
Productive Partnerships in Agriculture (PPAP)
PROJECT IMPLEMENTATION MANUAL
Section 6 – Monitoring and Evaluation Manual

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Abbreviations

Abbreviation	Description
ACIAR	Australian Centre for International Agricultural Research
ARB	Autonomous Region of Bougainville
AWPB	Annual Work Plans and Budgets
CB	Cocoa Board
CCI	Coconut and Cocoa Institute
CIC	Coffee Industry Corporation
COSA	Committee on Sustainability Assessment
DNPM	Department of National Planning & Monitoring
EHP	Eastern Highlands Province
ENB	East New Britain
FOB	Free on Board
GoPNG	Government of Papua New Guinea
ha	Hectare
IFAD	International Fund for Agricultural Development
ICR	Implementation Completion Report
ITC	International Technical Coordinator
km	Kilometre
M&E	Monitoring and Evaluation
MES	Monitoring, Evaluation and Survey
MTDS	Medium-Term Development Strategy
MTR	Medium Term Review
NADP	National Agriculture Development Plan
NDAL	National Department of Agriculture and Livestock
NGO	Non-government organisation
PCU	Project Coordination Unit
PMU	Project Management Unit
PNG	Papua New Guinea
PPAP	Productive Partnerships in Agricultural Project

Introduction

Purpose of this manual

This manual is section 6 of the PPAP Project Implementation Manual (PIM). The purpose of this Monitoring and Evaluation (M&E) Manual is to provide guidance and instructions to the core staff responsible for implementation of M&E activities within the Productive Partnerships for Agriculture Project (PPAP). Other project staff, particularly the Project Managers and Component Coordinators (Component 2 Coordinator, for Component 2, and Transport Planner/Senior Engineer), for Component 3, should also make extensive use of this Manual, but the core M&E staff will use this as a guide for significant parts of their work. These positions include:

- **Project Coordinator** (PC) heading the Project Coordination Unit (PCU) in the National Department of Agriculture and Livestock (NDAL), located in Port Moresby;
- **Senior M&E Officer** assigned to the PCU by the Secretary in NDAL;
- **Senior Monitoring, Evaluation and Survey (MES) Officer** assigned to the Goroka Project Management Unit (PMU) by the CEO of Coffee Industry Corporation (CIC);
- **Senior MES Officer** assigned to the Kokopo Project Management Unit (PMU) by the CEO of the Cocoa Board, or the Director of the Cocoa Coconut Institute Ltd (CCIL); and
- **Deputy Project Manager** of the Project Management Unit (PMU) for Cocoa Board Office in Buka, located in Buka (to facilitate the inclusion of Bougainville in M&E activities).

A more detailed description of the division of responsibility for M&E activities across the PCU, PMUs, World Bank, individual staff and consultants is provided in Section 4 of this Manual on Roles and Responsibilities. Detailed Terms of Reference for the two MES Officers (for coffee and cocoa) are provided as **Appendix A**.

The objectives of the PPAP M&E system are to:

- Ensure a high level of transparency and accountability in the delivery of project activities;
- Improve the effectiveness of day-to-day decision-making through the provision of timely information to project managers and staff;
- Enhance the ability of project steering committees to hold project staff accountable for effective delivery of annual work programs and to adjust project activities as needed;
- Empower key stakeholders and project beneficiaries to provide timely feedback to project management and staff ensuring that the project adapts to remain responsive to their needs;
- Capture and communicate lessons learned to improve performance during project implementation and to allow other similar and related projects to benefit from improved practices;
- Verify the achievement of project objectives and outcomes through the collection and analysis of high quality socio-economic and farming practice data and information.

Whereas M&E terminology can often be ambiguous and confusing, a comprehensive list of terms and definitions as they are applied to the PPAP is provided in **Appendix B**.

Project development objective and indicators

The Project Development Objective (PDO) for PPAP is: **to improve the livelihoods of smallholder cocoa and coffee producers through the improvement of the performance and the sustainability of value chains in cocoa- and coffee-producing areas.**

The key indicators which will be used to assess the achievement of this objective are the:

- a) The number of smallholder farmers adopting improved farming practices;
- b) The number and coverage of productive partnerships successfully implemented and likely to be sustained;
- c) The share of the export price, including quality premium, received by smallholder farmers in the project area; and
- d) The net incomes of smallholder cocoa and coffee growing households in the project areas.

Results Framework and Arrangements for Results Monitoring

While the above indicators will be used to measure the extent to which the overall objective of the project has been achieved, a set of 11 specific outcomes (or, results) have also been identified and included in the PPAP Results Framework in Annex 3 to the Project Appraisal Document (PAD). This Framework is attached to this Manual as **Appendix C**. Each of these outcomes is tied to a specific activity or set of activities within one of the project components or sub-components, and the achievement of these outcomes will be tracked over time through the use of both quantitative and qualitative indicators which are also specified in the Results Framework.

To allow for more informed project monitoring over the life of the project, target values have also been established, including a baseline value (which will be re-validated as needed through the baseline survey) and targets for each year of the project. If the data and information collected through M&E activities indicates that annual targets are not being met, and that the final targets seem unreachable, adjustments can be made, preferably as a part of the Reviews to be carried out at the end of Project Year 2 (PY2) and Project Year 4 (PY4). By that time, the project may have also evolved in ways not envisioned during project design, so the addition of new outcomes and/or indicators could also be added to the Results Framework and the accompanying “Arrangements for Results Monitoring” which is attached to this Manual as **Appendix D**. This Appendix item also includes specific guidance as to how to collect the data or information needed to measure the indicators, including: existing data and where it can be found (e.g. a database or regular publications); reports or types of documents which might capture qualitative changes (e.g. decisions) that have been set as targets; new instruments or M&E activities that will be needed to collect data or information that does not currently exist or is outdated; the frequency with which data should be collected; and who would be responsible for collecting and/or disseminating the data and information which is needed (including entities both within and outside of the project).

Integrating M&E Requirements into the Management Information System (MIS)

The Results Framework and the Arrangements for Results Monitoring jointly constitute the two core documents which should drive the design of the M&E data dimensions of the project's Management Information System (MIS). This MIS will be created at the very beginning of project implementation as a part of sub-component 1-D, Project Management and M&E. While the MIS will include information not specifically identified for M&E purposes (e.g. records of financial and procurement transactions), it will allow for the analysis of various types of project information regarding the overall performance of the project which will be used to inform management decisions. The MIS will use common software and simple format so that it can be easily operated, maintained and updated by all staff involved in PPAP.

A central part of the M&E Advisor's role in the project will be to bring the two MES Officers together with the PCU Coordinator to agree on the processes and accountabilities for operationalizing the guidance provided in the Arrangements document. This will be done, initially, through an M&E Implementation Workshop organized in the beginning of the project and then supported through more targeted assistance over the life of the project. The M&E Advisor will also be responsible for ensuring that the data, information and processes agreed during the Workshop are effectively integrated into the design of the MIS. [See **Appendix E** for a detailed Terms of Reference for the M&E Advisor.]

Contribution to the achievement of relevant country and sector strategies

The location of the PCU in the National Department of Agriculture and Livestock (NDAL) will facilitate the channeling of M&E information from PPAP into reporting on relevant national and sector strategies. PPAP information is most applicable to two Government strategies: MTDS and NADP.

Medium Term Development Strategy (MTDS)

At the national level, the overarching development strategy is expressed in the Medium Term Development Strategy (MTDS) 2005-10 as "export-driven economic growth; rural development and poverty reduction; including through good governance, and the promotion of agriculture, forestry, fisheries and tourism on a sustainable basis." The goal of the MTDS is "to foster sustainable improvements in the life of all Papua New Guineans." There are three objectives: (i) good governance; (ii) export-driven economic growth; and (iii) rural development, poverty reduction and empowerment through human resource development. The PPAP project would contribute to the implementation of the MTDS by:

- supporting interventions that foster the growth and increase the sustainability of two major agricultural export industries, coffee and cocoa;
- enhancing smallholder incomes in coffee- and cocoa-producing areas; and
- rehabilitating critical market access infrastructure in the project area.

National Agricultural Development Plan (NADP)

The NADP forms part of the MTDS. It was launched in April 2007 and covers the decade from 2007 to 2016. NADP represents the linchpin policy document for the agricultural sector, which defines the policy context within which PPAP will work. The goal of NADP is to stimulate economic growth in the agriculture sector through well coordinated planning and implementation that is interactive and

effective, involving the full participation of stakeholders, which promotes food security, income generation and poverty alleviation. A specific emphasis is also placed on ensuring that agricultural development incorporates environment protection considerations and the sustainable use of natural resources.

The M&E system for PPAP will capture the ways in which the project is to contribute to the NADP's objectives which are as follows:

- reduce the costs of production and improve the quality of agricultural produce for both domestic and international markets;
- increase income earning opportunities for those dependent on agriculture;
- ensure that development is socially, economically, and environmentally sustainable; and
- improve recognition of women's contributions to rural industries and increase opportunities for women's decision making in agriculture.

Baseline, Follow-up Surveys and Specialized Studies

Coffee and Cocoa Smallholder Surveys (Baseline, Mid-term and Final)

In order to measure the extent to which the project has achieved its stated objective and associated outcomes, a set of measurable indicators has been established at the outset, and mechanisms to monitor these indicators put into place. Whereas the project is primarily aimed at improving the livelihoods of smallholder farmers, this survey is specifically designed to measure changes in smallholder household conditions, especially those which may be influenced by the activities implemented through PPAP.

In addition to the main project objective stated above, a set of outcome indicators and intermediate outcomes indicators have also been identified as a means of determining whether the results specified in the PPAP Results Framework have been achieved. Some of the indicators listed in the Results Framework will be monitored through existing data sources such as the records kept by exporters or intermediary cocoa and coffee buyers (e.g. proportion of export price earned by farmers). Other indicators will be tracked via three separate surveys, one to establish baseline values, a mid-term survey to monitor changes and allow for project adjustments and a final survey to assess changes over the life of the project and the extent to which project interventions might have influenced such changes.

See **Appendix F** for the full Terms of Reference for the Baseline Survey and Follow-up Surveys.

Survey Partnerships

Two research initiatives have been identified for potential partnership with PPAP to leverage the human and financial resources which each project has, or may have, to offer. The two initiatives that have identified, and the potential for collaboration, are:

Committee on Sustainability Assessment (COSA)

COSA is the only publicly available evaluation or assessment methodology to fully measure the sustainability of farmers. It has been developed and utilized by a global network of researchers and executed in several countries. As the TOR for the Smallholder Survey describes, the international

expertise which network could bring to PPAP would substantially increase the value and utility of the baseline survey. See Appendix G for further information on COSA.

Curtin University of Technology

A research team led by Curtin University in Australia has proposed a large research study to the Australian Centre for International Agricultural Research (ACIAR) for funding. The study would focus on coffee smallholder productivity and include a range of research methodologies which would be complementary to the PPAP survey approach. Whereas PPAP's survey approach would include a 3 rounds of 2-3 hour visits to smallholder households, the Curtin study would place researchers in selected farming communities for several months in order to observe the socio-economic dynamics affecting farmers. An in-depth study of soil nutrients would also be conducted. The possibility of applying some of the methodologies planned under this study to PPAP's targeted cocoa-growing area will be explored, as well as other possible forms of collaboration.

Specialized Studies

To supplement the Smallholder Surveys and other M&E activities planned by the PMUs, a budget is also available for each PMU to respond to demand for, or the identification of high value, specialized studies to analyse issues which emerge during implementation. These studies may focus on things such as: a type of partnership project that may be replicable; a gap in data that, if filled, could allow for stronger analysis of project outcomes (e.g. value chains); a deeper analysis of women's participation in project activities; a deeper analysis of the potential for the sustainability of road maintenance agreements, etc. The contracting of studies in time for completion before the PY2 and PY4 Reviews would allow the results to be used in guiding modifications to the project in response to lessons from the first half of the implementation period.

Monitoring, Evaluation and Reporting

The periodic smallholder surveys and special studies described above, as well as other sources of M&E information, will all be fed into regular reports which will be submitted to the members of the Project Steering Committee, the World Bank, IFAD and other key stakeholders. These reports and monitoring activities are described below.

Semi-annual Progress Reports

According to the terms of the Financing Agreement signed between the World Bank and the GoPNG (and similarly with IFAD), progress reports must be sent by Government to the World Bank no later than 45 days after the end of each reporting period.

Progress reports are sent on a semi-annual basis no later than 45 days after the end of the semester, with annual progress report consolidating information on activities and results for the past year. The progress reports are an important tool for the PPAP management team to identify and proactively address any emerging issue with implementation and any departure from the agreed Work Plan and Budget, and legal agreements. The quarterly Interim Finance Reports (unaudited) also feed into the preparation of progress reports, as well as the procurement progress reports.

The consolidation of the semi-annual and annual progress reports is the responsibility of the Project Coordinator at national level and of the Project Manager at industry level. They are supported by the relevant staff and by the MES Officers regarding Key Indicators and other M&E data.

Progress reports are submitted to the PSC, the Industry Coordinating Committees, the World Bank and IFAD for their review, preferably before the following joint supervision mission. The PCU and PMU may be asked by the PSC or the co-financiers to improve the progress reports if the contents provide insufficient or unclear information on the status of project implementation.

Each Progress Report should include, at least, the following content:

CONTENT OF SEMI-ANNUAL IMPLEMENTATION PROGRESS REPORTS

- I. Executive Summary**
 - a. Overall progress with implementation and semester highlights
 - b. Key issues and actions taken
 - c. Key points on which PSC and World Bank guidance is sought (as needed)
- II. Progress with component implementation** [*for each component, discuss progress with activities for the period against agreed program of activities and results framework*]
 - a. Component 1 – Activity implemented and results against work plan
 - b. Component 2 – Activity implemented and results against work plan [*Reference to Annex 5 for summary of each Partnerships implementation progress*]
 - c. Component 3 – Activity implemented and results against work plan
- III. Progress in meeting legal covenants** [*Report progress towards legal covenants in Financing Agreements*]
- IV. Monitoring of ESMF implementation** [*Report on ESMF implementation and flag any issue that may have arisen with actions taken*]
- V. Progress with Agreed Action Plan to [date]**
[*Discuss progress and include action plan in annex 1*]
- VI. Financial Monitoring**
 - a. Financial management status [*include new commitments disbursement data, audit status, etc, and refer to tables in annex 2*]
 - b. Procurement status [*Discuss procurement status and refer to table in annex 3*]
- VII. Key Indicators** [*Discuss general progress and refer to tables in annex 4*]
- VIII. Work Program for the next 6 months** [*Discuss key activities for the coming period and any adjustment to the Program of Activities; Annex revised MOPs when relevant for the semi-annual progress reports*]
- IX. Annexes**

Annex 1 – Status of Agreed Action Plan

Annex 2 – Financial Management Report (use format agreed with World Bank)

Annex 3 – Procurement Status Report (use format agreed with World Bank)

Annex 4 – Progress against Results framework and Key Indicators

Annex 5 – Summary status of each Partnership

Partnership Progress Reports and Final Reports

Role of the PMU. Under Component 2, as part of the initial checks and field visits to review Partnership Proposals and consolidate them before they are submitted to the Technical Appraisal Committee, the Component 2 Coordinator will collect basic social, economic and environmental data on the situation in the area to be covered by the proposed Partnership/subproject. This “mini-baseline” for each Partnership will use simple forms prepared at project inception by the M&E Advisor in consultation with other staff involved in M&E activities. Further data collection using similar formats will be carried out by the Component 2 Coordinator as part of regular monitoring of the implementation of each approved partnership (at least on a six-monthly basis), and the data will be entered into the M&E system.

Role of the Partners. The lead partner for each partnership project supported by PPAP will be required to submit brief progress reports using a template provided by each PMU. These reports are to be submitted to support each request for disbursement of the next tranche of funding from the project, as described in the specific Partnership Agreement. The Component 2 Coordinator in each PMU will create a progress report table to monitor due dates for progress reports and to follow-up in the absence of compliance. The M&E Advisor will prepare the progress report template as well as a template for final reports (a draft is available in the Project Implementation Manual Section 2 – Component 2 Implementation, and would be adjusted as needed at project inception). Progress reports should be brief in length so as not to burden project partners, but include at least the following information: financial summary (using a short table), main activities, number and description of beneficiaries, and support received by beneficiaries. The results section for the progress report would list relevant outcome indicators included in the overall PPAP Results Measurement Matrix while also allowing space for other project-specific results which were specified in the proposal. Those progress reports will be signed by the representatives of the partners (lead partner and others).

Annual Stakeholder Feedback Meetings

At the end of each year (calendar or fiscal), each PMU will convene a set of feedback meetings to solicit feedback from key stakeholders on project implementation. Each 3-hour consultation will begin with a presentation including: main activities, results, challenges, lessons learned and steps to apply lessons, financial summary and plans for the next year. This will be followed by an open forum with participant comments, questions and responses from the PMU as needed. The PCU Project Coordinator will attend each of the consultation meetings in order to stay abreast of stakeholder views. Half-day consultations will be held for the following groups:

- Industry coordinating body members and implementing partners;
- Component 2 and 3 partners, including smallholder farmers/growers groups and individual smallholders if interested.

Each consultation will be summarized in English and Tok Pisin, including any follow-up recommendations (e.g. project adjustments), and attached to the next annual report as annexes. A list

of participants should be attached to each summary. These documents should be distributed to all consultations participants and available to other interested parties through CB and CIC websites, and upon request.

PY2 and PY4 Project Reviews

In addition to regular supervision mission carried out jointly by donors and Government, two full reviews of project implementation and progress towards its development objective will be carried out at the end of Project Year 2 (PY2) and Project Year 4 (PY4). During the fourth quarter of PY2 (and fourth quarter of PY4), a comprehensive evaluation of all activities to-date against the original design presented in the PAD will be completed, with support from an individual consultant if needed, under the supervision of the PCU Project Coordinator. The main objective of this review is to identify implementation challenges, successes and lessons that can be applied to adjust the project design to improve performance during the remaining implementation period. The PY2 and PY4 evaluation reports will incorporate findings from the follow-up Smallholders Survey, all previous semi-annual progress reports, supervision mission Aide Memoires and Agreed Action Plans, annual stakeholder feedback meetings, and other available price and production data indicating trends in the coffee and cocoa markets. In addition, the consultant will conduct a more in-depth assessment of elements of the project which have not yet been the subject of independent analysis. These are expected to include:

- the effectiveness (e.g. in policy influence and information dissemination) and value of industry coordinating bodies to their members (via structured interviews);
- the effectiveness and credibility (e.g. in terms of fairness and transparency in decision-making) of the partnership selection process;
- the efficiency and effectiveness of the entire partnership project management process/cycle, including road maintenance activities under Component 3 (e.g. EOI, proposal, appraisal, selection, agreement, project monitoring, etc.);
- the effectiveness of the project's targeting mechanisms and inclusiveness of activities; and
- the performance of the PMUs and PCU in terms of required reporting, disbursement targets, implementation schedule, application of safeguards, resolving implementation issues, communicating with other stakeholders, etc.

Implementation Completion Report

At closing, the PCU, in collaboration with PMUs, will be responsible for preparing an Implementation Completion Report (ICR) covering all components included in the Project. The ICR is a tool that enables the World Bank and its members to learn from experience and improve implementation of future projects, while evaluating the Project's performance. The ICR assesses and evaluates the Project components from design through implementation to closing. Attention is paid to achievement of the development objectives, overall achievements and factors affecting achievements, the performance of the World Bank and the Borrower, the likely sustainability of the Project following closure, and the lessons learned. There is no set format or length, though a ten-page summary should be made if the report is longer than this, to append to the World Bank's ICR. Preparation of the PCU's ICR should be undertaken in the final quarter of the Project, in time to be used by the Bank's ICR mission, which should be within six months of the closing date.

Roles and Responsibilities

PCU

The most important function of the PCU with respect to M&E is the integration of semi-annual progress reports submitted by PMUs into one, overall PPAP report for submission to management in DAL and DNPM, as well as the World Bank, IFAD and other stakeholders. This will be the direct responsibility of the Project Coordinator.

The PCU will be the repository for all project documents, including all monitoring and evaluation reports submitted by the PMUs, consultants and any other project partners, as well as the data and information used to prepare project reports. In so doing, information will be collated and stored, both in electronic and hardcopy formats with back-ups, so that it is readily retrievable and can also be sorted and presented in a number of formats and incorporated into regular reports. These documents and data should be readily available electronically, via well-organized project folders stored on project computers.

The PCU Project Coordinator will also supervise the work of the M&E Advisor and that of other consultants hired to contribute to M&E activities. While the Baseline Survey will be managed by the PCU to avoid the need for two separate contracts for the two different PMUs, supervision of this work in the field will be decentralized to the PMUs.

PMUs

The Project Manager in each PMU will have direct responsibility for the M&E activities at that level, with support from the full-time MES Officer dedicated to these activities. In addition to ensuring the timely and quality completion of the activities described in this Manual, the Project Manager will also need to work closely with the Component 2 Coordinator and the Transport Planner/Senior Engineer to collect both indicator-related data and information, as well as results that can be integrated in the semi-annual reports. The MES Officers will advise PMU staff on the instruments and documents which could be used to collect and communicate project results.

Role of the World Bank in M&E

Overall supervision of the PPAP will be done by the World Bank, through the Bank's Task Team Leader (TTL). The TTL would provide guidance to the Implementing Agencies on all implementation issues. The TTL will be responsible for issuing the required "no objections" or facilitating such clearance through the Bank's Regional Procurement Advisor. Apart from supervision of the Project, the Bank's role, through the TTL, is to ensure that all PPAP funds are spent and executed in accordance with the Financing Agreements and the related Operational Directives with regards to procurement, disbursement and other Project implementation procedures. The Bank may provide further guidance to facilitate implementation, both from an administrative and technical point of view.

Joint World Bank-IFAD supervision missions will be undertaken at regular intervals, usually two to four times a year. These exercises are conducted jointly with Government of PNG. The supervision missions will assess progress in the implementation of the Project, ensure that environmental social safeguards policies and guidelines are followed, review procurement and financial management activities, and pay particular attention to credit covenants and previously agreed upon actions. The terms and conditions of the IDA and IFAD financing are specified in the Financing Agreements, as well as the Project Appraisal Document.

During the supervision missions, issues related to the Project implementation will be discussed and, to the extent possible, resolved. A key parameter to be assessed during the supervision will be progress towards achieving the Project's development objective. In the rating system applied by the Bank to assess overall success of the Project, specific reference is made to this as well as to general implementation progress, with satisfactory or unsatisfactory ratings being applied. The supervision missions will rely on the Project's own monitoring and reporting to assist with the assessment. It is good practice for the Implementing Agencies to prepare a brief summary of Project implementation progress and issues by component to assist in focusing attention during the mission.

In addition, and as described above, the Government and the Bank will undertake two joint Reviews of the Project, with the first to be scheduled towards the end of Year 2 of implementation and the second towards the end of Year 4 of implementation. The Implementing Agencies will be required to prepare a progress report in preparation for those two reviews. These reviews will evaluate the Project implementation progress to date against the PAD, the progress towards achieving the development objective, including a critical assessment of whether the Project's development objective is still valid and whether substantive changes need to be made to the component activities and/or resource allocations. A plan of action will be drawn up for the remaining project period and agreed to by all parties.

As described above, the World Bank's Implementation Completion Report (ICR) mission will take place after the PCU/PMUs complete their own PPAP ICR. The Bank's ICR should be within six months of the closing date.

M&E Start-up, Timeline and Sub-Component Linkages

Start-up workshops

For each of the sub-sectors an "M&E Implementation Workshop" will be conducted to launch the M&E activities of PPAP within each PMU and in the PCU. These workshops will be facilitated by the M&E Advisor, who will work with the Project Coordinator and PMU MES Officers to agree on specific actions and division of responsibility for implementing the specific activities outlined in the M&E Manual, the Results Framework and Arrangements for Results Monitoring, in particular.

M&E Timeline

As a guide to the timely implementation of the main M&E activities described in this Manual, **Appendix H** provides a quarterly breakdown of when each activity should take place and the duration, if beyond a single quarter.

Appendix A: Draft Terms of Reference for Senior Monitoring, Evaluation and Survey (MES) Officers

Description

Both the Cocoa Board (or Coconut and Cocoa Institute Ltd) and Coffee Industry Corporation will dedicate one full-time staff member each, to perform the dual function of M&E coordinator for their PMU and main focal point for implementation of the Smallholder Surveys (3 rounds over the course of the project). They will be based, respectively, in Goroka and in Kokopo, with travel to project areas in the project provinces and integral part of duties.

For all activities within the PPAP M&E function, the Sr. MES Officers will report to their respective Project Managers. It is expected that these positions will take an increasing role in the survey work as they are trained and gather experience working with the international survey team, who has primary responsibility for the surveys.

Key Tasks and Responsibilities

The M&E responsibilities of the position will include:

- Participate in the start-up, “M&E Implementation Workshop” organized by the M&E Advisor and Project Coordinator and implement the agreed upon actions and division of responsibility for implementing the specific activities outlined in the M&E Manual;
- Participate in the design of PPAP’s Management Information System (MIS) to ensure that it is aligned with all of the required M&E data and information, and enter the required data and information into the system;
- Prepare semi-annual progress reports in collaboration with the Project Manager, for submission to the PCU for onward transmission to the World Bank, IFAD and the ICCs and PSC; and
- After training from the M&E Advisor, either individually or jointly with the Project Manager, facilitate the Annual Stakeholder Feedback Meetings, including the dissemination of documents before, during and after meetings, based on the format or templates provided by the M&E Advisor (summary documents may require translation in Tok Pisin).

Smallholder Surveys responsibilities include:

- Providing overall coordination of activities in country under the guidance of the International Team Coordinator and providing scientific leadership for the survey work in CIC/CB or CCIL;
- Facilitate the in-country work of the ITC;
- Compile country data, coordinate preparation of documentation at each stage of the work (baseline, mid-term, and final);
- Participate in adaptation and testing of the survey instrument, drawing from own research experience;
- Schedule and ensure the conduct and completion of farm visits by the surveyors;
- Coordinate survey enumerators locally, in collaboration with ITC;

- Provide feedback on survey results;
- Organize multi-stakeholder discussions of draft survey reports;
- Generate a final country report with the ITC; and
- Facilitate post-survey smallholder discussions.

Duration

This will be a full-time position covering the full six years of project implementation.

Required qualifications

The Sr. MES Officers must be post-graduate level staff with a strong motivation to learn about, and actively apply, research and analytical methods regarding sustainable cocoa and coffee farming practices and farmer livelihoods, as well as bringing best practice to PNG. They would have the experience and seniority to liaise with international research organizations and partners on behalf of CIC and CB/CCIL, and to ensure that long-term partnerships between those organizations and CIC/CB or CCIL are established as a result of project activities.

The successful candidate would be expected to have the following qualifications:

- A post-graduate-level degree in agriculture, rural development, economics, or a related field;
 - At least 5 years work experience in the broader area of social and economic development;
 - Experience in the preparation of regular project reports (reporting to donor agencies would be a plus);
 - Experience in conducting research surveys and/or other structured research methodologies and in supervising survey teams;
 - Experience working in an international project team, with counterparts located in other countries;
 - Ability to work well in teams, collaborating and working independently, as needed;
 - Ability to communicate effectively in English, orally and in writing, and ability to communicate in Tok Pisin, with a broad range of stakeholders from grassroots level to international level organizations.
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Appendix B: M&E Terms and Definitions

The following terms and definitions have been adapted from two main sources:

- “A Guide For Project M&E: Managing for Impact in Rural Development” International Fund for Agricultural Development (2002). Downloadable from WWW.IFAD.ORG
- K. Mackay (2007). “How to Build M&E Systems to Support Better Government” Independent Evaluation Group, World Bank. Downloadable from WWW.WORLDBANK.ORG

Accountability	<p>Obligation to demonstrate that work has been conducted in appliance with agreed rules and standards and to report fairly and accurately on <i>results</i> vis-à-vis mandated roles and/or plans. Ensuring accountability is one of the functions of <i>monitoring</i> and <i>evaluation</i>.</p> <p>Accountability is the key difference between <i>goal</i> and <i>purpose</i>. <i>Development interventions</i> need only contribute to the achievement of their goal in concert with other related initiatives. However they are held accountable for achieving the <i>purpose/strategic objective</i>.</p>
Activity	<p>Actions taken or work performed to produce specific <i>outputs</i> by using inputs such as funds, technical assistance and other types of resources. Sometimes also referred to as a <i>development intervention</i>. AusAID uses the word “activity” to describe all forms of development assistance including programmes, projects, facilities etc.</p>
Attribution	<p>The causal link between one thing and another: eg the extent to which observed (or expected) changes can be linked to a specific action in view of the effects of other actions or confounding factors.</p>
Audit	<p>Verification of the validity and regularity of resource utilisation by an independent third party. An auditor determines whether, and to what extent, the activities and organisational procedures confirm to proper and legal standards and other agreed criteria. In an internal audit the auditors report to the organisation being audited. In an external audit he auditors report to the funding organisation.</p> <p>A distinction is made between regulatory or fiduciary auditing which focuses on compliance with applicable laws and regulations; and performance auditing, which is concerned with relevance, economy, efficiency and effectiveness.</p>
Baseline Information	<p>Information – usually consisting of facts and figures collected at the initial stages of a <i>development intervention</i> – that provides a basis for measuring progress in achieving <i>objectives</i> and <i>outputs</i>.</p>
Benchmark	<p>Reference point or standard against which performance or achievements can be assessed. This is often based on the performance that has been achieved in the recent past by other comparable organisations or what can reasonably inferred to have been achieved in the circumstances.</p>
Beneficiaries	<p>Individuals, groups or organisations who, in their own view, and whether targeted or not, benefit directly or indirectly from a <i>development intervention</i>. These are also referred to as primary <i>stakeholders</i>.</p>
Benefit-Cost Analysis	<p>The comparison between investment and operating costs with the direct benefits or <i>impact</i> generated by the investment.</p>
Contribution	<p>The extent to which a <i>development intervention</i> can claim to have contributed to the generation of <i>results</i>, taking into consideration other factors that may also influence the outcome. When the cause-effect linkages are weak and the degree of <i>attribution</i> is low, it is more prudent to claim that an intervention will “contribute to” a particular <i>result</i>, rather than imply direct causality.</p>
Development Objective (DO)	<p>Intended <i>impact</i> contributing to physical, financial, institutional, social, environmental, or other benefits to a society, community or group of people via one or more <i>development interventions</i>.</p>
Effectiveness	<p>A measure of the extent to which a <i>project</i> achieves its <i>objectives</i> at the <i>goal</i> or <i>purpose</i> level; ie the extent to which a <i>development intervention</i> has attained, or is expected to attain, its relevant objectives <i>efficiently</i> and in a <i>sustainable</i> way.</p>

Efficiency	A measure of how economically inputs (funds, expertise, time etc) are converted into <i>outputs</i> .
Evaluation	A systematic (and objective as possible) examination of a planned, ongoing or completed <i>development intervention</i> . It aims to answer specific management questions and to judge the overall value of an endeavour and supply lessons learned to improve future actions, planning and decision-making. Evaluations commonly seek to determine the <i>efficiency, effectiveness, impact, sustainability</i> and <i>relevance</i> of an intervention. An <i>evaluation</i> should provide information that is credible and useful, offering concrete <i>lessons learned</i> to help future decision-making.
Goal	Higher-order <i>objective</i> , or statement of intent, to which <i>development interventions</i> are intended to <i>contribute</i> .
Impact	Impacts are third-level <i>results</i> comprising the long-term combined effect of first level (<i>output</i>) and second-level (<i>outcome</i>) <i>results</i> , and are measured at specific points during the life of a <i>development intervention</i> (<i>baseline, mid-term</i> and completion). Impacts correspond to the goal and purpose levels of the intervention. They measure changes in the lives of people, as perceived by them at the time of <i>evaluation</i> . Changes can be positive or negative, intended or unintended.
Independent Evaluation	<p>An <i>evaluation</i> carried out by entities or persons free from influence by those responsible for the design and implementation of a <i>development intervention</i>.</p> <p>The credibility of an <i>evaluation</i> depends in part on how independently it has been carried out. Independence implies freedom from political influence and organisational pressure. It is characterised by full access to information and by full autonomy in carrying out investigations and reporting findings.</p>
Indicator	Quantitative or qualitative factor or variable that provides a simple and reliable basis for assessing achievement, change or performance. A given <i>goal</i> or <i>objective</i> can have multiple indicators, but it is preferable to keep the number of indicators as small as possible.
Input	The financial, human and material resources necessary to undertake an <i>activity</i> and produce the intended <i>outputs</i> of a <i>development intervention</i> .
Lessons Learned	Knowledge generated by reflecting on experience that has the potential to improve future actions. Frequently, lessons highlight strengths or weaknesses in preparation, design and implementation that affect performance, <i>outcome</i> and <i>impact</i> .
Mid-Term Review (MTR)	An external <i>evaluation</i> performed around the middle of the implementation period in order to check on progress and make necessary adjustments to the approach. “Problem projects” identified during mid-term-reviews may need additional implementation support.
Monitoring	The regular collection and analysis of information to assist timely decision-making, ensure accountability and provide the basis for <i>evaluation</i> and learning. It is a continuing function that uses collection of data to provide management and the main <i>stakeholders</i> of an ongoing <i>development intervention</i> with early indications of progress and achievement of <i>objectives</i> .
Monitoring and Evaluation (M&E)	The combination of <i>monitoring</i> and <i>evaluation</i> , which together provide the knowledge required for: (i) effective management of <i>development interventions</i> ; and (b) reporting and <i>accountability</i> .
Objective	A specific statement detailing the desired accomplishments or <i>outcomes</i> of a <i>project</i> at different levels (short to long term). A good objective meets the criteria of being <i>impact</i> oriented, measurable, time defined, specific and practical. <i>Logframes</i> frequently use the second order objective or “ <i>purpose</i> ” to describe the strategic objective of a <i>development intervention</i> .
Outcome	Second level <i>results</i> achieved at the level of <i>purpose</i> , as a consequence of <i>outputs</i> . Outcomes measure the extent to which expected <i>objectives</i> have been achieved (<i>effectiveness</i>) and the likelihood that the benefits generated will continue after the completion of <i>project</i> support (<i>sustainability</i>).
Output	First level results consisting of the tangible (measurable, practical), immediate and intended <i>results</i> to be produced through sound management of the agreed inputs. Examples include goods, services of infrastructure produced by a <i>project</i> and intended to help realise its <i>purpose</i> . These may also include changes, resulting from the intervention, that are needed to achieve the <i>outcomes</i> at the purpose level.
Participatory Evaluation	<i>Evaluation</i> method in which representatives of agencies and <i>stakeholders</i> (including beneficiaries) work together in designing, performing and interpreting and <i>evaluation</i> .

Primary Stakeholders	The main intended beneficiaries of a <i>development intervention</i> .
Proxy Indicator	An appropriate <i>indicator</i> that is used to represent a less easily measurable one.
Purpose	The positive, improved situation that a <i>development intervention</i> is accountable for achieving. Also known as an <i>objective</i> or <i>strategic objective</i> .
Qualitative	Something that is not described in numerical form, such as records of meetings and descriptive notes from observations.
Quantitative	Something measured or measurable, or concerned with, quantity and expressed in numbers or quantities.
Results	The <i>outputs</i> , <i>outcomes</i> or <i>impact</i> (intended or un-intended, positive or negative), of a <i>development intervention</i> .
Results Framework	The logic that explains how the development <i>objective</i> is to be achieved, including causal relationships and underlying <i>assumptions</i> . The framework is usually presented in the form of a <i>logframe</i> matrix.
Stakeholders	An agency, organisation, group or individual that has a direct or indirect interest in a <i>development intervention</i> , or affects or is affected positively or negatively by the implementation and outcome.
Sustainability	The likelihood that the <i>benefits</i> of a <i>development intervention</i> will persist for an extended period after the external assistance ends.

Appendix C: Results Framework from the PAD

PDO	Project Outcome Indicators	Use of Project Outcome Information
To improve the livelihoods of smallholder cocoa and coffee growers through the improvement of the performance and sustainability of value chains in cocoa- and coffee-growing areas.	<ul style="list-style-type: none"> • the net income of smallholder cocoa and coffee growers in the project area • the number of farm households applying improved farming practices • the number and coverage of partnerships successfully implemented and likely to be sustained • the percentage of the export price and quality premiums, received by farmers 	These indicators will help assess the extent to which the activities of the project resulted in improved livelihoods for small producers engaged in coffee and cocoa production in project areas.
Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring
Result 1: Establishment of effective, relevant, and representative industry coordination committees, contributing to improved sector policy	<ul style="list-style-type: none"> • the percentage of cocoa and coffee industry coordination committee members reporting satisfactory value, representativeness and relevance of the committees • the number of policy and regulatory measures adopted and implemented • the percentage of buying points with access to price and quality information 	Assess the implementation progress of component 1
Result 2: CIC and Cocoa Board establish sustainable information systems and produce high quality M&E data and reports	<ul style="list-style-type: none"> • the availability and timely dissemination of quality M&E data and reports 	Ensure that adequate M&E is performed and available and, if not, take corrective measures
Result 3: PMU has adequate capacity to efficiently procure goods and services and ensure financial reporting and controls	<ul style="list-style-type: none"> • Timely implementation of procurement activities and satisfactory financial management reports. 	Ensure that adequate procurement and financial management are applied and, if not, take corrective measures
Result 4: Smallholders have adopted improved cocoa management practices in project areas which results in good control of CPB infestation and improved yields	<ul style="list-style-type: none"> • CPB control plan has been developed and is in place • Losses due to CPB infestation are substantially reduced • Cocoa yields have increased for smallholders 	Assess the implementation progress of component 2, particularly in terms of: <ul style="list-style-type: none"> • Effectiveness of the control of the CPB infestation, and, if necessary, revise and adjust the CPB control plan • Effectiveness of the adoption of the improved production management practices and their ability to deliver the outcome in

		terms of increased cocoa yields; if necessary, revise and amend the partnership agreements
Result 5: Smallholder cocoa plantations have been rejuvenated and diversification crops have been introduced and disseminated	<ul style="list-style-type: none"> • Number of hectares of cocoa replanted or rejuvenated with improved planting material • Number of hectares of shade and diversification crops planted 	Assess the implementation progress of component 2, particularly in terms of the effectiveness of the technical package and support measures to deliver the acreage to be replanted, and , if necessary, revise and amend the partnership agreements
Result 6: The quality of cocoa delivered by farmers in targeted areas has been maintained or improved	<ul style="list-style-type: none"> • Percentage of production rejected • Average dried cocoa moisture content in ARB reported by buyers 	Assess the implementation progress of component 2
Result 7: Smallholders have adopted improved coffee garden/block management practices in project areas resulting in improved yields and quality of coffee delivered	<ul style="list-style-type: none"> • Coffee yields have increased for smallholders 	Assess the implementation progress of component 2, particularly in terms of the effectiveness of the adoption of the improved production management practices and their ability of to deliver the outcome in terms of increased coffee yields ; if necessary, revise and amend the partnership agreements
Result 8: Smallholder coffee gardens/blocks have been rejuvenated and diversification crops have been introduced	<ul style="list-style-type: none"> • Number of hectares of coffee rejuvenated • Additional volume of diversified products sold 	Assess the implementation progress of component 2
Result 9: The quality and marketability of coffee along the value chain has been improved	<ul style="list-style-type: none"> • Percentage of differentiated coffee exported from PNG by value • Percentage of coffee with sustainability certification exported from PNG by volume and value • Percentage increase in price received by farmers in project areas over the standard quality (Y1) price 	Assess the implementation progress of component 2
Result 10: Women contribute more to increases in household income through involvement in improved farming practices, processing and marketing	<ul style="list-style-type: none"> • Number of women in farming households reporting increased access to, and use of, information on improved farming practices, processing and marketing 	

<p>Result 11: Critical transport infrastructure has been improved and is more likely to be maintained</p>	<ul style="list-style-type: none">• Number of Km of roads rehabilitated and maintained as per Maintenance Agreements	<p>Ensure that the objective of component 3 is achieved</p>
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Appendix D: Arrangements for Results Monitoring (from the PAD)

Project Outcome Indicators	Baseline	Target Values					Data Collection and Reporting		
		YR1	YR2	YR3	YR4	YR5	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
(1) Net income of smallholder cocoa and coffee growers	TBD						<ul style="list-style-type: none"> • Base line survey • Project bi-annual implementation reports • Project completion report • Additional surveys (PY3, PY6) 	Surveys Regular monitoring by PCU/PMUs	PCU, PMU Partnership participants
(2) Number of farms applying improved farming practices	0	3,500	7,800	12,900	18,500	24,000			
(3) Number & coverage of partnerships successfully implemented and likely to be sustained	0	7	15	25	35	50			
(4) Percentage of the export price and quality premiums received by farmers						70% on average			
Intermediate Outcome Indicators									
(1) The percentage of cocoa and coffee industry coordination committee members reporting satisfactory value, representativeness and relevance of the committees	0					> 70%	<ul style="list-style-type: none"> • Project bi-annual progress reports • Minutes of meetings of industry boards • Annual reports of cocoa and coffee industry organizations • Additional surveys 	Interviews of key informants	DAL PMU Partnership participants
(2) The number of policy and regulatory measures adopted and implemented	0					5			
(3) Percentage of buying points with access to price and quality information	0					100%			
(4) Percentage of smallholders reporting increased access to industry information	0					<70%			
(1) Availability and timely dissemination of M&E	0						• Project quarterly	Assessment	DAL

dissemination of quality M&E data and reports							M&E report • Project bi-annual progress reports	Supervision	Industry boards PMU
(1) Availability and timeliness implementation of procurement activities and satisfactory financial management reports	0						• Project bi-annual progress reports • Project quarterly financial management reports	Assessment Supervision and annual audits	PMU
(1) CBP losses are limited to 10 percent of cocoa in project areas of ENBP and ABR (2) Increase in average cocoa yields from 300kg/ha to 600 kg/ha in project areas	(50%) 300	30% 350	25% 450	25% 550	10% 600	10% 600	• Project bi- annual progress reports • Additional surveys	Industry board reporting Interviews of key informants	PMU Partnership participants
(1) Number of hectares of cocoa replanted or rejuvenated with improved planting material (2) Number of hectares of diversification crops planted	0 0	1,400 100	3,500 400	6,500 600	10,000 800	13,000 1,000	Project bi- annual progress reports Additional surveys	Reporting by partners Interviews of key informants	PCU, PMU Partnership participants
(1) % of production rejected in project areas (2) Average dried cocoa moisture content in ARB reported by buyers						<5% 7%	Project bi- annual progress reports Additional surveys	Reporting by partners Industry board reporting	PMU Industry board Partnership participants
(1) Increase in average coffee yields from 500kg/ha to 800 kg/ha in project areas	500	550	650	750	800	800	Project bi- annual progress reports Additional surveys	Reporting by partners Industry board reporting Surveys	PCU, PMU Partnership participants
(1) Number of hectares of coffee rejuvenated (2) Additional volume of diversified products sold through partnerships	0 0	2,100	4,200	6,300	8,400	10,500	Project bi- annual progress reports Additional surveys	Reporting by partners Industry board reporting Surveys	PMU Partnership participants
(1) Percentage of differentiated coffee	5	6	10	15	18	20	CIC Annual Report Additional surveys	Industry board reporting	PMU

differentiated coffees exported by PNG by value (2) % of coffee with sustainability certification exported from PNG by volume and value (3) Average quality premium received by farmers in project areas	TBD							International commodity boards bulletins Reporting by partners	Industry board (CIC) Partnership participants
(1) Number of Km of roads rehabilitated and maintained as per Maintenance Agreements	0	5	15	35	55	100	Project bi- annual progress reports	Independent assessment Survey	PCU

Appendix E: Draft Terms of Reference for M&E Advisor

Description

The M&E Advisor will be based in the PCU in NDAL and will report to the Project Coordinator who heads the PCU. With extensive experience in the design and administration of monitoring and evaluation instruments and systems, s/he will be hired to work under the supervision of the Project Coordinator in NDAL in designing and supporting the use of such instruments and systems by PPAP project staff, including the Project Managers in the PMUs and the Monitoring, Evaluation and Survey (MES) Officers in CB/CCI and CIC.

Key Tasks and Responsibilities

The M&E Advisor will provide technical support to the PPAP Project Coordinator with respect to his/her overall project reporting responsibility within NDAL and to the World Bank and IFAD. The consultant will also support other staff involved in M&E activities, such as the Project Managers, Component Coordinators, and the MES Officers in CB/CCI and CIC through assistance on specific activities as well as overall skill building. More specifically, the M&E Advisor will:

- Facilitate and assist in the organization of a start-up “M&E Implementation Workshop” and, in consultation with the Project Coordinator, the PMs and PMU MES Officers, agree on specific actions and a division of responsibility for implementing the specific activities outlined in the M&E Manual;
 - Fully develop and operationalize the project’s M&E system, at project level and at component/activity level (e.g. monitoring of each partnership) and provide the related training to all PPAP staff;
 - Modify the Data Collection and Reporting section of the Arrangements for Results Monitoring in an updated version of the M&E Manual based on discussions at the Workshop;
 - Make additional revisions to the M&E Manual as a “living document,” upon agreement with the Project Coordinator and two MES Officers to incorporate new instruments and approaches which are developed during project implementation;
 - Design the format for the Annual Stakeholder Feedback Meetings, including templates for documents to be disseminated before during and after meetings, and train the MES Officers and Project Managers in the use of this format (including supporting and attending the first annual meeting for each PMU);
 - Assist in the design of reporting formats for the semi-annual & annual progress reports and, for Component 2, the Partnership Progress Reports and Final Reports;
 - Liaise with the designer of PPAP’s Management Information System (MIS) to ensure that all of the required M&E data and information is appropriately included and structured in the system;
 - Recommend topics for possible M&E “specialized studies” to delve deeper into areas of PPAP that are not adequately captured by the main M&E instruments;
 - Assess the suitability of short-term M&E training courses for PCU and PMU M&E staff, assessing the qualifications and suitability of the staff to undertake this training in an objective manner and, where applicable, undertaking the required processes to nominate and send staff to these courses; and
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- Ensuring that project reports capture gender issues, specifically by identifying separately the number of male and female beneficiaries, the nature of their participation and the ways in which they have benefited from the project.

Specific outputs will include:

- A report of the M&E Implementation Workshop, summarizing actions agreed upon;
- An operational M&E system and PPAP staff fully trained on its use;
- Intermittent revisions to the M&E Manual, including the following sections: Data Collection and Reporting section of the Arrangements for Results Monitoring, Annual Stakeholder Feedback Meetings, etc.;
- A Guide on Conducting Annual Stakeholder Feedback Meetings, including templates for documents to be disseminated before during and after meetings;
- Regular assessments of PPAP M&E Activities, reviewing the effectiveness of instruments used, gaps in data and information collection, staff and organizational skills/capacity needs, and recommendations for strengthening the system in the following year, including possible specialized studies and recommended training/capacity building opportunities.

Duration

The consultant will be hired for a total of up to 10 months spread out over the first four years of the project (PY 1: 4 months; PY2: 3 months; PY3: 2 months; PY4: 1 month), with the bulk of this time dedicated to the first two years when most of the M&E design activity will be taking place.

Required Qualifications

The assignment requires a consultant with extensive experience in the design and administration of monitoring and evaluation instruments and systems, preferably in an advisory/consulting capacity. The consultant will require the capacity to operate independently in the main project areas (initially East New Britain Province, the Autonomous Bougainville Region and Eastern Highlands Province). The consultant is expected to be fully self-sufficient regarding the staff, transport facilities and equipment required to fulfil the assignment, although their work will be facilitated by the PCU in NDAL. In addition, the consultant must have knowledge of socio-cultural norms of the organizations involved in the project.

The successful candidate would be expected to have the following qualifications:

- Extensive experience in the design and administration of monitoring and evaluation instruments and systems, specifically participatory M&E and information systems;
 - Experience in providing management-level technical assistance and in building consensus among project staff in the implementation of agreed upon actions;
 - Familiarity with the agriculture sector, and preferably some experience with M&E in the agriculture sector;
 - At least 10 years professional work experience performing some of the functions described in this TOR;
 - Tertiary qualification in related fields such as business management, public administration, communications, agriculture, rural development, etc.;
 - Strong interpersonal, group facilitation and interview skills;
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- Ability to communicate effectively in English, orally and especially in writing;
- Previous experience in rural areas of PNG and understanding of specific data collection/analysis constraints would be an advantage.

Appendix F: Draft Terms of Reference for the Cocoa and Coffee Smallholders Survey

Background

The Productive Partnerships in Agriculture Project (PPAP) is executed by the Papua New Guinean Cocoa Board and the Coffee Industry Corporation (CIC) Limited, with funding from the International Development Association (IDA) and the International Fund for Agricultural Development (IFAD). The National Department of Agriculture and Livestock (NDAL) performs a monitoring and coordinating function at the national level. PPAP will be implemented over a six-year period, beginning in 2010.

The development objective of PPAP is to:

Improve the livelihoods of smallholder cocoa and coffee producers through improvements to the performance and sustainability of value chains in cocoa- and coffee-producing areas.

This overall objective would be achieved through strengthening industry coordination and institutions, expanding and strengthening linkages between smallholder farmers and agribusiness for the provision of technologies and services, and through the provision of critical market access infrastructure.

Overview of the Coffee and Cocoa Smallholder Survey

In order to measure the extent to which the project has achieved its stated objective and associated outcomes at the end of the project, a set of measurable indicators must be established at the outset, and mechanisms to monitor these indicators put into place. Whereas the project is primarily aimed at improving the livelihoods of smallholder farmers, this survey is specifically designed to measure changes in smallholder household conditions, especially those which may be influenced by the activities implemented through PPAP.

In addition to the main project objective stated above, a set of outcome indicators and intermediate outcomes indicators have also been identified as a means of determining whether the results specified in the PPAP Results Framework have been achieved. Some of the indicators listed in the Results Framework will be monitored through existing data sources such as the records kept by exporters or intermediary cocoa and coffee buyers (e.g. proportion of export price earned by farmers). Other indicators will be tracked via three separate surveys, one to establish baseline values, a mid-term survey to monitor changes and allow for project adjustments and a final survey to assess changes over the life of the project and the extent to which project interventions might have influenced such changes.

Some of the **indicators** which will be tracked through questions included in the survey instrument are:

- Net income of smallholder cocoa and coffee growers in the project area
 - Number of farm households applying improved farming practices
 - Number and coverage of partnerships successfully implemented and likely to be sustained
 - Percentage of the export price, and quality premiums, received by farmers
 - Number of women in farming households reporting increased access to, and use of, information on improved farming practices, processing and marketing
 - Number of farming households with increased net income
 - Number of hectares of cocoa and cocoa replanted or rejuvenated with improved planting material
 - Number of hectares of shade and diversification crops planted
-

- Productivity of smallholder coffee gardens and cocoa farms (kilos per hectare yields)
- Change in farmers accessing price and market information data by SMS and other means
- CPB losses are substantially reduced in cocoa areas
- Smallholders producing differentiated coffees

Beyond the needs of project monitoring and evaluation, the survey is also intended to be used as a tool to help producers move toward more sustainable practices and certification in order to achieve market recognition of their efforts. Therefore, the survey will be tailored to an understanding of the many sustainability practices that are embodied in certifications. The past decade has seen a rapid expansion of sustainability initiatives and certifications striving to promote sustainable agriculture at the field level and involve millions of producers – many in developing countries. For example, 57 nations now export certified fair trade products. GlobalGap is one of the world’s largest private “sustainability regulators” and now certifies in more than 76 countries, and organic products have reached an annual consumer market value of US\$40 billion. Certified coffees represent a rapidly increasing share of the market in PNG’s main export destinations. Similarly, the major buyers of PNG cocoa are moving towards buying an increasing share of certified cocoa, and those trends are expected to continue in the coming years. The programs vary in their approach and in the emphasis they place on particular objectives ranging from economic empowerment to environmental conservation and social development. However, it can be argued that all of the programs share the similar goal of promoting sustainable agriculture production and trade.

The Committee on Sustainability Assessment (COSA), an independent body with two dozen partner organizations supporting its development, offers the only publicly available evaluation or assessment methodology to fully measure the sustainability of farmers. The COSA methodology offers an ideal platform on which to build a survey instrument and process for measuring the impact of PPAP while also enabling farmers to better understand how farming practices and other choices can enhance the sustainability, and value, of their products. The COSA methodology is designed to understand the complete costs and benefits of implementing any sustainability initiatives such as organic or fair trade. This means looking beyond economic factors and considering the environmental and social effects as well. Equally important is sharing that information publicly so that everyone – from farmers to policymakers – can effectively make appropriate choices about sustainability.

Given the dual value of the COSA methodology, as a tool which can both measure changes in smallholder household conditions, and create a platform for educating farmers on sustainable farming practices, it has been chosen as the survey instrument for this project.

While the full COSA survey model covers a broad range of topics, the survey team will need to customize and shorten the survey to PNG context, including to allow for faster survey time (maximum of 2 hours, after initial testing) so that enumerators can cover the household sample within a two-month field work period. An initial review of the categories included in the COSA survey which align with the PPAP objective, outcomes and indicators identified the following categories as likely to be included in the survey:

1. Farm Income

- a. This includes a complete cost of production (preferably using internationally recognized benchmark categories (i.e. ICO cost of production method) as well

- as more subtle understanding of important issues such as quality and productive efficiency.
2. Farm Management
 - a. Efficiency and Administration
 3. Producer Organization
 - a. Services and Capacity
 4. Risk
 - a. Volatility, Financing, Diversification
 5. Market Access and Competitiveness
 6. Environmental management
 - a. Soil and water sustainability, Occupational health (i.e. pesticides), Biodiversity, rational use of inputs and agrochemicals.
 7. Community development
 8. Perceptions of Producer and partners in PPAP

In support of the project's sub-component on Quality Promotion and Sustainability Management, the survey must be designed so as to capture even modest changes in a variety of specific areas for distinct types of coffees and cocoas including those that are considered gourmet or specialty, Organic, Fair trade, Rainforest Alliance, Utz Certified, and the many private and emerging standards such as Starbucks C.A.F.É. Practices, 4Cs, and Nespresso AAA.

The Consultant hired to conduct the Smallholder Survey is expected to review the main project documents, using the Results Framework as the primary resource, and customize the COSA methodology and model survey for use in the areas targeted by the PPAP project.

The PPAP project is targeting six provinces, four for coffee and two for cocoa: Eastern Highlands (coffee), Southern Highlands (coffee), Simbu (coffee), Jiwaka (coffee), East New Britain (cocoa) and the Autonomous Region of Bougainville (cocoa). The project may also be rolled out to new areas and provinces at the end of Project Year 2. Within these provinces, the primary beneficiary group is smallholder farmers. While precise numbers are not available, it is estimated that 90% (the share of total exports) of PNG's approximately 370,000 coffee smallholders reside in the 4 target provinces. An estimated 70% (the share of total exports) of PNG's approximately 150,000 cocoa smallholders reside in the 2 target provinces. Therefore, the target populations are 333,000 and 105,000 for coffee and cocoa smallholders, respectively. In order to limit the scope of this survey to a more manageable survey sample of between 1,000 and 1,200 smallholder households (coffee and cocoa combined), the survey team will need to work with the PPAP staff in the Cocoa Board and Coffee Industry Corporation to define a group of representative target districts in which to implement the survey.

Main Activities and Duration

Three surveys will be conducted as a part of this assignment, a baseline (calendar year 2010), mid-term (PY3) and final survey (PY6). The surveys for coffee and cocoa will need to be customized to align with the specific issues and practices unique to farming each product. Each of the three rounds of surveys will follow the **same set of activities**, roughly in the order listed (see descriptions of Responsible Persons below):

Activity	Responsible Persons	Time Working	Project Month
Organize survey team and sign MOUs (already drafted) with local partners to ensure commitment of resources and to ongoing capacity building (Cocoa Coconut Institute and Coffee Industry Corporation)	International Technical Coordinator, Cocoa and Coffee PMU Project Managers	3 days	Month 1
Adjust and finalize an appropriate sampling frame, calculate the necessary sample size and select the sample for the survey.	Analyst, International Technical Coordinator	2 days	Month 1
Translate into <i>Tok Pisin</i> . Pre-testing version.	Senior MES Officers in PMU (Cocoa and Coffee Survey Coordinators)	1 week	Month 1
Adaptation and validation of model COSA survey. Consultations with various stakeholders. Some joint sessions, but mostly separate coffee and cocoa working groups developing customized surveys.	International Technical Coordinator, Cocoa and Coffee Survey Coordinators	1 week	Month 1
Field testing of questionnaires. Finalize English Survey and translate changes in <i>Tok Pisin</i> version.	Enumerators, International Technical Coordinator, Cocoa and Coffee Survey Coordinators	1 week	Month 2
Discuss and integrate proposed changes as a result of field testing. Reconvene consultations with various stakeholders.	Enumerators, International Technical Coordinator, Cocoa and Coffee Survey Coordinators	2 days	Month 2
Training of survey enumerators, in Kokopo and Goroka.	International Technical Coordinator	2 weeks	Month 2
Selection of survey sites and sample smallholder households that represent the target groups of PPAP in consultation with CB and CIC. Cocoa and coffee selections to be conducted consecutively with some timing overlap.	Analyst, International Technical Coordinator	1 week each for cocoa and coffee	Months 2-3
Advance work on field visits, gaining approval from local leaders. Continuing after first visits begin as a rolling process.	Cocoa and Coffee Survey Coordinators	3 days	Months 2-3 (ongoing)
Field visits by enumerators to administer the survey to households in the six target provinces (Eastern Highlands, Southern	Enumerators, Cocoa and Coffee Survey Coordinators	8 weeks	Months 3-5

Highlands, Simbu, Jiwaka, East New Britain and the Autonomous Region of Bougainville).	Coordinators		
Entry and cleaning of survey data using COSA software.	Enumerators, 4 Data Cleaners, Analyst	5 weeks	Months 4-6 (entry and cleaning done during survey breaks)
Analysis of survey data using COSA software.	Statistician, International Technical Coordinator,	2 weeks	Month 6
Preparation and circulation of draft report for feedback. The findings of the report should be linked directly to project objectives and the outcome indicators listed in the PPAP Results Measurement Framework.	International Technical Coordinator, Analyst	3 weeks	Month 7
Multi-stakeholder workshops to discuss the findings and provide feedback, and in order to finalize, the draft report. One workshop would be hosted by each of the two partner organizations.	International Technical Coordinator, Cocoa and Coffee Survey Coordinators	1 week	Month 8
One-day consultations (one in each of the 5 target provinces) with smallholders to discuss the main findings of the report and to identify topics which may be considered in the provision of extension services and in PPAP project implementation. These workshops will link the results of the surveys to the potential for certification and inform farmers how they can find additional information on certification, including the availability of training through the Sustainable Commodity Assistance Network (SCAN).	International Technical Coordinator, Cocoa and Coffee Survey Coordinators	2 weeks	Month 8
Finalization of the report by Assessment Leader. The final report with all relevant files will be submitted to the Project Coordinator in the PCU.	International Technical Coordinator	1 week	Month 9
Management and communication between International Technical Coordinator and local counterparts.	International Technical Coordinator	10 days	throughout

*Time can be saved on the first few steps of the Mid-Term and Final Surveys due to the work already completed during the baseline survey. Therefore, the total duration of these two surveys would be shorter.

Human resource requirements expected for the assignment

International Technical Coordinator - will be responsible for the overall execution of the surveys and related project finances working with a locally-based team, including a Cocoa Survey Coordinator and a Coffee Survey Coordinator. The S/he will be the primary liaison with the PPAP Project Coordinator in the PCU in the Department of Agriculture and Livestock (DAL) and responsible for the work of all survey team members, including day-to-day supervision of staff assigned by CCIL and CIC as full-time, Cocoa and Coffee Survey Coordinators. The International Coordinator will:

- Provide overall survey leadership and coordination among the key partners;
- Design or adapt an international calibre survey instrument that ensures a reasonable measure of scientific rigor;
- Liaise with partners to ensure timeliness of specific tasks performed and consistency of application;
- Train the Survey Coordinators, in order to permit them to adequately manage the day to day survey work and to handle the varied data inputs originating from field research.
- Train survey enumerators; supervise initial data uploading; hiring and supervision of survey processors and analyst; facilitate multi-stakeholder discussion of draft report; train of facilitators of post-survey smallholder discussions;
- Structure the data management systems to ensure efficient and secure management of the field data submitted from different locations;
- Ensure appropriate analysis and write survey reports;
- Supervise and coordinate preparation of final documentation.

Required skills:

- ① Excellent organizational skills and orientation to details in order to manage diverse and sometimes complex tasks in a timely manner;
- ① Excellent communication skills;
- ① Expertise with managing projects and research including statistical research and methods (minimum 3 years experience);
- ① Strong expertise in data processing methods and related software programs (i.e. Stata, Microsoft Access and SPS);
- ① Fluency in English;
- ① Demonstrated knowledge of sustainability issues and work experience involving them;
- ① Experience in agricultural commodities, particularly coffee and cocoa.

Administrative Support – To support the International Technical Coordinator in: contracting of consultants; financial management; preparation of progress reports; travel and event logistics; and other administrative tasks.

Analyst – To formulate sample selection methodology formula (size and variables); review survey tool to determine necessary specific control questions (primary goal) and quality of the existing set of questions (secondary goal); analyse the data collected through the field surveys, combining data to produce tables, charts and/or other graphic representations of survey findings, and to prepare inputs to draft and final reports.

Survey Processors – To enter survey forms into the COSA database; cleaning the data in consultation with the survey team to ensure data accuracy and integrity.

Survey Enumerators – To administer the baseline, mid-term and final surveys through field visits to the targeted households in the 6 selected provinces. Support in the identification and hiring of enumerators will be provided by CCI and CRI, possibly through university recruitment.

Survey Team Members Provided by Cocoa Board/Cocoa and Coconut Institute (CCI) and CIC

As critical members of the survey team, **both the CCI and CIC will dedicate one full-time staff member each**, their respective PPAP Sr. MES Officers, to coordinate and support all in-country survey activities. They must be post-graduate level staff and it is expected that these will take an increasing role in the work as they are trained and gather experience with the International Technical Coordinator. While working on survey-related activities, each Survey Coordinator will be directly supervised by the International Technical Coordinator to ensure the effective and timely completion of the surveys. Their terms of reference for the purpose of the survey are:

- **Cocoa Survey Coordinator (based in CCI or Cocoa Board)** – To participate in adaptation and testing of the survey instrument; coordination of survey enumerators in collaboration with International Coordinator; provision of feedback on survey results; organization of multi-stakeholder discussions of draft report on cocoa; scheduling and ensuring the conduct and completion of farm visits by the researchers; Compile country data, coordinate preparation of documentation at each stage of the work (baseline, mid-term, and final) and generate a country report with the International Technical Coordinator; facilitate post-survey smallholder discussions.
- **Coffee Survey Coordinator (based in CIC)** - To participate in adaptation and testing of the survey instrument; coordination of survey enumerators in collaboration with Project Director; provision of feedback on survey results; organization of multi-stakeholder discussions of draft report on coffee; scheduling and ensuring the conduct and completion of farm visits by the researchers; Compile country data, coordinate preparation of documentation at each stage of the work (baseline, mid-term, and final) and generate a country report with the International Technical Coordinator; facilitate post-survey smallholder discussions.

Travel

Only the International Technical Coordinator would be required to travel internationally. Other travel would be domestic, and related to the administration of the survey and delivery of workshops. Over the six-year duration of the project, the International Technical Coordinator is expected to travel to the survey sites in Papua New Guinea twice a year for each of the three years of survey activity. Travel would be for the following activities:

- Survey adaptation and validation (only for baseline survey year) and enumerator training (3 trips, one for each survey)
-

- Multi-stakeholder workshops on draft reports and preparation for smallholder workshops (3 trips, one for each survey)

Organizational Qualifications

The Coffee and Cocoa Smallholder Survey requires an organisation with significant prior experience in the design and application of appropriate methodologies in rural areas of developing countries. While the final design of the survey instrument is not complete, it would draw heavily from the Committee on Sustainability Assessment (COSA) model, and possibly elements of the Response-Inducing Sustainability Evaluation (RISE) and other more common socio-economic survey instruments. The organisation will be supported locally by the two partner institutions, CCI and CIC, but may need to operate independently in the main project areas when resources are not available from the partners.

Key Outputs

Key outputs for the baseline include:

1. All the draft and final survey instruments and customized methodology;
2. All the workshops and consultations to be carried out as described in those TORs, including minutes of those consultations and list of participants;
3. The draft report including all annexes, to be submitted to and discussed with DAL, CIC, Cocoa Board, the World Bank and IFAD by Month 7 of the Consultancy (tentatively this would be by February 2011);
4. The final report including all annexes, to be submitted to and discussed with DAL, CIC, Cocoa Board, the World Bank and IFAD by Month 9 of the Consultancy (tentatively this would be by April 2011);
5. All counterparts fully trained and networks established with COSA.

All written materials listed in this consultancy are to be provided both in electronic format and hard copies.

The final report will need to incorporate the comments of Government, the World Bank and IFAD and be acceptable to all.

Similar outputs would be provided for the two follow-up surveys.

Appendix G: Ten Things to Know About the Committee on Sustainability Assessment (COSA)

1. Who operates COSA and how is it paid for?

The Committee on Sustainability Assessment is an independent body. The primary facilitators are the International Institute for Sustainable Development (IISD) and the United Nations Conference on Trade and Development (UNCTAD) along with two dozen partner organizations supporting its development.

The 5 year participatory development process has been principally driven by a group of committed volunteer experts. These experts include a Scientific Committee and a broad International Advisory Panel. Today, implementation expenses in target countries are supported by local partners as well as international NGOs and donors.

2. What is the primary objective of COSA?

COSA is the only publicly available evaluation or assessment methodology to fully measure the sustainability of farmers. It is designed to understand the complete costs and benefits of implementing any sustainability initiatives such as organic or fair trade etc. This means looking beyond economic factors and considering the environmental and social effects as well. Equally important is sharing that information publicly so that everyone – from farmers to policymakers – can effectively make appropriate choices about sustainability.

3. What crops does COSA measure? Where does it operate?

COSA is now operational in Costa Rica, Colombia, Guatemala, Nicaragua, Tanzania, and Cote’D’Ivoire. Planned expansion includes Brazil, Ghana, Vietnam, Papua New Guinea, and Kenya. COSA is designed for all commodities but has first been developed for coffee and cocoa with upcoming plans for cotton, tea, and other crops.

4. Is COSA information shared?

Yes, COSA will house the largest independent collection of agricultural sustainability data in the world. COSA’s partnership with the United Nation’s International Trade Centre (ITC) allows it to provide an open global platform and database for natural resource sustainability. To share the measurement tools and processes with research institutions for analysis, COSA will employ quality control measures to help ensure globally comparable results and fair access to the raw data.

5. How long does COSA take to get information?

The field process requires about 2-3 hours with a farmer to complete a survey. COSA can be used immediately for management feedback or project monitoring and it is perhaps most effective when measures are taken annually and changes are observed over time. Changes at the environmental and social level are not always immediately evident, so having at least 3 years of data offers a much more realistic understanding. COSA strives for systemized and ongoing monitoring and evaluation in the places where it has trained local partners.

6. Is COSA an academic exercise?

COSA does use a scientifically rigorous process to ensure reliability and accuracy and it has been tested in a number of countries. It offers statistically relevant information but the results are publicly available in simple formats. However, its broad range of practical information including the costs of production, key health concerns, the level of soil erosion and much more makes it a valuable practical decision-making and improvement tool, particularly for farmers and sustainability initiatives.

7. How much does it cost to implement COSA?

Implementation can be at the farm/enterprise level or the national level and thus varies. At its most ambitious to date, a national implementation measuring six different sustainability initiatives cost under US\$175,000 per year, but other interventions have been less costly. Once COSA is learned and implemented, subsequent measures of similar or different crops in the same area are expected to be relatively less expensive and can eventually even be applied independently at a co-op level.

8. Are there other ways to measure the impacts of sustainability efforts?

Yes, several recent efforts borrow from COSA and some are evolving separately. COSA collaborates with a number of partners, such as the ISEAL Alliance, that are developing strong performance-based metrics and guidelines. COSA is unique in that it is not an *ad hoc* collection of measures or indicators; it is a comprehensive system developed from an extensive participatory process with farmers, scientists, private sector, and NGOs. Only one other comparable system (a private one) has been developed and well-tested for several years as a comprehensive approach to measure sustainability.

9. What is the basis or legitimacy of COSA?

- ③ COSA is a public tool and generates publicly-available information
- ③ COSA is designed as a neutral measurement method to understand the outcomes of any sustainability efforts
- ③ COSA has been tested in 8 countries¹, embodies continuous improvement and integrates current scientific principles that result in credible information
- ③ COSA methods were developed by a broad group of stakeholders that range from producer groups and NGOs to international agencies and private firms.
- ③ COSA follows best practices in measurement and assessment and it is based on the Bellagio and Rio principles focusing on economic, social, and environmental measures.

10. Is COSA itself sustainable?

COSA works directly with regional or national partners to build local capacity to conduct good measurement and integrate it into ongoing programs. It serves as a farm management tool and facilitates smarter business decisions on the part of farmers, funders, or firms. COSA efforts will also

¹ Colombia, Costa Rica, Cote d'Ivoire, Honduras, Kenya, Nicaragua, Peru, and Tanzania. Other countries including Brazil, Ethiopia, Ghana, Papua New Guinea, and Vietnam are under discussion.

inform the sustainability initiatives themselves to improve their effectiveness and several are already active partners. It's practical usefulness and local empowerment means that it is not dependent on donor support.



