

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: AB5122

Project Name	PNG Productive Partnerships in Agriculture
Region	EAST ASIA AND PACIFIC
Sector	General agriculture, fishing and forestry sector (60%);Agricultural marketing and trade (40%)
Project ID	P110959
Borrower(s)	GOVERNMENT OF PAPUA NEW GUINEA
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Environment Category	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
Date PID Prepared	October 5, 2009
Date of Appraisal Authorization	December 10, 2009
Date of Board Approval	March 30, 2010

1. Country and Sector Background

1. PNG is a resource-rich, low income country of approximately 6.5 million people, with a dual economy. The modern extractive sector draws on substantial reserves of metal ores and hydrocarbons and accounts for 30 percent of GDP, however it generates only a small fraction of employment. Despite strong economic growth since 2005, fuelled by the global commodity boom, half of the population lives below the national poverty line, most of them in rural areas. The pattern of growth based mainly on the extractive industries sector, has not been led to improvements in rural living standards.
2. The majority of the population (86 percent) resides in rural areas and is largely dependent on semi-subsistence agriculture. Agriculture accounts for approximately a third of GDP and the sector is dominated by smallholder farming systems. Coffee and cocoa are the main cash crops, with respectively over 30 percent and 20 percent of the total labor force at national level involved in their production, processing and sale. A high proportion (70 percent and over) of the fob value of cocoa and coffee beans can be captured by smallholder farmers in particular where they have good access to markets. Cash is increasingly required to meet the costs of education, health and other goods and services and has also become indispensable in many transactions such as bride prices, compensation payments and other social obligations.

3. Coffee production is the backbone of the rural economy in the Highlands, with approximately 90 percent of national exports originating in Western Highlands, Eastern Highlands and Simbu Provinces. The majority of coffee (88 percent) is produced by an estimated 370,000 smallholder producers nationwide. Productivity is low, with yields on average 30-50 percent of their potential. The production trend for the last decade indicates a clear decline and despite its socio-economic importance, PNG coffee has undergone an overall deterioration in productivity and quality. There is little empirical data available but the reasons behind low productivity have been documented in recent research: the lack of support services to promote improved tree husbandry practices; lack of adequate replanting (most of the trees are over 40 years old and well beyond their optimal production age); constraints to market access that reduce farm-gate prices and reduce smallholders' incentives to invest or harvest coffee; and law and order issues.
4. PNG is a small coffee producer at international level with exports just falling short of 1 million bags in recent years. Certified coffees represent a growing but still small share of production (3 percent). Exporters foresee a sustained demand for PNG coffee and consider that markets have the capacity to absorb a doubling of high quality Y Grade and premium smallholder coffee from PNG.
5. The Coffee Industry Corporation (CIC)¹ has formulated a 10-year strategic plan covering the period 2008-2018 which recognizes the need to improve industry coordination and also emphasizes the need to increase returns to smallholder growers to ensure the sustainability of the industry. To that end, there is increasing consensus within the industry that PNG should build on its competitive advantage in the higher value segments of the market, including coffees differentiated by quality, sustainability certifications and Geographical Indications. The market for these coffees could be more remunerative and are among the fastest growing segments of the global coffee industry. Improving coffee farming-systems by taking advantage of diversification opportunities is an important part of the strategy to improve coffee growers' livelihoods.
6. Approximately 20 percent of PNG's rural population is engaged in cocoa production, processing and sale. In 2008, PNG exported 51,000 metric tons of cocoa beans. There is strong and sustained demand for PNG cocoa as documented by extensive market analysis done by the Cocoa Board² and exporters. Europe and the USA represent 52 percent of the market for PNG cocoa beans, with PNG cocoa benefiting from a fine flavor status which brings a premium in NYC exchange (over US\$ 200 per ton over Ivorian beans). PNG is also benefiting from its proximity to Asian grinders and their demand for well fermented and good physical quality cocoa beans (Singapore, Thailand, Malaysia and Indonesia buy 46 percent of PNG cocoa). Exporters unanimously consider that the issue is the capacity

¹ The CIC is the statutory body created by GoPNG in 1991 under the Companies Act to regulate the coffee industry. It has a 12-member board with representation of government (Department of Agriculture and Livestock; Planning; and Trade and Industry), smallholder growers, plantation owners, processors and exporters. Its head office is in Goroka, Eastern Highlands Province, and it has field officers in all 11 coffee growing Provinces.

² The Cocoa Board is the statutory body responsible for the regulation of the Cocoa Industry. Similar to the CIC, it has a board with representation of government Departments, growers, processors and exporters. It has a head office in Rabaul, East New Britain Province, and field officers in all 14 cocoa growing Provinces.

of PNG to respond to market demand for sustained quantity and quality of cocoa production.

7. Two Provinces (East New Britain and the Autonomous Region of Bougainville) produce 70 percent of total cocoa exports³. About 85 percent of PNG cocoa is produced on small holdings by an estimated 150,000 families with a low average yield of 300 kg per hectare. In addition to low productivity, quality management is another area for improvement. In the immediate short-term however, the greatest threat both to the productivity and quality of PNG cocoa arises from the Cocoa Pod Borer (CPB)⁴. Cocoa is the largest single source of income in East New Britain Province and the Autonomous Region of Bougainville and the arrival of the CPB threatens to devastate their economy. While technical solutions are available for CPB control, their adoption will require a substantial scaling-up of farmer support services and on-farm investments. Some diversification of cocoa-based farming systems will also be necessary to restore rural livelihoods in affected areas.
8. Both for coffee and cocoa production, smallholder farmers are faced with similar constraints and significant market failures that impede their performance and their ability to respond to market signals. They are disadvantaged by significant diseconomies of scale resulting in high transaction costs and limited market access. Smallholder farmers have little access to information, new technologies and improved planting material. Because of information asymmetries, few farmers have knowledge about quality or standards requirements for higher remuneration or other market opportunities. Finally, the location of many smallholder farmers means that they lack access to roads and the necessary infrastructure for coffee and cocoa processing. Their remoteness also increases the costs of interventions to support producers. Finding suitable forms of collective action to overcome these disadvantages requires considerable efforts. A history of failed attempts at various forms of cooperatives or joint interest groups in PNG attests to the associated risks. These risks also make it difficult for commercial banks to provide services to smallholder farmers and their organizations.
9. Agribusiness enterprises and traders are critical for communicating market demand to producers and establishing value chains that effectively link them to the market. However, building long-term relationships with smallholder farmers involves considerable transaction costs on the part of the agribusiness. These include: identifying producers; reaching them in difficult access areas; establishing farmer groups; and introducing good agricultural practices. The public sector plays a critical role in strengthening smallholder competitiveness through support for better technology transfer and improved organization. In addition, there is a need for critical infrastructure where supply chains have been broken due to deteriorating roads that no longer permit farmers to cost-effectively bring their products to market. However, weak capacity to deliver services and limited outreach severely limits public intervention. Strengthening public

³ In 2007-08, another 12 percent came from East Sepik Province and 8 percent from Madang Province.

⁴ *Conopomorpha cramerella*

institutions is an important step, but will not be sufficient to reach the majority of farmers or to reach them consistently.

10. Since relationships along the supply chains are defined primarily by exporters/processors, improving both the productivity and quality of smallholder production, as well as addressing dire threats to those industries such as the cocoa pod borer, require the active involvement of these commercial operators. Dozens of processors and exporters have been effectively delivering producer support and so are natural partners to reach producers cost-effectively. Fostering a scaling-up of those market-oriented interventions is expected to partly offset the limited outreach of public institutions. This entails selective public funding (with clear eligibility and selection criteria) to offset some of the investment risks and stimulate the expansion of regular and ongoing linkages between private enterprises and smallholder farmers.

2. Objectives

1. The development objective of the proposed project would be to improve the performance and the sustainability of value chains in cocoa- and coffee-producing areas, in order to improve the livelihoods of smallholder cocoa and coffee producers. This would be achieved through strengthening industry coordination and institutions, facilitating linkages between smallholder farmers and agribusiness for the provision of technologies and services, and through the provision of critical market access infrastructure.
2. Key outcomes would be that: (i) smallholder farmers adopt efficient, market responsive and sustainable production practices leading to an improvement in their income; (ii) demand-driven productive partnerships are scaled-up with public support; and (iii) key infrastructure bottlenecks in the targeted value chains are addressed.

3. Rationale for Bank Involvement

1. The GoPNG's Medium-Term Development Strategy (MTDS) 2005-2010 places agriculture at the center of the government's export-driven growth strategy, recognizing the need to develop the non-mineral economy. Government's renewed commitment to agricultural development has been demonstrated through the National Executive Council (NEC)'s decision to prepare a National Agriculture Development Plan (NADP) for the period 2007-2016, which was completed by the National Department of Agriculture and Livestock (NDAL) and endorsed by NEC in 2007. Another NEC decision in 2007 further committed funding to the NADP over a ten year period. The NADP also seeks to leverage donor and private sector funding to achieve its goals and targets. The Plan recognizes the limitations imposed by a dearth of public goods in the areas of infrastructure, institutional capacity, access to information and access to finance services.
2. The NADP highlights the role of the private sector in agricultural development, and indeed the private sector has stepped in and is a primary provider of inputs, marketing,

sustainability certification and quality control services to smallholders. However, these efforts are currently limited by their perception of risks in expanding investments to farmers and by their own financial capacity. The project would bridge that risk and facilitate the private firms that already offer services to thousands of farmers to substantially expand those services. PPAP investments would not only leverage a considerable expansion in those services (at least 300-400 percent) and market linkages but also focus on improving the competitive and organizational capacity of farmers as well as the transparency of the information and supply chain links in the sector. Finally, where deteriorated infrastructure creates bottlenecks, complementary investments in transport infrastructure would open up market access and improve the livelihoods of rural households.

3. The Bank has extensive experience working on value-chains and developing public-private partnerships in the agriculture sector and is uniquely placed to guide this process and incorporate lessons learned in other countries. During the preparation of the proposed project, the Bank has worked with the Cocoa Board and other stakeholders on further developments of the national cocoa industry strategy and, through its partnership with Mars Inc., has provided technical expertise to the Cocoa Board. Similarly, the Bank has drawn from global expertise to work with the CIC on a program to make the Coffee Industry Strategic Plan operational. Providing targeted capacity building to the relevant public institutions is an important part of PPAP. They will need to upgrade their ability to provide vital public goods such as timely market and sector information that are now essentially absent. Furthermore, in PNG, the Bank's long-term involvement in supporting the oil palm industry has demonstrated the potential role of the private sector in delivering services and infrastructure, in partnership with the public sector, in a context where public sector institutions are relatively weak.
4. The proposed PPAP would provide, over several years, the predictable and continued support that is required to implement some of the structural changes necessary to improve the performance and sustainability of PNG coffee and cocoa value-chains, as well as increasing their contribution to rural livelihoods. As such, it would complement support provided by Government through annual programs such as the rehabilitation of larger plantations, which is carried out by the Department of Agriculture and Livestock.
5. The proposed project would complement the efforts of other development partners involved in the agriculture sector including the Australian Agency for International Development (AusAID) and the European Union (EU), which have been focusing on agricultural research and New Zealand's International Aid and Development Agency (NZAID), which is supporting institutional strengthening of the Fresh Produce Development Agency (FPDA).

4. Description

1. The project would include three components: (a) Institutional Strengthening and Industry Coordination; (b) Productive Partnerships; and (c) Market Access Infrastructure. The project would be implemented over a six year period.

2. Component 1: Institutional Strengthening and Industry Coordination. The specific objective of this component would be to improve the performance of sector institutions and to enhance industry coordination in the coffee and cocoa sectors. Existing stakeholder platforms for industry coordination would be consolidated to address short- and long-term issues such as sector governance, skills development in the industry, improvement in extension services, industry strategy on threats to quality and quality promotion, information within the industry, market development and crop diversification. This component would have four sub-components as follows:

Sub-component A: Industry coordination & policy development: This sub-component would build the capacity of industry coordination committees (ICC) to support sector dialogue and policy development in the cocoa and coffee subsectors.

Sub-component B: Communication and information management systems. The project would strengthen the information management systems necessary to inform policy development and stakeholders' decisions in the coffee and cocoa industries.

Sub-component C: Quality and sustainability management: This sub-component would strengthen quality promotion in the coffee and the cocoa industries and promote, where appropriate, the adoption of certified sustainability practices (Organic, Fair Trade, Rainforest Alliance, and quality certification schemes);

Sub-component D: Project management and monitoring and evaluation (M&E). This sub-component would support all project management and M&E functions in the Project Management Units (PMUs) respectively located in the Cocoa Board and the CIC, as well as a small Project Coordinating Unit (PCU) in DAL. It would also finance the related TA and the operations of the Technical Advisory Committee (TAC) under Component 2.

3. Component 2: Productive Partnerships. The specific objective of this component would be to increase the integration of smallholder producers in performing and remunerative value chains, by developing and implementing productive alliances between smallholders and the private sector in the project areas.
4. Those partnerships would be demand-driven and consistent with the specific priorities identified in each subsector. During project preparation, these strategic priorities have been identified as follows:
 - (a) In the cocoa sector, activities which support CPB management such as training on good farming practices; the production of improved planting material (nurseries and budwood gardens) to increase their availability for replanting; the promotion of and support for rotational replanting and cocoa garden rejuvenation; market-driven diversification of cocoa-farming system; and management of quality through the adoption of more efficient and environmentally-friendly post-harvest and processing technology;
 - (b) In the coffee sector, activities which support the adoption of sustainability practices and the expansion of the production of differentiated coffees; training on good farming practices; the production of improved planting material to increase their

availability for replanting; replanting and coffee garden rejuvenation programs; market-driven diversification of coffee-farming systems; and management of quality through the adoption of more efficient and environmentally-friendly post-harvest and processing technology.

5. Project funding would be channeled through partnerships with legal entities in the private and associative sectors, which have already been successfully working with smallholders on productivity, quality and sustainability enhancement and are interested in scaling up those activities. Those partnerships would be result-oriented, and expected results and cost-sharing arrangements would be specified in the partnership agreements. The project would provide assistance for the development of those partnership proposals, as needed, through contracted local service providers. The detailed guidelines on cost sharing arrangements and the rules for the implementation of this component (e.g. eligibility criteria, selection process, evaluation process, etc) will be described in the PIM (under preparation).

6. This component would have two subcomponents:

Sub-component A: Productive partnerships in the cocoa growing areas. This component would finance result-oriented partnerships in cocoa-growing areas to increase smallholder cocoa productivity, quality and sustainability and improve cocoa-farming systems. Its implementation would be under the responsibility of the PMU within the Cocoa Board with support from a Technical Appraisal Committee (TAC).

Sub-component B: Productive partnerships in coffee growing areas. This sub-component would finance result-oriented partnerships in coffee-growing areas to increase smallholder coffee productivity, quality and sustainability and improve coffee-farming systems. Its implementation would be under the responsibility of the PMU within the CIC with support from the TAC.

7. Component 3: Market Access Infrastructure. The specific objective of this component would be to improve smallholder market access in targeted areas under the project. This component would have two sub-components as follows:

Sub-component A: Preparation of market access infrastructure investments. This sub-component would finance the identification and selection of priority investments in support of Component 2 partnerships.

Sub-component B: Market access infrastructure development. This sub-component would finance the related investments in infrastructure rehabilitation and maintenance.

8. Geographical coverage. The project would initially be implemented in East New Britain Province, the Autonomous Region of Bougainville, Eastern Highlands Province, Western Highlands Province and Simbu Province. Most producers and the major stakeholders in the public and the private sectors are all located in those Provinces, and most innovations in the sector originate from those Provinces. Rural household dependency on coffee and cocoa income for their livelihoods is also high. A first review of possible expansion to

new Provinces would be conducted at the end of PY2, and a second review at the end of PY4. Component 1 activities would, by nature, provide benefits at the national level.

9. Targeting. Targeting of disadvantaged groups would be considered in the selection and prioritization of investments under the project. Specific consideration will be given to partnerships with smallholder farmers in less favored areas (such as more remote areas in the Highlands, or areas hit by CPB and exclusively dependent on cocoa) and partnerships which mobilize young farmers. Gender balance will be considered in all activities, for example the provision of training to both men and women, or employment opportunities at the ward level through the establishment and management of nurseries and budwood gardens. The M&E system would monitor targeting of those groups under the project.

5. Financing

Source:	(\$m.)
BORROWER/RECIPIENT	6.9
International Development Association (IDA)	25.0
IFAD (proposed)	9.3
Total	50.2

6. Implementation

1. National Project Steering. GoPNG has established a Project Steering Committee for project preparation and this would evolve into a Project Steering Committee (PSC) for project implementation. The PSC would include the Department of Agriculture and Livestock (DAL), the Department of National Planning and Monitoring (DNPM), the Department of Finance (DOF), the Department of Treasury (DOT), the Department of Works (DOW), the Department of Environment and Conservation (DEC), the Cocoa Board, the Coffee Industry Corporation (CIC), the Rural Industries Council (RIC), the National Agriculture Research Institute (NARI) and the Provincial Governments.
2. Project Coordination at national level. A key principle of the project design in decentralized project management at industry level. At national level, DAL would be responsible for the coordination of project implementation. A small Project Coordination Unit (PCU) would be established within DAL with primary responsibility for M&E as well as liaison with the PSC, central government departments and financiers (IDA and IFAD).
3. Project Management at industry level. Project management functions would be placed with the CIC and with the Cocoa Board respectively for the coffee and the cocoa industries. Project Management Units would be established under both institutions to support the CIC and the Cocoa Board with project implementation (including daily management of project activities, financial management, procurement, and reporting). The PMU based in Goroka within the CIC would be guided by a Coffee Industry Coordination Committee (Coffee ICC), which would also act as an industry-level steering committee for the PPAP. Similarly, the PMU based in Kokopo within the Cocoa Board

would be guided by a Cocoa Industry Coordination Committee (Cocoa ICC), which would act as an industry-level steering committee for the PPAP. Due to the special status of ARB, a Deputy PMU Manager reporting to the Project Manager in Kokopo would be based in the Cocoa Board office in Buka. A Transport Specialist/Senior Engineer would also be part of each PMU and be responsible for the implementation of Component 3.

4. Technical assistance. A technical assistance team would support the PCU and PMUs and build capacity of DAL, Cocoa Board and CIC in core management functions. This would include a Project Implementation Advisor, a Financial Management Advisor, a Procurement Advisor, and an M&E Advisor on a part-time basis.
5. DAL will be responsible for overall monitoring and evaluation of the PPAP, working in close collaboration respectively with the CIC and the Cocoa Board. An overall M&E system is being prepared and a Management Information System (MIS) will be developed for the project, which will form the basis for tracking key implementation progress indicators. Particular attention is being paid to establishing realistic and useful indicators that can be regularly collected and maintained in the MIS.

7. Sustainability

1. PNG coffee exports have been less than one million bags per year during the last few years. The current low level of productivity of smallholder coffee is exacerbated by irregular supply in quantity and quality, which results in low revenues for smallholder households. PPAP would support partnerships with traders, processors, exporters, farmer groups and the organizations supporting them, in order to train farmers on more productive and remunerative farm management practices and to link them to markets. Activities would be carried out to improve the quality of PNG coffee and increase the share of differentiated coffees that are exported, resulting in higher prices for smallholder farmers and better incentives to invest in the management of their farms. Differentiation can include better quality, certification or Geographical Indications. Diversification of farming systems is also seen as an efficient strategy to manage risks at farm level, and would be one of the options available under the project. The poor state of minor road infrastructure in the Highland Provinces also makes market access difficult. PPAP includes a component that will carry out road rehabilitation works.
2. The main threat to the sustainability of the PNG cocoa industry is the CPB infestation. However, the current crisis also presents an opportunity for the sector to transition to more intensive and remunerative farm management systems. In effect, better management practices applied to cocoa plantations has proven to be the most effective manner to control CPB infestation. PPAP will support the adoption by farmers of these improved management practices through training and technical support. The replanting of cocoa with selected new clonal hybrids will ensure the rejuvenation of the productive base. The activities will be implemented through partnerships between farmer groups and the private sector with a view to building commercial relations that will ensure sustainability. The shift in management practices together with the replanting of smallholder cocoa with improved planting materials will contribute to the sustainability

of PNG cocoa production. Sustainability will also be supported by fostering quality and certifications that are in demand by existing buyers. Similar to the situation in the coffee sector, the diversification of cocoa-farming systems is seen as an integral part of risk management at farm level, and as an exit strategy for those households who would not be able to implement more intensive cocoa farming management practices for CPB management. It would therefore be one of the options available under the project.

3. Institutional aspects. Currently institutions in the coffee and cocoa sector (CIC and Cocoa Boards) need strengthening in a number of areas, such as governance and provision of information to the industry. They are also in a fragile financial position and cannot play their role of industry coordination effectively. PPAP will implement several activities aiming at strengthening these institutions, in terms of governance, policy, financial management, communication and transparency. The project will also assist them to upgrade quality management systems throughout the industry (revision of export standards, strengthening of quality control, etc.). Stronger institutions will contribute to make both industries more sustainable.

8. Lessons Learned from Past Operations in the Country/Sector

1. The preparation of the proposed project benefited from the experience of previous World Bank projects in PNG (particularly in the oil palm sector and in road maintenance⁵) and from that of other agriculture projects in PNG. Finally, the design of the project considered lessons learned in other countries with the implementation of public-private partnerships (or productive alliances) in the agriculture sector⁶.
2. Key lessons integrated in the project design include: (i) decentralized project management; (ii) transparent governance arrangements for the implementation of productive alliances with the private sector; (iii) simple procedures and clear business standards; (iv) scaling up successful approaches for agricultural extension; and (v) for transport infrastructure, sufficient consideration to maintenance arrangements as well as technical standards.

9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[x]	[]
Natural Habitats (OP/BP 4.04)	[]	[x]
Pest Management (OP 4.09)	[x]	[]
Physical Cultural Resources (OP/BP 4.11)	[]	[x]
Involuntary Resettlement (OP/BP 4.12)	[x]	[]
Indigenous Peoples (OP/BP 4.10)	[x]	[]
Forests (OP/BP 4.36)	[]	[x]

⁵ Roads Maintenance and Rehabilitation Project (RMRP)

⁶ In particular the experience with the following: Mali Agricultural Competitiveness and Diversification Project; China Agricultural Technology Transfer Project; Columbia Productive Partnerships Support Project; Columbia Second Rural Productive Partnerships Project; and Vietnam Agriculture Competitiveness Project.

Safety of Dams (OP/BP 4.37)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects in Disputed Areas (OP/BP 7.60)*	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects on International Waterways (OP/BP 7.50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10. List of Factual Technical Documents

1. Background documents and studies:

Coffee Strategic Plan 2008 to 2018, Policy Statement – August 2008

Coffee Strategic Plan 2008 to 2018, Implementation Plan – August 2008

National Agriculture Development Plan - 2007-2011 – September 2008

PNG Taxation & Customs Guide for Aid Organizations – November 2008

Final Report Cocoa Strategic Plan (Mars), June 2009

Coffee report and proceedings of June 09 workshop (Giovannucci), July 2009

2. Project documents:

Project Information Document – October 2008

Draft Procurement Plan (URS/DAL), September 2009

Draft Social Assessment (URS/DAL), September 2009

Draft ESMF (DAL), November 2009

3.

11. Contact point

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12. For more information contact:

The InfoShop

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

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