from camp to national level). Need based In-service training plans, a guide/manual on extension harmonization also in place, The level of coverage and interaction with farmers also increased through use of zones as entry points for extension delivery and recruitment of field staff. Implementation of District Extension strategies, demo calendars started this year.

(2) What are the areas of extension services which have NOT been significantly improved yet?

- The approach was holistic; all areas of extension were being improved, but it is the rate of improvement that is in question. For example, the officers have been trained in how to conduct DEMOs as a tool to transfer technical skills to farmers, but to get farmers to meet regularly in the farmer field school or study circles has proved to be difficult. Numbers of farmers who meet is low due to excuses of individual farmer commitments when meetings are held by CEOs.
- Liaison between research and extension, we need to institutionalize.
- Partnerships with other extension providers especially at camp level need more improvement.
- Much has been done except on the intensification of micro trainings to farmers which are relatively very short

- Transport for field extension workers is still very to effectively cover all zone .
- Farmer group approach-Farmer groups and associations from the grassroots to apex level. This include Interest groups and/or Farmer Field Schools, Zonal committee, camp committee, and District committee
- Mechanisms for reaching out to farmers in outlying areas
- Harmonization of extension approaches among service providers
- Areas of financial and logistical (transport) support to extension service delivery.
- Monthly and quarterly meetings
- Some field staff (especially those that were outside the target district/camps) still need more training/practice to further improve their competences- facilitation skills, how to conduct demos, FFF, etc. The CEO farmer coverage still not high due to inadequate transport.
- Some districts still face problems working with stakeholders
- We need in service trainings for camp officers to improve on technological transfer and facilitation
- Extension tools such as the extension strategies, demo calendars are still at the beginning of their first cycle and have not yet fully matured.
- Infrastructure-most CEOs have no offices and their housing units are dilapidated.
- Review and planning meetings were not held routinely.

(3) What is your view on the application of PaViDIA Approach to demo or farmer field school as an entry point of extension service?

- My view is that it is effective, and it has helped to bring members of participating villages together to learn new skills and new income generating activities. However, conflicts about who benefits more and who does more work have created problems in running the micro projects. Some people want to benefit where they did not work because they are influential in the community. As a result. Some decide to quit.
- Pavidia approach to farmers is good as the farmers will be assisted by giving them a start up to a micro-project, though sustainability is questionable.
- In the past research trials were passed direct to the farmers for demos and FFSs of which adoption rate were low. Piloting of research trials with lead farmers is appropriate because farmers ideas, environment are put into consideration.
- This is good because PaViDIA improves on full participation which is the central part in the participation process. Farmers are now fully involved.
- It is an effective approach because it engages farmers to participate on all activities involved in the demo or farmer field school hence they are able to replicate them in their own fields.

- PaViDIA approach is very effective but requires thorough understanding by implementers. Good points is that:
 - 1) PaViDIA approach promoted group approach (Targeting a village) in agricultural development interventions. This meant increased participation in demonstrations and farmer field schools so established under PaViDIA Villages.
 - 2) Under PaViDIA, resource poor farmers willing to adopt what they were learning in demos/FFS had an opportunity to be assisted from the village revolving funds so that they could do things either in smaller groups or individual household
 - 3) A successful village can support demos based on felt needs of the village community
- Needs to be revisited, entry point should be cooperatives and interest groups for it to work well and enhance efficiency and effectiveness of extension service.
- Under PAVIDA the risk is that only sub-committee member in charge of particular micro-projects may grasp the technical aspect involved, e.g. in rearing chickens hence knowledge & skills transfer may be restrictive. However, it has worked well in some communities especially for micro projects like goats and cattle which have been passed on thus individual empowered.
- The approach has been good as it is less costly because of the group approach and demand driven activity.
- It is more comprehensive and empowering. It provides communities with opportunity and necessary capacities for learning through demos. The seed money also provides capital inputs to kick start implementing development activities in the communities.
- It is the best approach because communities/farmers are grouped together sharing the same purpose and objective.
- Farmer field school as an entry point in my view is the best as farmers are not coerced but are driven by their own interest.

(4) Which outputs of the RESCAP (see PDM) could improve MAL's ability to implement PaViDIA approach, and which outputs could not improve so much?

- Output 1 and 2 are cardinal.
- All outputs are relevant for MAL ability to implement PaViDIA but most important is: In-service training, Identification and dissemination of appropriate technologies.
- Institutionalization of training systems and strengthening of MALs institutional capacity should be improved upon
- All them have actually helped to improve MAL's ability i.e. Identification of appropriate technologies, Institutionalization of training system, Improvement of

practical abilities, Strengthening of monitoring and backstopping capacity, Improvement of MAL's institutional capacity.

- All outputs could contribute to improvement of MAL's ability to Implement PaViDIA. However, the output on strengthened monitoring and backstopping capacity at Camp/block, district Province and National Level is quite cardinal.
- Outputs which could improve implementation of PaViDIA:
 - (1) In service training of extension officers and district staff.
 - (2) Strengthening Monitoring and backstopping.
 - (3) Monthly /Monday meetings
 - (4) Promotion of appropriate technologies.
- Identification of appropriate technics for farmers, improvement of staff capabilities and extension management. I feel not much was done to improve monitoring and backstopping at all levels as it is still done inconsistently and not systematically.
- Farmer field school approach, providing camp operations timely and grants.
- Output 1 and 3 could improve, Output 4 and 5 could not improve.
- All the five (5) Outputs can improve MAL's ability to implement PaViDIA approaches. These outputs are feeding into each other therefore all the five (5) outputs can improve MAL's abilities.

(5) Examples to utilize PaViDIA Approach as tools for rural extension services

- Needs assessment and identification of appropriate technologies
- Farmer field school approach
- Pilot and ordinary demo approach
- Trainings
- PaViDIA Approach can be used where extension provision seeks to build capacities for self-sustenance, with emphasis on using locally available resources. With village fund (revolving) Village or community becomes an opportunity provider for its member's in terms of soft loans or pass on programs. Examples of PaViDIA utilization:
 - 1) Village facilitated to start goat rearing as FFS and members benefit on pass
 - 2) Village facilitated to start communal improved Rice Production and members are given Improved rice seed on soft loan to ensure sustainability
- Participatory Extension Approach (PEA) and Farmer Field School (FFS).
- The participatory approach targeting villages, FFS and use of grants to farmers.
- PaViDIA uses a participatory approach. Farmers identified various commodities which the project funded. The commodities form interest groups (e.g. off season vegetable production, seed production, animal draft power, fish farming, local

chicken rearing, canal rehabilitation/construction and management, etc.) farmers upon which Farmer Field Schools are formed. Therefore, the approach, using the commodities can be used both for training farmers and for commercial production/purposes.

2. Outputs – status of achievement

Output 1: Identification of Appropriate Technologies

(1) Do you think 14 identified technologies are really appropriate for small-scale farmers?

- The 14 technologies were identified in consultation with farmers, researchers and extension experts. As such, they have been very useful in meeting farmer needs, and improving their livelihoods. Specifically, farmers have improved productivity due to the technologies introduced.
- Some of them
- Yes but not Gattari
- I think all the identified technologies are appropriate except the hydro power mill “Gattari” which has not been utilized effectively by the farmers and it is viewed as an ancient technology.
- Yes, most of them are appropriate apart from the soil improvement technologies which are considered to be labor intensive.
- I do because they are identified in line with what the farmers lack need to be addressed with available.
- Yes, the 14 technologies on the overall picture are appropriate, because to determine appropriateness of these technologies, views from participating/observing small scale farmers were taken into account. The 14 technologies cannot be taken as the whole 14 applying to a given area but maybe one or a combination of some of these technologies may apply in a given area but accumulatively they make 14.
- Not really, some need more time to be taken as appropriate for small scale farmers.
- It is subjective. Dependent on farmers’ need.
- Some of the 14 identified technologies are appropriate for small scale farmers while others are not.
- They are because if farmers can adopt and come up with the desired output then the poverty alleviation in these rural house-holds can be enhanced.

Output 2: Institutionalization of training system

(1) Do you think Master Trainers are capable to organize trainings of trainers by themselves (without the help of JICA)?

- I think they are able to organize and conduct TOT without JICA. They have been able to do it with JICA and I think the experience and expertise they have acquired can enable them to successfully run TOT trainings.
- Yes, very much so.
- Yes they are capable provided there will be financial support through RDCs
- With what they have done already they are capable only that with limited resources in MAL it can be a challenge.
- YES. The Master Trainers are capable of organizing training without help. However, there has to be a strategy to provide for these activities even in the Ministry of Agriculture budget.
- Yes, if only they are given the necessary support in terms of financial and material support.
- Yes as long as HQ (through Extension Branch) takes full charge to direct MT activities and make them robust.
- They are capable of organizing trainings. As matter of fact the trainings were done by master trainers and JICA mainly provided the financial support.

(2) What is the significant benefit of the training system established through RESCAP, compared to the training system (if any) in MAL?

- The significant benefit has been the continuous capacity building of CEOs and BEOs resulting in better skills to meet new challenges of farmers needs. Farmers have appreciated the level of advice given to them in various crops, irrigation, feeding of livestock and recommendations for plant disease control. Report writing skills have improved, and the skills in conducting demonstrations of technologies to farmers have been upped too.
- The practical aspect of the training session held in field environment
- Curriculum designed based on the training needs assessment done at the start of the program.
- The trainings also practical oriented.
- RESCAP trainings are more practical and result oriented and give immediate feedback.
- There was no system at all existing in our province so the one established will help address lapses that are identified. Trainings conducted without out sourcing trainers.
- The Training system under RESCAP focused building extension officers' practical abilities needed to address needs of the small scale farmers

- The trainings were not generic but based on extension strategies.
- In Service trainings which address the felt needs of trainees, which has enhanced knowledge and skills of officers.
- It helped awaken and unify codes of practice and standards (among extension workers & managers) with respect to activity implementation and reporting. MAL training system seems to focus more on long term trainings yet staff IST and farmer trainings been uncoordinated and left to other stakeholders.
- The use of the Cascade model, introduction of lesson plan and general organization of training such budgets and training materials.
- Practical emphasis on planning training programme with clearly developed lesson plans, need to doing (implementing) and seeing results (monitor and evaluating progress) and the need to take advantage and maximize on use of local resources.
- The significant benefit of the training system established through RESCAP is that it focused on capacity building MAL staff to train others from Master trainers to Provincial trainers, District trainers and finally to frontline officers.

Output 3: Improvement of CEO's abilities

(1) What are the significant improvements of CEOs' abilities in the last 5 years (hereinafter referred as "during RESCAP period")? - What can they do now compared to the past time?

- Better able to conduct demonstrations to farmers. Officers have been instilled with a new sense of need to conduct demonstrations to farmers for them to know how to carry out practices than just talking.
- They have improved their commitment of maintaining visits to their farmers. They spend greater amount of time with the farmers
- By use of ADEOs, they have a planned schedule of visits to their farmers than before when they did not have ADEOs.
- There has been a significant improvement in the quality of reports and the frequency of reporting.
- Use of GIS for distance calculation, Use of ADEOs/ diaries, Use of demonstration calendars. Able to implement 05 / camp
- Quality reporting and on time
- Able to generate good plans
- Quality demo setting
- Improved facilitation
- Adequate planning through the use of ADEOs
- DEMO making and setting

- Improved record keeping and data collection
- Dissemination of information on appropriate technologies
- Able to conduct camp activities effectively with limited resources due to mapping of the camps.
- Able to carry out activities due planning with the ADEOS which they carry with in the field.
- Documenting planned and achievements on regular basis using Diary
- Significant improvements of the CEOs have been in the areas of planning, (which has enhanced efficiency and effective service delivery) report submission and improvements in the knowledge base and access to updated information.
- Through ISTs most CEO have been able to gain and apply more knowledge and skills. They are more confident facilitating agriculture activities, are able to make more meaningful action plans for field activities, and can properly write monthly reports.
- Not applicable to N/western province
- Ability to organize zones as entry points for delivery of extension services leading to improved coverage and interaction with and among farmers.
- CEOs have resource materials to refer to for trainings. E.g., crop recommendation, agricultural extension manual.

Output 4: Strengthening of monitoring and backstopping capacity

(1) What are the significant improvements of Monitoring and backstopping capacities at levels of district, province and HQ during RESCAP period?

- The levels of backstopping and monitoring have significantly improved at provincial level in supervising the district staff, and also the district staff in supervising and backstopping field level staff (BEOs & CEOs). Previously, provincial staff rarely visited the districts, but within the past five years, there has been appreciable number of visits by the provincial staff to follow up on what has been reported in the various reports.
- Report submission checklist. Use of diaries. Harmonized report format
- Most importantly the introduction and use of ADEOs
- Monitoring and backstopping has increased in the last few years
- The check list report submission has helped reports to be submitted in time
- The ADEOs have helped the backstopping team to know which activities the field officers carried out than just being told
- Reports submitted are properly filed so they can be used as reference points to compare reports
- Use of monitoring routes

- Use of computer applications
- Efficiency and effectiveness through developing and using monitoring routes in the district using QGIS.
- The introduction of district strategies/personal action plans has given a more realistic monitoring and backstopping opportunity for all levels as it is easy to know and track what is happening.
- No support from RESCAP to NW Province
- The ADEO is important tool and has been appreciated to help check how extension work is planned, implemented and accounted for (reported) in a particular camp, district, province and HQ.
- The checklist for report submission has also stimulated a spirit of competition among extension officers in terms of timeliness of report submission and quality of reports.

(2) Do you think management tools (e.g. Check-list of report submission, filing system, Mapping, District meeting) are all effective?

- These tools have proved to be effective and beneficial. Officers are concerned to see whether their reports are reflecting on the checklist, since it is displayed for all to see. As a result, it reminds them to submit reports. District meetings have improved accountability as reviews at these meetings show to supervisors and other officers as to whether goals are being achieved or not and why. Solutions are provided and made to be responsible for what they are doing.
- Yes, especially mapping and district meetings
- Yes they are. Easy to locate information/records, easy to plan monitoring routes and know which CEOs have not submitted reports
- Checklist enables managers to see which officer is not active
- Filing enables good management of information for reference as well communication
- Mapping enabled placing of activities in the area for reference and follow up. Mapping also enable the development of routes and as well planning interventions
- Yes they are, but monthly meetings have been a big challenge due to limited resources especially for officers from far flung areas to attend.

Output 5: Improvement of MAL's management capacity

(1) "National Extension Service Strategy" is being drafted at present. Without the Strategy, what problems do you have?

- Without the strategy, we have problems of where effort is being directed. It is too general to say that we would like to contribute to farmers' increase in crop and livestock productivity. The strategy gives targets and goals as well as when particular activities have to be carried out. It is not easy to keep track of what has been achieved and what is still to be achieved without a strategy. The strategy also allows the NGOs working with small scale farmers contribute to the strategy.
- We lose direction and fail to come up with well-defined activities.
- Some activities not in line with National Policies and priorities of the province
- Types of demos to be installed may not be known and planning would be difficult.
- Without extension strategy, there would be unfocused and uncoordinated interventions. Extension strategy allows for prioritized interventions. Strategies also encourage synergies. Otherwise, there would be unrealistic demand for resources and without which, activities may not be implemented. And on the other hand, given adequate resources, there would be misapplications and misuse of resources if there were no strategies.
- District plans will stand alone without much support as it may not be in line with national extension strategy and it will be difficult to operate without a National Extension service which creates a road map.
- Lack of strategy leads to non-focus on priority issues hence stagnates development and leads to misguided and wastage in use of already meagre resources.
- The activity is not localized to the needs of the districts.
- Lack of focus on priority areas
- Inefficiency in allocating limited resources
- Duplication and uncoordinated interventions/efforts which may conflict and/or confuse farmers
- Difficult to monitor and measure progress
- At the moment as a district we align district activities to the sixth national development plan. In the execution of extension service different players carryout extension differently, some with incentives for the farmers particularly NGOs in form of food and allowances. This has led to apathy in certain instances if the activity is exclusively MAL funded as it is devoid of the above stated incentives. We do not have any major problems as a result of the non-existence of a draft national extension strategy.

(2) Do you think MAL staff (district and province) can design Extension Strategy/ Demo Calendar and use them effectively by themselves? (without JICA)

- Skills and knowledge to design extension strategy and DEMO calendar have been provided by RESCAP, and the staff so experienced are capable to do it. However,

there was need for extension of RESCAP's presence for a further two years as the province and district are performing, so that there is support. The five years was a learning phase, now the province and district will be applying the skills. It's like a major examination or test. There must be someone to say yes you are doing it right. If there is no one, there will be a gap created.

- Yes, they can.
- Yes since the formats were done during management trainings and planning was done by participants
- Yes they are capable as the strategy does not need many days to be formulated as the foundation has been laid off through the trainings conducted.
- Yes we can, because making of strategy is based on what MAL normally provides (few resources) for operations and what is prevailing on the ground (many challenges).
- Yes, since trainings have been done for the same and capacity have been built in MAL staff in fact in our district we doing this.
- Yes they can design though most still require guidance/supervision in view of the different staff experiences and capacities in districts and provinces.
- Yes, MAL staff especially those under Department of Agriculture

4. Overall Goal

(1) Efficiency or productivity of the extension tools of MAL that are aimed at improving of farmers' livelihood, as well as those of the PaViDIA micro projects, have been increased during RESCAP period?

- Efficiency and productivity have increased in that participating farmers have increased on the initial capital that they were given in a number of PaViDIA Income Generating Activities. Numbers of goats have increased, and farmers are earning income to send children to school and to help the elderly in communities. Some communities who keep broilers have learned to reduce costs by making their own feed to raise the levels of profits. Those who have fish ponds have adopted the practice and have made individual fish ponds and they are rearing their own fish. Grinding mills are providing incomes to communities and have brought services near to the homesteads and farmers don't have to travel far to grind their meal for food.
- There have been some failures in some instances where farmers have been helped with oxen for draft power but have been unable to train the oxen until recently.
- Yes, such as field trials, pilot demonstrations and actual demonstration at field level.

- Yes, e.g., appropriated technologies like the line markers.
- Yes in most target districts/camps.

II. Implementation Process

1. Project management

1-1. Management for inputs

(1) Is there any excess or deficiency in specialties of the JICA experts and period of time of their assignment in Zambia?

- From observation and interaction, the JICA experts have been adequate. What they have been able to achieve within the five year time frame has been excellent and well appreciated by the district.
- No and the period for this phase has been adequate.
- Optimal
- Period too short. Impact may be positively seen after five years or more.
- Yes to some extent.
- The period of their assignment could be extended to 5 years, specialties are okay.
- The training initiatives on extension management skills (such as SAOs, inductions, district strategies, demo planning and implementation) was introduced comparatively late in the project lifespan and may not have yet impacted much.
- Period of stay for some Experts have been too short for them to see the outcomes of their interventions/ideas.
- Excess. The period of time of stay in Zambia I feel is adequate.

(2) Role of the experts – has there been any change of their role/TOR since the initial stage of the Project?

- There has been no change of their roles that the district is aware of.
- The experts attached to us have not changed their roles, they continued with their advisory service.
- No.
- Yes, one expert moved from Provincial office to HQ.

1-2. Project counterpart personnel in MAL

(1) Do you think the participation of MAL staff including you in RESCAP is enough for the achievement of the project purpose (improved extension service)?

- The participation of MAL staff has been tremendous. Each time the officers at all levels have been called upon to participate in any of the RESCAP or PaViDIA

programs, there has been positive response, hence a good level of achievement of the objectives of the project, although it must be admitted that there is a long way to go.

- Very much so, counterpart officials are able to achieve the project purpose.
- May not be enough as there is need to incorporate other stakeholders in order to improve MAL activities.
- Yes
- Yes the only challenge was staff changes at all levels.
- Yes, but we need to involve other players as well.

1-3. Management for operation - have there been any problems in followings?

(1) Decision making process for the project management by MAL and JICA Zambia Office

- There has been slight delay for permission to release funds to PaViDIA micro projects that deserved to be funded for the remaining IGAs. Apart from this, there have been no problems.
- I am not privy of that situation.
- No.
- None, except before the signing of the MOU
- Not any that I am aware of.

(2) Frequency to hold the Joint Coordination Committee (JCC) – questioned for officers of the member departments/organizations for JCC

- Initially, very frequent as planned. Over the last year only once (2013).
- No.
- Not applying in my operation area.

(3) Communication among the project operation units (JICA experts, counterpart personnel (MAL staff) and project management officers of MAL)

- Very good, as it is transmitted electronically.
- No.
- Communication has been outstanding and most protocols observed.
- There were no full time staff attached this could have delayed or affected implementation somehow at times.

- JCC meetings were held but they time frame from one meeting to the next was long. Quarterly JCC meetings could have been better.

2. Project ownership

(1) What activities of the Project should be continued by MAL after the termination of the Project?

- Monitoring of provincial and district activities; printing of ADEOs; funding of in-service training (by way of allocating funds specifically for in-service training).
- Institutionalized trainings for both farmers and officers
- Management meetings
- Trials, pilot demos and field demos
- Training and dissemination of appropriate technologies
- In service trainings
- District strategic plans
- Identification and promotion of appropriate technologies
- Institutionalization of training system
- Improvement of practical abilities
- Strengthening of monitoring and backstopping capacity
- Use of ADEOs
- Planning using extension strategy and demo calendar
- All Extension supporting activities such as implementation and review of extension strategies, demo calendars, setting up planned demos, use of ADEOs, checklist for report submission, filling system for CEO/BEO stored at SAO office, monitoring and backstopping micro-projects, In-Service/Induction Training, progress reporting.

(2) What are conditions to enable continuation of the above activities?

- Officers who have worked with the RESCAP experts must be available at MAL HQ as there has been POR.
- The activities of POR to be mainstreamed in the work plan of the Director, Principal monitoring officer and the Chief Extension Methodologist and other key staff at HQ.
- Adoption of the extension strategy for the ministry
- Enhanced partnerships
- With other Extension providers such as S3p
- Planning and budgeting for the above
- Provision of ADEOs to CEOs
- Provision of logistics to conduct effective monitoring and backstopping, carry out

in-service trainings

- Strengthening material and financial support especially at camp and block and district level.
- All that is needed is a coordinating office at HQ, preferably Extension Branch.
- As long as there is leadership from HQ and financial support.
- Government commitment through MAL and institutionalization of the activities in MAL annual work-plans and budgets

III. Fiver Criteria Analysis

1. Relevance

1-1. Needs of the implementation agency

(1) In which aspects institutional development of MAL are needed to develop effective extension services?

- Maintenance of In service trainings and build capacity for monitoring
- Official orientation and formulation of T.O.R for each officer in their hierarchy
- Continues capacity building of staff
- Commitment of frontline extension providers
- Strengthening institutions such as CACs, DACs and DDCCs
- Provision of adequate transport
- Financial support through RDCs
- Workshops and management meetings
- Continuous capacity development of staff especially field staff.
- Effective stakeholder engagement especially at district level, creation of stronger farmer groups for demo/FFF implementation, continue training of farmers and staff
- Harmonization of departments within MAL and institutionalization of MTS activities. Also support to IST, TOT
- Regular In-Service Training for staff
- Active involvement of other MAL Departments

(2) Is PaViDIA Approach still one of the extension approaches for MAL?

- No. The PaViDIA approach with its cornerstones of Developing infrastructure using local resources and Income Generating Activities needs external support for those requirements not locally available and has to be supported by outside sources. However, in areas where PaViDIA approach has been used already, the villages that have accumulated resources can continue to reinvest in other IGAs according to their plan.

- NO – in that MAL does not approach it that way but only through community groupings or cooperatives.
- Yes.
- Yes as it involves farmer participation
- Its stronger is districts where the project was implemented. It is being implemented alongside PEA concept
- It is definitely one of them.
- To some extent yes as it is drawn from PEA.

1-2. Needs of the beneficiaries

(1) How the trainings/ advices/ services provided through RESCAP were helpful for you and/or your staff?

- The mentioned services were helpful in very tangible manner. The trainings aided the officers to refresh their knowledge and also learn new skills that have been seen in the demonstrations they have conducted to farmers. Continuous advice on the effective planning by use of ADEOs has helped in scheduling visits in a well-organized manner, whereby results are sought, rather than simply recording that a visit has been made without a goal.
- The training showed us the deficiencies that we had, and it showed gaps to be filled.
- Analytical skills were developed
- Realized the importance of record keeping for future use
- Improved in the backstopping support
- Able to formulate work plans fully
- It brought to the specific areas of management that need to be addressed
- They have enhanced our knowledge and skill in the field and this has improved effective and efficient extension service delivery.
- Having had worked in one of the target districts and being one of the MTs from inception, the increased RESCAP activities further helped to improve my ability to develop training materials, design, prepare and conduct training programs. This experience made me a better trainer/facilitator.
- The need for effective planning, monitoring and implementation and management of resources including TIME.
- The need to be strategic in our work, e.g. use of limited means at our disposal to produce results
- On the part of officers they have benefitted in a number of ways including
 - (1) Able to understand the cycle well and consequently plan more effectively
 - (2) They have a lot of literature to refer to.

(3) Practical abilities have been improved e.g. understand the difference between pilot and ordinary demos and how to implement the two more effectively, facilitation skills improved

(2) How important are MAL's extension services for small scale farmers when comparing to other service providers?

- Farmers have expressed their appreciation in meetings on the benefits they have gained from MAL extension services. Experience has shown that other service providers will focus on an area of their interest to promote a technique for example, treadle pump, or cotton growing, or herbicide use, etc. to boost their company sales. MAL is there for a variety of crops, livestock, technology and services that are aimed to benefit the farmer for their own development not for MAL to increase sales or income. So the services are not biased. And farmers know and appreciate this fact.
- Very important, it is the prime provider of extension to farmers.
- Other service providers are mostly short term while MAL is continues system
- Increased knowledge to farmers
- Improved standard of living for small scale farmers
- MAL is the only organization that has structures all in all areas targeting the extension service. Therefore it is very important.
- MAL extension service are very sustainable as compared to other service providers who normally do it on contract basis and when they go whatever they started is not sustained. MAL extension is very sustainable as they do not provide handouts in term of food and money to farmers. MAL staff are also better qualified and better placed and this enhances sustainability.
- Unlike other service providers, MAL covers all farmers and has a higher potential in terms of network and knowledge resource.
- We are the custodian of the extension service and we are there to help farmers in a sustainable way.
- MAL extension services are comparatively above other extension service providers. The services are comprehensive, technically sound, systematic, sustainable, and has wide field network coverage.
- MAL extension services are important because MAL staff understand the farmers and environment better compared to other service providers hence able to tailor services that are relevant and well suited to farmers setting. MAL has the aspect of sustainability highly entrenched as opposed to other service providers consequently activities spearheaded by mal create a much bigger impact over time.

2. Effectiveness

(1) How much could outcomes from following tasks of the project contribute to achievement of the project?

Tasks (outputs in PDM)	Extent of Contribution
1 Identification of appropriate technologies	80%
2 Institutionalization of training system	75%
3 Improvement of practical abilities	100%
4 Strengthening of monitoring and backstopping capacity	80%
5 Improvement of MAL's institutional capacity	100%

	Extent	Extent	Extent	Extent	Extent	Extent
1	Very good	25%	80%	High	Very much	Very much
2	Good	20%	80%	High	To some extent	Much need to be done
3	Very good	20%	90%	High	Very much	Very much
4	Good	15%	80%	High	To some extent	Much
5	good	20%	70%	High	Very much	Much

	Extent of Contribution
1	Help in targeting/focusing resources o relevant needs
2	Helped unify code of conduct/practices in knowledge/skills transfer, reporting
3	Raised staff confidence in implementation of field activities
4	Helped to verify, share information and make correction
5	Helped unify code of conduct/practices in knowledge/skills transfer, reporting

	Extent	Extent	Extent	Extent	Extent	Extent
1	Good	Very much	Effective	90%	Much	Greatly contribute
2	Good	Very much	Effective	100%	Much	Greatly contribute
3	Good	Very much	Effective	100%	Much	Greatly contribute
4	Good	Very much	Effective	100%	Moderately	Greatly contribute
5	Fair	Very much	Very Effective	100%	Much	Greatly contribute

(2) Other than the above, what should have been otherwise undertaken by RESCAP to further improve the extension service by MAL?

- NIL
- Lobbying for the position of Research Extension Liaison Officer for each province
- Strengthening farmer to farmer extension system

- Encourage exchange visits/exposure visits, involve farmers in the training, that is the lead farmers
- Provision of fuel and transport support (logistics) especially to field staff.
- Provision of transport at camp level and expanding to other provinces
- Establish and maintain a team of Master Trainers at HQ.
- RESCAP should have also brought on board Departments of Livestock, Veterinary and Fisheries since they are also providing extension services.
- Provide resources for monthly, quarterly and annual meetings.

3. Efficiency

Inputs were made appropriately in terms of timing, quality/quantity and utilization?

Japanese side (JICA experts, training in Japan, project operation budgets):

- They were appropriately and at the right time.
- Yes.
- Operational budgets well planned
- To some extent, operational budgets were not enough and training duration in Japan not adequate. Field staff should be provided with long term trainings for higher qualifications as well.
- Yes, according to JICA conditions

Zambian side (project counterpart personnel, project operation budgets, etc.):

- Personnel were adequate, but because it was to be part and parcel of the extension programme, operation budget was inadequate, leading to untimeliness in carrying out some important activities.
- Yes.
- Break on counterpart on appropriate technologies after retirement from GRZ, operation budget below average and transport not enough to even cater for other sections.
- Operational budgets have limitations
- Project operational budgets not adequately provided.
- Inadequate and unpredictable.
- Less efficiently and untimely

4. Impacts

4-1. Contribution of RESCAP to achieve the overall goal

(1) Do you think project purpose “improved rural extension service” is one of the most effective means to achieve the overall goal “livelihood improvement of farmers”?

If you think so, why?

- Rural extension service has been seen in Zambia as in many developed countries, as a means of improving rural livelihoods through the transfer of knowledge to the rural populace who depend mostly on growing their own food to survive. They may not know that there is a better way of growing their crops or livestock; they may be aware, but they may not know how to do it. If there was no extension service, they would remain at the same level forever, as they may not be able to pay for the services if the government was not providing for them. So, extension service is very important in achieving the overall goal of livelihood improvement of farmers.
- Yes, it is one of the means because it trains the farmers to use appropriate and innovative technology as is required.
- YES, the system up to farmer level is incomplete without facilitation from extension providers.
- Yes because the extension service has strategies that help identify the farmers’ problems and can help guide them to identify solutions which in return improve their livelihoods.
- Yes, through capacity development of staff will lead to effective and efficient extension service which will enhance livelihood improvements of farmers.
- Yes because farmers need to be continually given information on new technologies so as to help improve their knowledge, skills and attitudes relevant for improved agricultural production.
- Yes. When the extension service is organized especially at camp level it has direct impact on the farmers. Improvement of farmers is more dependent on the camp officer when he has adequate support from the district.
- Yes. Improved delivery of extension services has direct and indirect contribution to improvement of farmers’ livelihood. Farmers will be technically equipped to improve the management practices of their enterprises which will result in improved production and productivity and ultimately standard of living.
- Yes. This is because through improved rural extension service, farmers will be able to make informed decisions in as far as;
 - (1) What type of crop is suitable for their area
 - (2) Type of crop variety that will give high yields
 - (3) Crop husbandry practices to applyThat informed decision will result in food production and productivity thereby

farmers are food and nutrition secure and able to sell excess produce to the market which is income generation. Farmers' livelihood will in the end improve.

- Yes, because most farmers live in rural areas and once rural extension service improves the livelihoods of most farmers will also improve. Extension services help to improve livelihoods.

(2) What are other means (causes) which should be realized in order to achieve the overall goal (livelihood improvement of farmers)?

- Collaboration with other departments in the ministry; as farmers learn through extension improve productivity, they will need market information from Department of Agribusiness and services from vet and fisheries. This will not be a problem because these have been working together and needs strengthening.
- Is to bring in other players to offer medium and long term credit to small scale farmers.
- Well defined marketing system (Bulking)
- Value addition to crops
- Promotion of mechanization
- Involve farmers in all participatory activities
- Continuous capacity building of staff and farmers in all areas of crops production, storage and marketing.
- Improved access to credit and marketing facilities
- Promote Responsive research
- Improved stakeholder engagement and coordination
- Enhanced and sustained staff & farmer support programs(strong institutionalization)
- Provision of transport in order to reach out to more farmers
- Extension is not an end in itself. Other means include; adequate and predictable funding, support infrastructure for staff (houses, office accommodation) and production (improved roads, irrigation, processing, and storage), dynamic private sector.
- Change of mind set of farmers, crop diversification, use of high yield crop varieties
- Taking a holistic approach, improve the marketing arrangements. Re-organize the Co-operatives so that they become viable and enterprising.
- Provision of startup capital (resources) to farmers

4-2. Do you observe any spillover effects (impacts to individuals, organizations, societies, etc.) by RESCAP that may be generated through process to implement following tasks?

- Identification of appropriate technologies
- Institutionalization of training system
- Improvement of practical abilities
- Strengthening of monitoring and backstopping capacity
- Improvement of MAL's institutional capacity

If you observe any, please list up them as many as you remember.

- Yes; identification of appropriate technology in non-RESCAP districts
- Institutionalization of induction courses for new staff
- Calculation for distances in relation to fuel allocation during monitoring and visitation
- SHA utilization of master trainers in Mbala
- Piloting of research trials with farmers in the non RESCAP districts
- Mushroom production using local seed from ZARI Misanfu
- New practices in bee keeping
- Not yet observed
- Some staff has been able to integrate farmer activities with other stakeholders, thus increasing coverage and even quality.
- In non RESCAP areas there was such as FFS, SAO meetings, Blocks meetings and management tools.
- Increased demand for ADEOs by officers
- There is renewed interest by officers to work despite challenges of transport

5. Sustainability

5-1 What should be sustained after RESCAP is terminated?

(1) What are main benefits that the Project is expected to leave?

- Improved extension management by MAL managers.
- Improved work performance by district staff, CEOs and BEOs.
- Timely and frequent monitoring
- Line of feedback from Field to district and to the province and vice versa
- Culture of in-service training to continue on improving practical skills
- Timely and high quality reporting
- The use of the field diaries
- The conduction of trials and demos

- Refresher training courses
- Management meetings
- Knowledge and skill in extension service delivery through:
 - (1) Use of ADEOs
 - (2) promotion of appropriate technologies
 - (3) In service trainings
 - (4) Monitoring and evaluation
 - (5) Planning using extension strategy and demo calendar
- The idea of making use of local resources available
- Well defined extension management
- Strategic planning
- Intensified backstopping
- Improved management capacity of the extension services through the trainings conducted.
- In-service training programs that are planned
- District staff are more able to plan and conduct training for officers
- Dissemination of knowledge and skills to farmers especially in the project areas has increased owing to improved facilitation skills, increased and improved demo handling, promotion of FFS
- Some villages supported with funds for micro- projects have been able to re-invest or pass on the project benefits among members
- A reservoir of knowledge, guidelines and skills has been documented for present and future reference.
- The reporting format has been upgraded and made uniform
- Most districts are meeting more frequently on monthly basis

(2) Among the above, which benefits should be sustained?

- All benefits need to be maintained, if possible.
- Continuous research and improvement of technology
- Continuous Monitoring and Evaluation by Management
- All.
- ADEOs
- Appropriate technologies

(3) What is the main risk(s) to inhibit sustainability of the project's benefits/effects?

- The risks lie in there being no commitment on the part of MAL to maintain the

benefits. It has emphasized capacity building of staff and farmers, demonstration of improved and appropriate technologies planning of activities, improvement on feedback leading to increased productivity on the part of the farmers to improve their livelihoods.

- Provincial, district and field staff to assume that the benefits will continue to be there even without effort; that extension can still be conducted as it has always been.
- Frequent movement of staff from one station to the next
- Unavailability of local counterparts could be through retirement, etc.
- Financial constraints
- Financial support which is irregular and institutionalization
- Relaxation on the part of the managers from keeping the project rolling, (i.e., lack of meeting, lack of IST)
- Risk going back to the old way of doing things
- Newly recruited officers going in the field without being inducted
- Continuation of the activities initiated by RESCAP .The activities need to be embedded into the MAL work plans and budgeted for.
- No major risk.

(4) What should be done for overcome the risk(s)?

- Ensure that officers take it up and continue to apply the knowledge and skills obtained, and that orientation must be given to any officer that is taking over from an existing officer who is well versed in what RESCAP has trained officers in.
- Maintain the T.O.T team, and assist it to operate.
- Continues sharing of information with rest of staff through meetings, etc.
- Incorporate during budgeting
- Improved funding towards activities in the Ministry of Agriculture and Livestock
- Trainings which should be very inclusive (all departments of MAL)
- Enhance monitoring
- Government commitment to ensure adequate and predictable resource disbursements
- Introduction of budget lines in the Annual budgets such as Support to the Production of ADEOs.
- Continuation of the activities initiated by RESCAP .The activities need to be embedded into the MAL work plans and budgeted for.

5-2 Financial aspect

Will budget be enough available for continuing improvement of the extension service after end of RESCAP?

- There has been an improvement this year funding towards extension, and if this is maintained, then improvements will be implemented within the available budgets allocated to districts. No special funds are required to implement extension services improvements, but funds are needed according to requests made in annual budgets presented to Ministry of Finance from districts.
- There is need to increase budget allocation to DOA for field operation.
- YES, also in collaboration with other partners such as S3p SHA and APPSA
- If it comes on time but otherwise, it may not be enough
- Budgets should be funded as they profiled and accordingly the quarters the implementation will be effective.
- Honestly, I don't know!
- It's possible but not at the current funding and spending regime.
- Not at all
- Based on MAL 2015 budget for extension services
- It is very difficult to tell due to limitations of resources.
- Absolutely no.
- Yes to some extent
- To less extent

