

Scoping Study of Rural Finance for Australia-Indonesia Partnership for Decentralization

Rural Economic Development (AIPD-Rural)

# **Draft Final Report**

12 July 2013

# TABLE OF CONTENTS

E)	EXECUTIVE SUMMARYiv				
1	INTI	RODUCTION	1		
	1.1	BACKGROUND	1		
	1.2	OBJECTIVES AND ORGANIZATION OF THE DRAFT FINAL REPORT	1		
	1.3	METHODOLOGY	1		
2	FINA	ANCIAL NEEDS OF THE BENEFICIARIES	3		
	2.1	Target beneficiaries	3		
	2.2	Vulnerability	4		
	2.3	Location	4		
	2.4	Financial needs	4		
	2.5	Access to finance constraints faced by beneficiaries	6		
3	SUP	PLY OF FINANCIAL SERVICES IN AIP-PRISMA LOCATIONS	8		
	3.1	Observations on how credit is provided to the target group	8		
	3.2	Constraints faced by financial service providers	9		
4	BUS	INESS AND POLICY ENVIRONMENT	12		
	4.1	Key Policies and Regulations affecting Access to Finance of Target Group	12		
	4.2	Status and Trends of new Insurance Products available to Farmers	13		
5	GAP	PIDENTIFICATION BETWEEN FINANCIAL NEEDS AND SERVICE PROVISION	15		
	5.1	Identification of Gaps			
	5.2	Prioritization of Gaps	16		
6	ОРТ	ION IDENTIFICATION AND ASSESSMENT	18		
Ū	6.1	Overall Management of A2F Interventions within the Context of AIP-PRISMA			
	6.2	Options related to the Economies of Scale Gap			
	6.3	Options related to the Capacity and Knowledge Gap			
	6.4	Options related to Risk Management Gap	20		
	6.5	Options related to Policy and Institutions Gap	20		
7	REC	OMMENDATIONS	24		
	7.1	Demand Analysis			
	7.2	Initial Technical Assistance on Agrifinance			
	7.3	Increasing the Awareness of Current Government Loan Programs and Facilitating Smallholder			
		rs' Access			
	7.4	Product Development			
	7.5	Financial Literacy of Farmers	25		

7.6	Agric	cultural Value Chain Financing for Financial Institutions	25
7.7	Polic	y and Regulations Advising2	25
APPENDIX	1.	KEY INDICATORS IN TARGET PROVINCES	28
APPENDIX	2.	PERSONS MET	30
APPENDIX	3.	REFERENCES	33
APPENDIX	4.	MISSION TO EASTERN INDONESIA	34
APPENDIX	5.	MAIN CREDIT PROGRAM FOR AGRICULTURAL PROMOTION	35

### LIST OF TABLES

Table 1 Typical Agricultural Activities in Target Districts	5
Table 2 Bank of Indonesia Regulations about Financing to MSME	12
Table 3 Options for Managing A2F Intervention within AIP-PRISMA	
Table 4 Gaps and Options for Improved Access to Finance	22
Table 5 Recommendations and Assessment	26
Table 6Poverty in Targeted Areas	29
Table 7 Persons Met	30
Table 8 Types of Stakeholders met during the Mission	
Table 9 Agricultural Credit Programs	35

### LIST OF FIGURES

Figure 1 Flow of Credit to Target Groups	8
Figure 2 Gaps between Financial Needs and Supply of Financial Services	16

### ABBREVIATIONS

Access to Finance			
Asian Development Bank			
Australia-Indonesia Partnership for Decentralisation – Rural Economic			
Development (AIPD Rural			
Aide Memoire			
Australian Agency for International Development			
Badan Perencanaan Pembangunan Nasional (National Planing Board)			
Bank Indonesia			
Bank KreditDesa (Rural Credit Bank)			
Bank Pembangunan Daerah (Regional Development Bank)			
Bank Perkreditan Rayat (People's Credit Bank(			
Badan Usaha Miik Desa (Village Owned Enterprise)			
Bank Rakyat Indonesia			
Penjaminan Kredit Daerah (Regional Loan Guarantee Company)			
Koperasi Kredit (Loan and Saving Cooperative)			
Kredit Usaha Rakyat (Peoples Business Credit)			
Micro Small and Medium Enterprises			
Otoritas Jasa Keuangan (Financial Services Authority)			
StatistikPotensiDesa (Village Potential Statistics)			
Promoting Rural Income through Support for Markets in Agriculture			
Revolving Loan Fund			
Survey Sosial EkonomiNasional (National Socio-economic Survey)			
Tim Nasional Percepatan Penanggulangan Kemiskinan; (National Team for			
Accelerating Poverty Reduction)			
Usaha Mikro, Kecil dan Menegah (Micro, Small and Medium Enterprise)			

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# **EXECUTIVE SUMMARY**

1. Access to financial services is emerging as a potentially important component of the market systems (M4P) approach adopted in the AIPD-Rural's PRISMA program. The AIP-PRISMA program anticipates that in order to effectively address various constraints and respond to beneficiaries' needs in regard to access to financial services, a range of interventions might be required to support the development and use of efficient and sustainable financial products. This Scoping Study of Rural Finance objective is to present the findings and recommendations of a Mission conducted in Indonesia between June 1 and June 21, 2013 including field visits to East Java, NTB, and NTT provinces.

2. The Financial Needs of Beneficiaries. The target group of AIP-PRISMA includes poor and near poor farmers in the target districts. The beneficiaries are smallholder farmers, often with a low education level, relatively isolated from the public agricultural and research system, some of them also isolated geographically. There is a great degree of heterogeneity among the beneficiaries in terms of agro-ecological environment, type of value chain, socio-economic development of the areas where they live and farm, as well as their income sources. As a consequence of this heterogeneity, the financial needs of target beneficiaries are quite diverse and more detailed information will be required to develop suitable interventions. The target group are highly vulnerable even to minor shocks to their income. Additionally, the high variability of agricultural production and income due to climate shocks, volatile market conditions, and various pests and diseases affecting agricultural production can affect their livelihood considerably. There are however little insurance services available to the target group, and none in terms of agricultural insurance. The mission was able to make preliminary notes about financial needs of farmers in terms of size, terms, and purpose; however, a more in-depth assessment based on an appropriate survey will be needed to assess the effective demand of farmers for financial services. In addition to a diversified range of credit products, saving, and insurance products might be required by target households.

3. The Mission has also identified constraints in the demand side including the lack of secure land and fixed asset titles of a large number of smallholder farmers; exposure to risk arising from shocks to production, price volatility, and highly fluctuating demand; limited financial literacy; weak value chain integration; and limited presence of effective farmer organizations.

4. **The supply of financial services.** The range of financial service providers currently serving the target group (i.e. smallholder farmers) includes a combination of (i) formal institutions such as commercial and rural banks; (ii) semi-formal institutions such as the UPK Revolving Loan Funds and farmer associations; and (iii) informal providers such as private lenders, input suppliers, collectors, buyers, friends and relatives. In most cases, commercial banks and regional development banks maintain a limited proportion of their portfolio devoted to agriculture (e.g. for Bank Jatim, this is less than 5%; and for Bank NTT, this is about 1% of total loan portfolio). More generally, banks hardly lend to poor/near poor farmers given the high cost of delivery and the perceived high risk of these target groups. Similarly, rural banks focus lending mostly on micro and small enterprises that are able to generate a more even cash flow (e.g. those in trading). There seems to be a much stronger emphasis placed on "productive activity lending" – under which agricultural / production activities constitute a small proportion. Thus, direct lending by formal financial institutions to small-scale farmers is currently very limited.

5. Financial service providers face a number of constraints that explain their limited interaction with agriculture (more generally) and with small-scale farmers (specifically) including (i) high costs of delivering small-scale financial services, especially in the rural/agricultural sector; (ii) limited agricultural market knowledge; (iii) use of standard (less innovative) credit risk management practices among financial institutions; and (iv) limited range of products offered.

6. **Business and policy environment**. Currently there are several government loan programs that are targeting agriculture and small enterprises; the most important of these programs are KKPE, KUPS, KPNRP, and KUR. KUR is the only program with loan guarantee. The rest (KKPE, KUPS, and KPENRP) are using subsidized interest rate cost scheme. The current policy of the government is to use only one scheme for one loan program, so for example because KKPE has received subsidized interest rate cost from the government, it will not be guaranteed by the government and vice versa for KUR. That is why the interest rate of KUR is much higher compared to the other loan programs since the interest rate cost is not subsidized by the government. Currently Bank Indonesia has not conducted evaluation/assessment of the above government loan programs.

7. In 2012, Bank Indonesia issued a regulation to promote financing to micro, small, and medium enterprises (MSME). The target for 2018 is a loan ratio to MSME equal to 20% of bank's total loan. The target beneficiaries of the AIP-PRISMA program will most likely fall under the micro enterprise category of the Bank Indonesia regulation. However since Banks are not specifically required to lend to agriculture sector under this regulation, it remains to be seen whether banks will increase their portfolio in agriculture or choose other sectors such as trading that are usually perceived to be less risky by banks.

8. To support access to credit for farmers and farmer groups, Indonesia introduced the Law No. 9 of 2006 on Warehouse Receipt System. For warehouse receipt, the usage of warehouse receipt by smallholder farmers is also not very encouraging. Despite the interest rate cost subsidy given by government (around half of the commercial rate are shouldered by the government) smallholder farmers are still unable to take advantage of using warehouse receipt to provide financing for them.

9. Currently there is no private insurance company in Indonesia which is providing agricultural insurance. For small loans provided by banks, only life insurance is common in Indonesia. Ministry of Agriculture has started conducting pilot project for crops insurance for the planting season of 2012/2013 and also a pilot for cow insurance. In spite of subsidies provided by the Government, the results are not encouraging so far.

10. **Gaps and Options**. The analysis of constraints has highlighted a number of gaps existing between financial needs of target beneficiaries and supply of financial services. The gaps are related to (i) economies of scale; (ii) risk management; (iii) capacity and knowledge; and (iv) policies and institutions. For each gap, options for AIP-PRISMA have been identified, prioritized, and assessed. The analysis has led the Mission to make some recommendations as follows.

11. **Recommendations.** Some of the recommendations are for the short-term (1-2 years) and could be picked up by AIP-PRISMA relatively quickly. These include (i) a study of effective demand for financial services in the target districts; (ii) technical expertise on access to finance to AIP-PRISMA Team; (iii) increasing awareness of smallholder farmers of current government loan programs and facilitating access; and (iv) capacity building to farmers to improve their financial literacy and farm budgeting skills and to financial institutions to improve their understanding of agricultural value chains and value chain financing.

12. In the medium-term (2-5 years), the Mission recommendations include measures aimed at (i) improving value chain financing; (ii) product development; and (iii) partnerships with other organizations working on agricultural insurance, mobile banking, warehouse receipts, and policy.

# 1 INTRODUCTION

# 1.1 BACKGROUND

13. AusAID's new Rural Economic Development program, known as the Australia-Indonesia Partnership for Decentralization – Rural Economic Development (AIPD Rural) will work in 20 districts of 5 provinces in Eastern Indonesia: East Java, NTB, NTT, West Papua and Papua. In addition to these 20 districts, 4 additional districts will be included in the provinces of Maluku, D.I. Yogyakarta, Central Java, and West Sumatra. The AIPD Rural Program will consist of two distinct but complementary funding streams and the first and largest share will go to financing an activity called *Promoting Rural Income through Support for Markets in Agriculture* (AIP-PRISMA).

14. Access to financial services is emerging as a potentially important component of the market systems (M4P) approach adopted in the AIPD-Rural's PRISMA program.

15. The AIP-PRISMA program anticipates that in order to effectively address various constraints and respond to beneficiaries' needs in regard to access to financial services, a range of interventions might be required, including facilitating access to financial services, providing information and capacity building to both supply and demand side institutions to support the development and use of efficient and sustainable financial products. In broad terms, the possible options for this support include: a stand-alone activity to promote increased access to financial services; the integration of support for financial services within PRISMA's program activities; and partnerships and cooperation with other donors, government and both formal and informal financial service providers.

# 1.2 OBJECTIVES AND ORGANIZATION OF THE DRAFT FINAL REPORT

16. This document is the *Draft Final Report*<sup>1</sup> of the Mission on *Scoping Study of Rural Finance for Australia-Indonesia Partnership for Decentralization*. The *Draft Final Report* (DFR) is the third deliverable of this consultancy and aims at presenting the key findings and recommendations of the mission conducted on 1-18 June, 2013. The DFR follows the *Inception Report* submitted on 7 June 2013 and the *Aide Memoire* submitted on 18 June 2013. The DFR is organized into seven sections as follows:

Section 1	Introduction
Section 2	Financial Needs of the Beneficiaries
Section 3	Supply of Financial Services in AIP-PRISMA locations
Section 4	Business and Policy Environment
Section 5	Gap Identification between Financial Needs and Services Provision
Section 6	Options Identification and Assessment
Section 7	Recommendations.

# 1.3 METHODOLOGY

17. The mission has addressed the following key questions.

### 18. Demand Side

- Who are the beneficiaries and what are their financial needs?
- To what extent and how are the beneficiaries currently meeting their financial needs?

<sup>&</sup>lt;sup>1</sup>To be referred as Goletti, F., M.A. Carpio, A. Mongid, and R. Tomasoa (2013) *Draft Final Report for Scoping Study of Rural Finance for Australia-Indonesia Partnership for Decentralization*, AIP-PRISMA, Jakarta, 12 July 2013.

• What are the key constraints of beneficiaries to meet their financial needs?

### 19. Supply Side

- Who are the main financial service providers (both formal and informal)?
- How do they provide financial services to the beneficiaries?
- What are the constraints of financial service providers in meeting the demand of beneficiaries?

### 20. Gap Analysis

- What are the main gaps in demand and supply?
- How can we prioritize these gaps?

### 21. **Options Analysis**

- What are the options available to address the prioritized gaps?
- What are the advantages and disadvantages of each option?

### 22. **Recommendations**

- What are the options more suitable for AIP-PRISMA?
- 23. In order to address these questions, the Mission Team conducted the following activities:
  - i. Review of relevant literature;
  - ii. Compile and summarize relevant data;
  - iii. Conduct key informant interviews both in Jakarta and in the three provinces of East Jawa, NTT, and NTB;
  - iv. Prepare and present an Aide Memoire after returning from the Eastern Indonesia field work;
  - v. Prepare a draft Final Report;
  - vi. Prepare a Final Report based on comments from the AIP-PRISMA team.

# 2 FINANCIAL NEEDS OF THE BENEFICIARIES

# 2.1 Target beneficiaries

24. **The beneficiaries of the program are poor and near poor** farmers in the target districts. The definition of beneficiaries takes into account both their main occupation (i.e. farmers, broadly understood to include crop, livestock, and fishery activities) and their income level (as per prevailing definition of poverty in Indonesia). By considering both the poor and near poor, the project can address that large number of people who are clustered at the bottom of the income distribution and for which small changes in the poverty line make a substantial difference<sup>2</sup>. More than half of the farmers in the target districts are poor and near poor and they have been estimated by AusAID to be around 1.2 million.

25. **Size of landholding is not an accurate predictor of poverty.** In most cases, the beneficiaries will be smallholders with farm size between 0.2 and 3 ha. However, in some cases, land size (particularly in areas such as NTT, where water availability is an issue and much of the land is not productive), might not be a good indication of poverty (a landholding of 10 ha of upland or land without much access to water could be consistent with poverty). In NTB, some farmers also rent land in addition to their own land especially for planting shallots. Similarly, in the case of specialized livestock farmers, landholding is not the most relevant indicator. A poultry farmer who is able to produce 2,000 birds per cycle or a pig farmer fattening 20 piglets per cycle will not require much land in addition to a chicken coop area or piglet sheds. Similarly, land size is not a relevant indicator for a fisherman.

26. **Low education level** of many of the beneficiaries might be relevant to agricultural income. Lower education level makes it more difficult to learn and adopt productivity-enhancing practices both in production and post-production activities. In very extreme cases, there might be numeracy issues, or financial literacy issues to consider (e.g. some may not be used to developing budgets).

27. **Isolation from government extension and research organizations**. Considerable amount of the agricultural extension work seems to be provided by the private sector or NGOs. During the mission, the public extension and research systems were notably absent. This probably is a biased conclusion obtained from a very short visit. Nevertheless, it would not be surprising that most of the beneficiaries are not reached by the extension and research system. Other studies (see for e.g. IFC, 2007, World Bank 2007) would support this conclusion.

28. There is a **great degree of heterogeneity** among the beneficiaries in terms of agro-ecological environment, type of value chain, socio-economic development of the areas where they live and farm, as well as their income level (driven in part by the extent to which they depend on a single commodity and have non-farm income sources). In Kupang, most farmers seem to have low productivity and are poorly integrated with value chains. In Malang, on the other hand, even smallholders seem to have relatively good productivity and are in proximity of relatively well developed markets and service providers. In Bima (in NTB), the farmers visited rely on the production of two crops - shallots and paddy – and reported to have regular buyers. In East Java, water for irrigation seems to be generally available, whereas in NTT water availability is a major constraint for agriculture. As a consequence of this

<sup>&</sup>lt;sup>2</sup> In 2002, the population living below the international poverty line of \$1/day (in 1993 purchasing power parity terms) was just 7.5 percent. In contrast, the population below \$2/day was 52.4 percent (IFC 2007, Indonesia: Rural Finance Mapping).

heterogeneity, the financial needs of target beneficiaries are quite diverse and more detailed information will be required to develop suitable interventions.

# 2.2 Vulnerability

29. As already mentioned, the poor and near poor are highly vulnerable even to minor shocks to their income. A small change in income might precipitate households from a near poor level to below the poverty line. Additionally, the high variability of agricultural production and income due to climate shock, volatile market conditions, and various pests and diseases affecting agricultural production can affect their livelihood considerably. Agricultural risk compounds with household or individual shocks (e.g. sudden illness within the family) that result in a highly vulnerable condition among the beneficiaries of the PRISMA program. Beneficiaries might not have access to facilities (e.g. savings) that might allow them to cope better with some of these shocks.

# 2.3 Location

30. **Weak access to infrastructure in Eastern Indonesia**: the provinces where beneficiaries live (with the exception of East Java) have poor road density, unreliable energy supplies, limited access to irrigation, and poor access to water and sanitation. Thanks to mobile revolution, communication infrastructure has considerably improved, although some of the most remote areas in Eastern Indonesia might still have problems of access to communication. Access to physical branches of financial institutions might be less of a problem than access to other services such as hospitals (WB 2010, A2F Study).

31. **Remote areas.** The farmers met during the mission by the Consultants do not appear to be very isolated from markets; although some NGO representatives met by the Mission were from more isolated areas. Given the archipelagic geography of Indonesia, many households in more remote islands and hilly areas are indeed isolated and therefore more vulnerable to shocks arising from climatic events, natural disasters, or pest attacks and diseases. Effectively reaching these farmers will be a challenge for AIP-PRISMA – and more so, when we consider the need to deliver financial services to beneficiaries in these remote areas. More innovative systems of delivery through the application of mobile technology might provide opportunities.

32. **Economic centers.** In each of the provinces and districts of the target areas there are centers of economic importance and markets that could absorb the food and agricultural surplus of beneficiaries. For example, Surabaya is a major market (the second largest city in Indonesia), and as such, has a vast direct and indirect demand for food and agricultural products from East Java and neighboring provinces. In the case of NTT, surplus products such as cattle and maize can also be exported to other islands and provinces of Indonesia; while vegetable products can be traded even to East Timor. Similar observations can be made for shallots produced in NTB. The rapidly growing income of Indonesian households (on average) could allow a rapid increase in the demand for horticultural products throughout the archipelago (see USAID 2008 Indonesia Economic Growth Sector Assessment).

# 2.4 Financial needs

33. Determining the financial services needs of beneficiaries is a complex undertaking. Many, if not all, individuals will always claim that they want or need loans and other financial services. But as with any market intervention, determining the demand for financial services needs to take account of

what is referred to as "effective demand" – i.e. those individuals and households who do not only claim that they need/want financial services, but who are actually capable of making effective use of these services.

34. It is important to note that in the absence of any comprehensive demand-side information on the financial services needs of beneficiaries, the Mission endeavored to conduct some meetings with farmers and farmer groups during the field visits to East Java, NTT and NTB. The findings from these meetings have also been complemented by reviews of other literature on the demand for financial services in the country and in the specific locations (where available). Based on the interviews conducted, we have taken note of some of the financial services that beneficiaries may need to support their economic activities. These should be taken as purely indicative at this stage; further detailed analysis of the financing requirements among farmer-beneficiaries (if and when effective demand is determined) will be necessary.

Activity to be financed	General terms and conditions of the loan or financing package			
	Term	Size		
Purchase of Annual Crop Inputs (e.g. seed/breed, fertilizer, pesticides), land preparation, harvesting, weeding	Short term (3-6 months)	Small (less than Rp. 10 million/ha) for grains and horticulture Medium (but less than Rp. 30 million/ha) for spices (e.g. chilli), sugarcane, shallots		
Perennial Crops (e.g. cocoa, coffee) including purchase of input and initial investment in planting	Medium-long term (4-8 years)	Medium-large (Rp. 50 million/ha)		
Animal production (poultry, pig, dairy, beef, aquaculture) including inputs (feed, health and veterinary services) and fixed investment in structures (sheds, pens, water system, waste disposal)	Short term (3-6 months) for small livestock (poultry and pig, fish) Medium term (2-5 years) for cattle and dairy cows	Depends on the number of animals. For 10 piglet fattening cycle about Rp. 30 million		
Livestock (cattle, dairy cow) investment in animal stock	Medium term (2-5 years) for cattle and dairy cows	Medium-high (Rp. 40 million for cow).		
Purchase or acquisition of equipment (small tractor, pumps, dryers, harvester, thresher, seeder, pickup trucks, packaging machine)	Medium term (2-5 years)	From small (Rp. 3 million for a pump) to big (Rp. 200 million for a pickup truck)		
Building Infrastructure (wells, tanks, canals, green house, storage facility)	Medium-long term(2-10 years)	Medium-high		

### Table 1 Typical Agricultural Activities in Target Districts

35. In most cases encountered by the mission, the financial needs of beneficiaries seem to be modest in terms of size: most production activities were based on annual crops (the mission did not have the opportunity to observe perennial crops or cattle operations) or livestock activities such as pig production. Annual crop production does not require large working capital. In the case of areas where water is not readily available through surface irrigation system, a well might be needed, which might involve some form of investment (e.g. in Kupang Timur, about Rp. 5 million is required to build a shallow well at 10 m of depth). In most cases observed, the equipment is basic, mechanization is rather limited, and most of the working capital is for the purchase of inputs (i.e. seeds, fertilizer, and plant protection). Given the small size of holdings, working capital varies between a few hundred thousand Rupiah and Rp. 5 Million.

36. In the case of livestock farmers, the amounts are larger; for 10 piglets, one cycle might involve Rp. 25 million with a profit of Rp. 5 million over a period of 4 months. In case the farmer would like to

expand the operation from 10 to say 50 piglets, then some investment in infrastructure (sheds, waste disposal) and working capital will require considerably more resources and some reliable financing mechanism in addition to or to complement the existing informal mechanisms used. In NTB, shallot farmers need around Rp. 23 million in one session of shallot planting. Shallot requires much more capital than other crops such as peanut although revenues could also be much higher in shallots (but the price is highly variable).

37. These amounts are either available to the farmers through their own funds or through informal channels (e.g. borrowing from friends or relatives, as well as from collectors or input traders who may also lend in kind). In some cases, farmers are able to access credit directly through cooperatives, rural banks and some commercial banks (e.g. BRI in Bima). Most loans extended are on individual basis, although one rural bank in East Java reported using group lending methodology to reach small-scale farmer clients. While some farmers are able to access formal financial services access for this target group is still largely limited. Those without access to formal financial services resort to borrowing from moneylenders, from family/friends, or from input traders and/or collectors. Credit provided by traders and collectors is a type of value chain finance; but in the locations visited, the credit is not part of a contract (such as a farming contract) between farmers and agribusiness companies, and is usually informally administered.

38. Some farmers met during the Mission have expressed the need for insurance products, such as crop and livestock insurance, or insurance to protect them from high price fluctuations. In the latter case (insurance against price fluctuations), there are no financial products available to small farmers (such as hedging with futures or options, or weather indexed insurance<sup>3</sup>); in the case of grains or durable products (e.g. coffee and cocoa beans), warehouse receipts are available in some cases (e.g. a scheme involving Bank Jatim) but are not designed for poor or near poor farmers.

39. Farmers in NTT stressed the importance of savings to improve security and facilitate learning about financial management. This is consistent with the findings from the larger survey on Access to Finance by the World Bank (2010).

# 2.5 Access to finance constraints faced by beneficiaries

40. **Lack of land and fixed asset titles**. As lending by banks is heavily collateral-based (most require land and fixed asset certificates), many farmers find it difficult to qualify for bank loans, given their lack of proper documentation<sup>4</sup>.

<sup>&</sup>lt;sup>3</sup>IFC, 2010 explore the issue for maize producers in Eastern Indonesia.

<sup>&</sup>lt;sup>4</sup>Approximately 60 percent of landowners in Indonesia hold their land informally. Their land has not been mapped and measured, their rights have not been verified, and their legal interests have not been registered. They do not hold the land certificates that evidence their land rights under formal law. As such, these landowners are unable to take advantage of one of the most valuable attributes of land rights— the ability to use land as collateral. Even when smallholders receive land certificates, they rarely have the knowledge or means to use the certificate as collateral for credit (IFC 2007, Indonesia: Rural Finance Mapping). Moreover, disputes over land title in East Java, NTT and NTB are widespread (Abdurrachman, 2004). Land disputes are relatively difficult to resolve, because some people do not want to accept the decision of the court. Land conflicts are common in indigenous areas. This conflict usually involves communal fight. Land conflicts also occurred between plantation companies and smallholders to compete for agricultural land.

41. **Risks associated with** high price fluctuations (e.g. chili, shallots) and shocks arising from climatic events, pests and disease attacks, and natural disasters.

- Price volatility in some cases, price shifts can be quite dramatic between cycles (which appear to be partly driven by changes in production, as well as the policy environment);
- Dramatic reductions in yield –as brought about by unforeseen weather changes (e.g. consistent rain over long periods in Bima or pest attacks to vegetables in Kupang);
- Loss of / reduction in (cash) income when sales go down (whether in terms of changes in price or production/yield), which is significant especially for those farmers who plant a limited range of crops only and/or do not derive income from non-farm activities.

42. **Limited financial literacy**, an important factor explaining the difficulty most beneficiaries would have in complying with bank requirements. In fact, the A2F survey of the WB (2010) identified education and financial literacy as important determinants of demand for financial services. Financially literate persons are 8% more likely to have a saving account than financially less literate persons.

43. **Weak value chain integration**. Beneficiaries have immediate links with input suppliers and collectors. However, most farmers do not establish linkages among themselves and with other value chain actors (e.g. traders, processors) in order to gain from economies of scales or value addition activities. Beneficiaries do not have much understanding of value addition through value chain integration and how to benefit from it.

44. The implications of this lack of integration are twofold: on the one hand, beneficiaries have weaker linkages with financial services providers, and on the other hand, farmers are less able to benefit from innovations and better prices that stronger value chain integration with agribusiness enterprises could facilitate. Active participation of beneficiaries in a well-integrated value chain would make them more credible clients of financial institutions. For example, a vegetable farmer in NTT who has hardly any linkages with input providers (e.g. seeds or fertilizer), extension service providers, traders, transporters, processors, cold chain storage providers, modern retail stores, and packhouses will most probably continue to work either at subsistence level, or produce little for the market. Addressing such a farmer's financial needs for improving productivity will also be severely constrained by virtue of his/her limited access to technology and market knowledge. The absence of good linkages with other vegetable value chain actors would not make him/her a good client for a financial institution.

45. **Limited presence of effective farmer organizations.** Farmers and farmer groups encountered by the Mission appear to be weakly organized in terms of marketing, inputs supply, production planning, and access to finance. If productive and value adding improvement have to occur to benefit the target group, there is a need for effective farmer organizations (including well-governed cooperatives) through which farmers could improve their access to technology, markets, and finance. There is also a need for effective contract farming arrangements (for good practices in Indonesia see Ian Patrick 2004<sup>5</sup>) where credit, inputs, technical and management advice and risk spreading are combined in order to maximize productivity.

<sup>&</sup>lt;sup>5</sup>Contract farming in Indonesia: Smallholders and agribusiness working together, ACIAR Technical Reports No. 54.

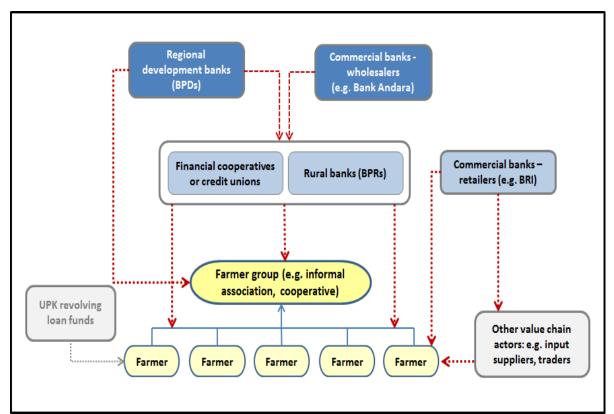
# **3** SUPPLY OF FINANCIAL SERVICES IN AIP-PRISMA LOCATIONS

### 3.1 Observations on how credit is provided to the target group

46. The range of financial service providers currently serving the target group (i.e. smallholder farmers) includes a combination of (i) formal institutions such as commercial and rural banks; (ii) semiformal institutions such as the UPK Revolving Loan Funds and farmer associations; and (iii) informal providers such as private lenders, input suppliers, collectors, buyers, friends and relatives. Formal financial institutions serving the target group include:

- Rural banks or BPRs some are even starting to provide microcredit via group lending mechanisms (e.g. in East Java);
- Some commercial banks e.g. BRI in Bima, and Bank NTT in Kupang;
- Credit unions and financial cooperatives;
- Regional development banks although those visited during this mission appear to be mostly channelling wholesale loans via conduits such as BPRs and cooperatives; and
- Commercial banks providing wholesale facilities e.g. Bank Andara, via its linkage banking program with affiliate cooperatives and BPRs.

47. Figure 1depicts the flow of credit from various financial service providers, as observed during the mission. It is important to note that while various financial institutions provide credit to the target group (whether directly or indirectly), the volume of loans extended to the sector is not considered nor expected to be significant (compared to lending to other sectors).



### Figure 1 Flow of Credit to Target Groups

Note: ---> indicates the flow of credit from a financial service provider to either (a) an intermediary (for on-lending), or (b) the intended end-borrower (e.g. the smallholder farmer).

48. The figure above also depicts the relative proximity of various types of financial service providers to the target group:

- Most branches of banks and financial institutions tend to be located in towns or market centres. Some commercial banks (e.g. BRI or some BPRs) may be able to serve the target group by making sure that their frontline personnel (e.g. loan officers) visit farmers at their farms or homes. On the other hand, banks that provide wholesale financing (e.g. some regional development banks) will hardly have any direct interaction with the target group.
- It is not surprising to find that non-formal providers tend to be those within closest proximity to
  the target group. These include other value chain actors (e.g. input suppliers, traders, etc.) that
  have regular interaction with farmers and provide credit in cash or in kind. The volume of credit
  extended (per borrower) at this level tends to be smaller (e.g. IDR 2-3 million, based on interviews
  in Bima) compared to some of the loan packages involving banks (the lowest reported values were
  IDR 10 million, also in Bima).
- Although UPK revolving loan funds, as a targeted government microcredit scheme, can be considered relatively close to the target group, these loans are hardly reaching small-scale farmers or are being used to support production activities. Considering the current design of the product and the inherent limitations of extending credit in this manner, the UPK loans appear to be directed towards (and better serve) borrowers engaged in non-agricultural activities, who have a more or less regular cash flow.<sup>6</sup>

49. In most cases, commercial banks and regional development banks maintain a limited proportion of their portfolio devoted to agriculture (e.g. for Bank Jatim, this is less than 5%; and for Bank NTT, this is about 1% of total loan portfolio). More generally, banks hardly lend to poor/near poor farmers given the high cost of delivery and the perceived high risk of these target groups. Similarly, rural banks focus lending mostly on micro and small enterprises that are able to generate a more even cash flow (e.g. those in trading). There seems to be a much stronger emphasis placed on "productive activity lending" – under which agricultural / production activities constitute a small proportion. Thus, direct lending by formal financial institutions to small-scale farmers is currently very limited.

50. In some cases, financial service providers may not be directly lending to farmers / farmer groups, but extend credit to either (a) other financial service providers that are better able to serve the target group, or (b) other value chain actors, such as input traders / suppliers, who in turn, provide credit (whether in cash or in kind) to farmers.<sup>7</sup>

# **3.2** Constraints faced by financial service providers

 $<sup>^{6}</sup>$  There are many issues surrounding UPK revolving loan funds, which have already been discussed at length in other assessments; and measures are currently being reviewed by government and other stakeholders on the way forward for UPK revolving loan funds. For the purpose of this scoping study, it is important to highlight its limitation in terms of the way these funds are administered. The manual systems and processes that underlie the appraisal and disbursement of funds, as well as the monitoring of loan repayments, make it difficult to introduce any innovation – e.g. introducing new product features that more closely match the requirements of agricultural production activities. These funds are also managed by a non-financial entity – and as such, are often not only severely constrained in terms of their human resource capacity, but also have very poor or weak governance structures.

<sup>&</sup>lt;sup>7</sup> In NTT, for example, Bank NTT is noted to have provided financing to a seed producer/trader involving (with an initial loan of IDR 700 million). Under this arrangement, the seed producer/trader may use part of that loan to finance small-scale farmers he transacts with.

51. Financial service providers face a number of constraints that explain their limited interaction with agriculture (more generally) and with small-scale farmers (specifically).

52. **High costs of delivering small-scale financial services, especially in the rural/agricultural sector:** The cost of providing financial services to the target group (i.e. to individual small-scale farmers) may be too high – especially for larger institutions like commercial / regional development banks (that tend to have higher fixed costs). Many of these institutions have to invest heavily in gathering adequate market information to properly appraise loan applications among farmers, and sometimes have to travel long distances to monitor the performance of farms they may have financed. The cost of providing financial services is also heavily affected by the providers' perception of agriculture as a high-risk activity. This is evidenced, for example by the exorbitant costs (requirements) imposed even by financial institutions that provide wholesale-lending via rural banks.

53. **Limited agricultural market knowledge:** Even among banks / financial institutions that are already providing services to farmers, there seems to be limited understanding of farmers' livelihoods and income patterns (except for a general understanding that the sector is very risky, in light of production and price fluctuations). As such, most of the existing lending activity is highly collateral-driven. Similarly, there seems to be limited understanding of agricultural value chains and value chain finance even among commercial banks – and as such, the opportunity for value chain financing is left largely untapped.

54. Use of standard (less innovative) credit risk management practices among financial institutions: Even if banking regulations allow institutions to accept other forms of collateral (i.e. other than property), in practice, many banks still require hard collateral from their borrowers.<sup>8</sup> This is a standard practice for banks to manage credit risks and enforce loan contracts. There is so far no evidence of institutions making use of purchase orders or accepting purely movable assets as collateral for loans. Some institutions (e.g. a few BPRs) are starting to experiment with group lending arrangements that allow borrowers to access loans under joint liability. But these are not common, even among those institutions providing microfinance services in Indonesia. Most, if not all, financial institutions in the country tend to over-emphasize the importance of collateral, rather than employing more innovative ways of appraising loan applications (e.g. cash-flow based appraisal techniques that are utilised by successful microfinance operators in other countries).

55. **Limited range of products offered:** There is a limited degree of innovation in terms of developing products (to meet farmers' needs) and delivery mechanisms (to reduce transaction costs). For example, although some financial institutions are already introducing credit products with balloon payments, we have so far not seen any conscious effort to provide value chain financing (although some, such as Bank Pundi in Malang, are already working more closely with input dealers).

56. Related to this, there is too strong an emphasis placed on credit – rather than looking at the value of other financial services, especially in helping farmers to cope with risks. Even banks that are lending directly to small-scale farmers tend to consider these as only 'borrower-lender driven relationships'; there is hardly any cross-selling of services reported even among borrowers who have been on multiple loan cycles. While some UPKs, cooperatives, and rural banks are trying to instill a "spirit of saving" among beneficiaries, the overall impression is that there seems to be limited appreciation of how instilling a culture of savings can help to address some of the access

<sup>&</sup>lt;sup>8</sup> Moreover, in practice, banks typically require borrowers to provide collateral equivalent to 150-200% of the loan value.

constraints.<sup>9</sup>The limitations in product development are even more pronounced when we consider insurance products. There are very limited insurance products available that are specifically targeted for farmers (e.g. crop and livestock insurance). Also, there is scope to consider exploring the use of other products such as purchase order-based financing, open lines of credit, factoring, leasing, use of vouchers, etc.

57. **Government loan programs distorting the market.** Provision of agriculture loans for smallholder farmers faces competition from some government loan programs. In the presence of subsidized loans to smallholder farmers, it will be more difficult for a sustainable supply of financial services to emerge.

58. It is important to note that addressing these supply-side constraints does not guarantee that institutions will increasingly provide financial services to small-scale farmers. There are other demandside barriers to consider, as well as issues that stem from the broader policy / regulatory environment. Moreover, there are other un/under-served market segments in Indonesia (e.g. the non-agricultural SME sector) that have yet to be more fully explored, and which could offer more lucrative opportunities for financial institutions. Many of the improvements that could take place over the next few years to address financial access constraints in Indonesia (e.g. developments in the payments systems) are expected to pave the way for institutions to better serve these markets first.

<sup>&</sup>lt;sup>9</sup> Savings can also provide a form of insurance against the vagaries of market fluctuations, crop failures and disaster, and a number of idiosyncratic risks (illness, accidents, etc.) that poor farmers are exposed to. In other countries, some financial institutions that have successfully provided financing to small-scale producers have experimented with financial arrangements that combine the provision of loans with savings facilities.

# 4 BUSINESS AND POLICY ENVIRONMENT

### 4.1 Key Policies and Regulations affecting Access to Finance of Target Group

59. **Government loan programs to farmers** have a long history in Indonesia. They started with the Bimas (*Bimbingan Masal*) program in the 1970's and continued in the 1980's with the KUT (*Kredit Usaha Tani*). Currently there are several government loan programs that are targeting agriculture and small enterprises; the most important of these programs are KKPE, KUPS, KPNRP, and KUR. The details of the current government loan programs are given in APPENDIX 5.

60. There are two general schemes that are being used by the government to encourage banks to lend more to agriculture and small enterprise, i.e. subsidizing interest rate cost and providing loan guarantee (only 70% covered by the guarantee).

61. KUR is the only program with loan guarantee. The rest (KKPE, KUPS, and KPENRP) are using subsidized interest rate cost scheme. The current policy of the government is to use only one scheme for one loan program, so for example because KKPE has received subsidized interest rate cost from the government, it will not be guaranteed by the government and vice versa for KUR. That is why the interest rate of KUR is much higher compared to the other loan programs since the interest rate cost is not subsidized by the government.

62. Currently Bank Indonesia has not conducted evaluation/assessment of the above government loan programs.

63. **Regulation on Financing to MSME.** Bank Indonesia recognizes that micro, small, and medium enterprises have a strategic role in terms of their contribution to national income and employment. The key regulation to support SME is Regulation of Bank Indonesia Number 14/22/PBI/2012 about Lending by Banks or Financing and Technical Assistance for Micro, Small and Medium Enterprise issued 21 December 2012. The regulations apply to all banks including Islamic Banks and Islamic Business Unit.

64. BI sets regulation on MSM lending by requiring banks to submit a business plan to BI and publish quarterly reports monitoring the progress of the plan. BI also reduces prudential regulation in order to provide credit up to Rp. 500 million. BI also supports regional governments by encouraging the establishment of Regional Credit Guarantee Institutions (Jamkrida), SME Development and Assistance Centre (P3UKM) and Financial Consultant Partner for Bank (KKMB).

65. Agriculture sector is not specifically targeted in this regulation. Banks are still free to choose which sectors they will finance under UMKM. The details of Bank Indonesia UMKM regulation as follows:

Micro Enterprises	Small Enterprises	Medium Enteprises	
<ul> <li>Maximum net worth of IDR 50 million, excluding land and building for the enterprise; or</li> <li>Maximum annual sales revenue IDR 300 million</li> </ul>	<ul> <li>Net worth of more than IDR 50 million but maximum is IDR 500 million, excluding land and building for the enterprise; or</li> <li>Annual sales revenue more than IDR 300 million but maximum is IDR 2.5 billion</li> </ul>	million but maximum is IDR 10 billion, excluding land and building for the enterprise; or	

 Table 2 Bank of Indonesia Regulations about Financing to MSME

66. The target for the loan ratio to UMKM (micro, small, and medium enterprises) is 20% from bank's total loan however it was staggered with the following schedule:

- 2013: According to bank's capacity as stated in the business plan
- 2014: According to bank's capacity as stated in the business plan
- 2015: Minimum 5% of total loan must be for UMKM
- 2016: Minimum 10% of total loan must be for UMKM
- 2017: Minimum 15% of total loan must be for UMKM
- 2018: Minimum 20% of total loan must be for UMKM

67. The target beneficiaries of the AIP-PRISMA program will most likely fall under the micro enterprise category of the Bank Indonesia UMKM regulation. However since Banks are not specifically required to lend to agriculture sector under this regulation, it remains to be seen whether banks will increase their portfolio in agriculture or choose other sectors such as trading that are usually perceived to be less risky by banks.

68. **Warehouse Receipts**. To support access to credit for farmers and farmer groups, Indonesia introduced the Law No. 9 of 2006 on Warehouse Receipt System. The Law is then followed by the issuance of the Government Regulation No. 36 of 2007. To encourage the use of Warehouse Receipt System, then the government via Minister of Finance introduced the Ministry Regulation No. 171/PMK.05/2009 on Warehouse Receipt Subsidy Scheme. The subsidy will cover cost of warehouse receipt. Eligible borrowers are Farmers, Farmers Group, Joint Farmers and Cooperatives. For banks, maximum interest is 5% above maximum interest rate payable set by Indonesia Deposit Insurance (LPS) and eligible debtors pay only 6%/pa.

69. For warehouse receipt, the usage of warehouse receipt by smallholder farmers is also not very encouraging. Despite the interest rate cost subsidy given by government (around half of the commercial rate are shouldered by the government) smallholder farmers still unable to take advantage of using warehouse receipt to provide financing for them. Some of the reasons for that are:

- The cost for accessing warehouse receipt is still considered too high (insurance cost, processing cost, transportation cost, registration cost, etc)
- Smallholder farmers do not have the economy of scale to access warehouse receipts
- The quality of the commodities often do not meet the standard required by the warehouse management (The commodities must meet Indonesian National Standard / SNI)

# 4.2 Status and Trends of new Insurance Products available to Farmers

70. Despite a population of 42 million farmers, until now, there is no insurance product dedicated to cover agricultural risk in Indonesia; for example insurance for cattle or crops is not available. The Ministry of Agriculture plans to accelerate the provision of insurance for cattle. This policy aims to protect and provide security for the farmers in conducting cattle business. On a pilot basis, the government will provide subsidies to cover 80% of the premium for cattle grower's insurance. The premium payment is 1.5% of the total price of cattle.

71. IFC (2010) conducted a feasibility study to implement Weather Index Insurance (WII) for Maize Production in Eastern Indonesia. The study found that WII is "technically feasible" to develop. IFC also identified a business model that may be suitable for this type of insurance product. However, market testing if WII is commercially feasible both for farmers and insurance company is still needed. Until now, there is no commercial insurance company providing this product.

72. Ministry of Agriculture also conducted study on climate change and in its road map (2011), WII is one of choices to protect the farmers from the impact of climate change. Total Rp. 2 trillion has

been allocated to support the program. Tempo Daily (25 Feb 2011) reported that insurance for farmers is close to reality and only needs a presidential decree. It seems the approach is not commercially based insurance but politically motivated program.

73. In Indonesia, before insurance company can sell the insurance product, insurance authority will study thoroughly to examine the viability of the product. According to article 3 of Ministry of Finance (MoF) Decree No. 422/ KMK.06/2003, any new insurance product, when submitted for registration to the regulator shall fulfill many requirements such as specimen of insurance policy, expert judgment, three year underwriting projection, reinsurance support and marketing plan. It is clear that insurance for protecting famers is not coming very soon.

74. Currently there is no private insurance company in Indonesia which is providing agricultural insurance. For small loans provided by banks, only life insurance is common in Indonesia.

75. However in order to provide more protection to farmers, the legislative body (DPR) is discussing a bill on protection and empowerment of farmers. The bill is called *RUU Perlindungan dan Permberdayaan Petani* (Farmers Protection and Empowerment Bill). One of the items in the bill states that the government should provide crops insurance to smallholder farmers (defined as farmers with maximum land of 2 hectares) for protection against harvest failure. The Government is required to instruct state-owned insurance companies to provide crop insurance to smallholder farmers.

76. According to the bill, the crop insurance should cover against:

- Natural disasters
- Pests
- Animal disease outbreaks
- Global climate change
- Central and Local government's program mistakes

77. Ministry of Agriculture has started conducting pilot project for crops insurance for the planting season of 2012/2013. The commodity tested in the pilot project is paddy. The area selected for the pilot test are Jawa Barat, Jawa Timur and Sumatra Selatan which covers an area of approximately 1,000 hectares each (total 3,000 hectares). The premium per hectare per planting session is IDR 180,000 and the claim value if harvest failure happens is IDR 6 million. During the pilot project 80% of the premium will be covered by government and 20% by the farmers.

78. The initial result of the pilot project is not encouraging. According to Sahata L Tobing (Retail Director of Jasindo, one of the state-owned insurance companies participating in the pilot project) in the first three months the claim has reached IDR 540 million while the premium collected has only reached IDR 300 million. Majority of the claims is due to flood. Jasindo will suggest to Ministry of Agriculture to evaluate the premium fees and risk profile. With this not so encouraging initial result for the pilot project, it will be even more difficult for private insurance companies to enter into agriculture insurance in Indonesia.

79. Ministry of Agriculture is also planning to launch insurance for cow. The premium is set at 1.5% of the price of the cow. Government will subsidize 80% of the premium while 20% will be shouldered by the farmers. This cow insurance will be prioritized to the borrowers from KUPS (government loan program for cow breeding as mentioned above).

# 5 GAP IDENTIFICATION BETWEEN FINANCIAL NEEDS AND SERVICE PROVISION

# 5.1 Identification of Gaps

80. The analysis of constraints in the previous two chapters has highlighted a number of gaps existing between financial needs of target beneficiaries and supply of financial services. The gaps can be categorized into four groups (see Figure 2).

81. **Economies of Scale.** Whether farmers are too small and lack linkages with organized value chain or financial institutions find too costly servicing a large population of small-size clients, sometimes located in remote areas, target beneficiaries fail to meet their financial needs and financial institutions find it unprofitable to devote effort and resources to reach them out. The difficulty of servicing small-size individual clients could be overcome if aggregation along the value chain were to occur, for example through farmer groups/cooperatives linked to a processor in a contract farming arrangement that were to be shared with the financial institution and therefore allow for economies of scale in providing technological, marketing, and financial services.

82. **Risk Management.** Agriculture is perceived as a very risky activities both by farmers and financial institutions. Risk perception is a constraint to demand and supply of financial services. Farmers are hesitant to engage in credit relations with financial institutions, since they are concerned that in the absence of insurance mechanisms they would be highly vulnerable to shocks, price volatility, and climatic events; financial institutions are very cautious in their risk management and interpret collateral requirements conservatively, basically refusing to look beyond the titles for fixed assets.

83. **Knowledge and Capacity.** Farmers often find it difficult to meet the requirements of financial institutions due to a number of reasons, including their limited capacity in understanding the requirement or even the basics of financial planning and management. Many farmers in the target group are subsistence farmers; many are also following agricultural practices that are based on traditional methods rather than principle of farm budgeting (for example planning production, inputs, and outputs in function of expected market demand). As a result, when confronted with the sometime onerous requirements of financial institutions, farmers are at a loss in meeting those requirements and thus are unable to access credit or other financial services.

84. Similarly, financial institutions are usually not familiar with the dynamics and complexities of farming systems and agricultural value chains. Value chain financing is a novel concept and requires in depth understanding of the workings of agricultural value chains and also capacity to provide value chain financing. Lacking this understanding and capacity, there will be missed opportunities in financing growing agribusinesses able to meet an increasingly sophisticated food demand in urban and international markets.

85. **Policies and Institutions.** BI recent regulation on financing of MSME (regulation 14/22/PBI/2012) is a welcome news to micro and small enterprises and farmers. Its implementation however will have to overcome several obstacles including the lack of land titles for the majority of farmers, a constraint on their access to credit. The implementation of the policy will also require overcoming the limitations of a relatively narrow choice of financial products available to farmers. Financial institutions will need to be more innovative than just offering balloon loans: a range of products including different types of no-frill accounts, saving accounts, term deposits, purchase

orders, credit cards, open lines of credit, and mobile banking can be expected to be tested and some of them scaled up.

86. One of the greatest obstacles of farmers in the target group to access financial services is the weakness of farmer organizations. Farmers organizations can be strong assets in overcoming economies of scale limitations of smallholder farmers and facilitate linkages to effective value chain (see above para 81). At the same time, farmer organizations (for example effective cooperatives) can allow pooling of resources, improved access to input, and better negotiation with third parties, including financial institutions.

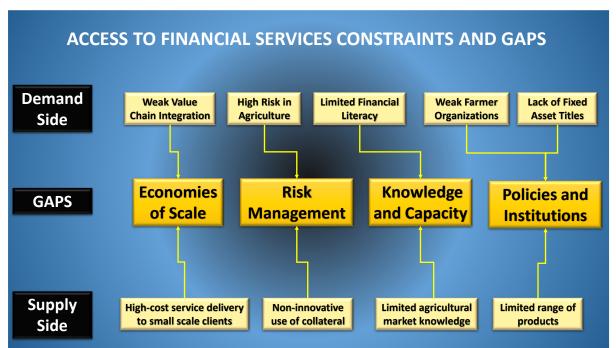


Figure 2 Gaps between Financial Needs and Supply of Financial Services

# 5.2 Prioritization of Gaps

87. **Economies of scale as prioritized gap.** The AIP-PRISMA project design is firmly based on the value chain approach. In order to achieve its intended objective (i.e. improved income of the target groups), value chain development will have to occur through the combination of technology, infrastructure, financial, and institutional innovations. The Markets for the Poor approach to value chain development will ensure that the target groups benefit from value chain development. At the same time, the development of effective value chain requires overcoming the economies of scale limitations that were identified as a gap between the demand and the supply of financial services.

88. **Capacity and knowledge are required to build effective value chain that benefit the poor**. Addressing the economies of scale gap implies considerable amount of capacity building both of farmers and financial institutions. The capacity building of farmers is related partly to financial literacy and farm budgeting and partly to methods of supply chain management in order to work in a value chain effectively. For financial institutions, the effort will be both in helping to understand agricultural value chain better and to understand how to finance them in a way that can overcome diseconomies of smallholders.

# 89. While engaging in value chain financing, improved risk management mechanisms can be identified. Value chain financing requires an effective value chain in place and working. Economies of

scale through improved linkages in supply chain management often require risk sharing between parties (for example in contract farming), the availability of good business plans involving not just individual clients but also groups of clients, and therefore the opportunity of using a range of tools for collaterizing debt and insuring parties against shocks.

90. **The opportunity for AIP-PRISMA to act on the policy and institutional side might be limited**, at least in the initial phase of the project (first 4 years). Given its location in Eastern Indonesia and its emphasis on implementation at the district level, the Project will not be sufficiently close to the policy makers in Jakarta; nevertheless, the Project might influence policy and institutional developments through pilots in the target district and draw lessons that could inform the policy debate. For example, pilots might shed different ways of providing collateral and providing finance to value chain actors; they could also shed some lights on the way to move beyond the RLF in the PNPM and identify different institutional structures for the evolution of the UPK.

# 6 OPTION IDENTIFICATION AND ASSESSMENT

### 6.1 Overall Management of A2F Interventions within the Context of AIP-PRISMA

91. A range of interventions will be required to respond to the gaps that have so far been identified (as well as those that will emerge from further analysis, as the program fully mobilizes). The design and implementation of these interventions will require that adequate expertise be established.

92. This may be in the form of an A2F Advisor or a small team of A2F specialists, who will lead the design and implementation of all necessary A2F interventions in support of the AIP-PRISMA Program. This resource can be used to (a) respond to ad-hoc requests received in the pilot locations to assess financial service needs; (b) develop some capacity among AIP-PRISMA personnel (e.g. value chain managers, district facilitators) to respond to access to finance issues if and when they arise in the course of implementing the interventions during the pilot phase; (c) developing guidelines (to support AIP-PRISMA personnel in the long term); and (d) negotiating with other potential financial service providers.

93. This expertise could either be established within the AIP-PRISMA program implementation unit or within the Ausaid Rural Development Team. Another option might be to have this expertise as a stand-alone mechanism — i.e. independent of and separate from the AIP-PRISMA program management unit. Some of the advantages and disadvantages of these approaches are outlined in the table below.

	Options	Particular issues to be considered			
a. Expertise to be integrated within the AIP-PRISMA program implementation unit		<ul> <li>If integrated within the AIP-PRISMA program implementation unit, there is greater scope for working in a more coordinated manner.</li> <li>However, contracting and negotiations with the management contractor are currently underway / may have already been completed. As such, adding this to the program manager's contract may cause further delays (to mobilization). Even while this might be treated as a separate contract, the interface between the managing contractor and the "A2F Advisor" needs to be clarified (including any details on reporting lines, accountability, etc.).</li> </ul>			
b.	Expertise to be integrated within the Ausaid Rural Development Team	<ul> <li>If integrated within the Ausaid Rural Development Team, this resource could also be used to address other A2F requirements of Ausaid and/or work in synergy with other Ausaid programs that have A2F components.</li> <li>This might, however, carry the risk that the A2F Advisor / specialists become less integrated with the AIP-PRISMA program. It would therefore be important to clarify the priorities for this role.</li> </ul>			

### Table 3 Options for Managing A2F Intervention within AIP-PRISMA

Options	Particular issues to be considered			
c. Expertise to be established as a stand-alone / independent, albeit complementary, mechanism	<ul> <li>There is the risk that as an independent entity (i.e. independent of the Program management unit), coordination may not be as smooth or fluid. But these risks can be managed by ensuring that the A2F Advisor / specialists participate in regular coordination meetings (of the program team) and that coordinating and reporting functions between the Advisor and the program team are clearly specified.</li> <li>This option offers greater flexibility. For e.g., considering that the interventions required will be demand-driven, an independent entity can be contracted (separately) using a draw-down arrangement. Under such an arrangement, the entity can respond to requests for interventions by fielding as many A2F specialists as might be required during the pilot phase of the AIP-PRISMA program.</li> <li>This option would also free up other resources that might be required – of the program management unit or of Ausaid – if the advisor were integrated or housed within these teams. The independent entity could provide not only technical expertise, but also all related back-stopping and administrative services that might be required to support the work of the A2F Advisor / specialists.</li> </ul>			

# 6.2 Options related to the Economies of Scale Gap

94. AIP-PRISMA can address the Economies of Scale Gap and improve access to finance by promoting different forms of value chain financing described below.

95. **Channeling through value chain actors**. In this option, the Project facilitates access to finance of the target group though value chain actors such as input providers, collectors or buyers. Examples: maize seed company in NTT extending credit to seed multiplication farmers; or a cocoa international buyer in Papua extending credit to collectors. The project will help value chain actors to mobilize farmers, organize demonstrations, provide training and technical assistance to farmers, value chain actors, and banks/financial institutions involved in the model.

96. **Nuclear enterprise model**. In this option, the Project identifies a key enterprise in production or processing. Examples: a sugarcane processing company; a dairy processing company; a feed mill; a slaughterhouse and meat processing plant. The company links with buyers, suppliers, and financial service providers (e.g. credit, savings, insurance, mobile payments). The Project support the value chains linkages (e.g. contracts) through matching grants, technical assistance, promotion, awareness campaigns, and social mobilization.

97. **Match-making** between farmers/groups, buyers, input providers, financial institutions, processors, and technology providers. The Project facilitates creation of value chain development associations where farmers, traders, input providers, processors and their associations join together to organize value chain linkages and promote improvements in productivity, value added, and sales. The Project provides seed fundingto these associations to make investments along the value chain (e.g. logistics improvements such as collection centers and warehouses, packhouses, reefers) that require a combination of own funding and

banking financing. The Project will also provide technical assistance and promotional activities.

### 6.3 Options related to the Capacity and Knowledge Gap

98. AIP-PRISMA can address the Capacity and Knowledge Gap by improving financial literacy of the target groups and capacity in agricultural value chain financing of financial institutions.

99. **Financial Literacy.** This involve a program to improve various dimensions of financial literature of farmers, including both (a) financial planning and cash flow analysis; and (b) crop budgeting and margin analysis to understand the productivity of different inputs into the production system of the farmer.

100. **Agricultural Value Chain Financing**. This is a capacity building program for financial institutions aimed to introduce the key concepts of agricultural value chain, value chain financing, and different tools for overcoming diseconomies of scale in reaching out to smallholders.

### 6.4 Options related to Risk Management Gap

101. AIP-PRISMA can address the Risk Management Gap by piloting alternative types of collateral with partner financial institutions in the target districts, promoting pilots for crop and livestock insurance in partnership with microinsurance institutions, and expanding existing efforts in warehouse receipt systems (WRS).

102. **Alternative types of collateral** could be explored with partner financial institutions in the target districts. In addition to hard collateral based on titled fixed assets, other acceptable collateral are social capital (for example based on group lending), movable collateral (such as inventories), partial collateral and zero collateral (for example in the presence of credit guarantee).

103. **Crop and livestock insurance**. This should be explored with partner microinsurance organizations and pilot projects (such as the paddy insurance pilot conducted by Ministry of Agriculture as mentioned in para 79). It would be easier to start from livestock insurance (particularly cattle insurance) since this is less complex than crop insurance (including weather indexed insurance).

104. **Warehouse receipt system (WRS).** There are already ongoing activities in East Java. Rather than initiating a new pilot, in this case, PRISMA should partner with IFC or Bank Jatim to build on ongoing activities. AIP-PRISMA can assist smallholder farmers in aggregating their crops (e.g. through farmer groups) so that volume are bigger and cost are lower; and also assure a certain level of quality (see para 69).

# 6.5 Options related to Policy and Institutions Gap

105. Rather than embarking on fully-fledged policy advisory services, for which perhaps PRISMA does not have the appropriate design, it would be preferable to focus on (a) product development in partnership with financial institutions in the target districts; and (b) drawing on lessons from pilots related to (i) alternative collateral types and (ii) lessons learned from pilots of alternative institutional structures for the UPK.

106. **Exploring Alternative Credit Products and Delivery Mechanisms** other than the standard loan with balloon payment. These products might include open lines of credit, farmer credit cards, mobile banking, purchase order financing.

107. **Drawing lessons from alternative uses of collateral** other than the titled fixed assets and including social capital, movable collateral, partial collateral, and zero collateral. The lessons learned could then be brought to the policy debate to initiate policy reforms.

108. **Drawing lessons from alternative structures for the UPK**. One of the key policy issues related to the PNPM is the future institutional structure of the UPK and their revolving funds. Different options are being explored (e.g. transformation into a limited liability company, cooperative, or joint stock company), but the debate is still largetly based on theoretical arguments rather than empirical evidence. AIP-PRISMA could promote some pilots to explore alternative structures in the target districts.

Table 4 Gaps and Options for Improved Access to Finance

Gap	Option	Cost Activities	Time	Assumptions and Risks	Impact
	Channeling through value chain actors	<ul> <li>Medium</li> <li>Farmers training</li> <li>Demonstrations</li> <li>Technical assistance to value chain actors (value chain actors and financial institutions)</li> </ul>	2-3 years	Risk: Value chain actors not interested in providing financial services to target group	<ul> <li>Higher productivity and income of target group</li> <li>of financial institutions</li> </ul>
Value Chain Financing	Nuclear enterprise model	<ul> <li>Medium</li> <li>Matching grants to nuclear enterprise</li> <li>Technical assistance to farmers, financial institutions, and nuclear enterprise</li> <li>Promotion and awareness campaigns,</li> <li>Social mobilization of farmers and value chain actors</li> </ul>	2-5 years	Assumption: Trust with nuclear enterprise has to be very high	<ul> <li>Assured market and less volatility of prices</li> <li>Risk sharing</li> <li>Improved access to savings and credit</li> </ul>
	Match-making between farmers/groups, buyers, input providers, financial institutions, processors	<ul> <li>HIgh</li> <li>Seed funding to value chain development association</li> <li>Technical assistance to farmers, financial institutions, traders, and processors</li> <li>Promotion and awareness campaigns,</li> </ul>	2-5 years	Assumption: Need long term commitment to the value chain development	<ul> <li>Higher value added in the value chain</li> <li>More benefits to target group</li> <li>More access to services of financial institutions</li> </ul>
Capacity	Financial literacy for farmers	Low Educate farmer on farm budgeting, evaluating gross margins, and financial requirements	1-2 years	Assumption: Basic numeracy and literacy	Farmers' productivity increases Farmers' cash flow improves
Building	Agricultural value chain financing for financial institutions	Low	1-2 years	Assumption: Interest of the financial institutions in	Expanded portfolio in agriculture and to target group

Draft Final Report

### AIP-PRISMA Scoping Study of Rural Finance

Gap	Option	Cost Activities	Time	Assumptions and Risks	Impact
		Training of financial institution staff in agricultural value chain and value chain financing		developing agricultural finance	
	Alternative forms of collateral	Low	2-5 years	Assumption: partner with credit guarantee institutions	
Risk management	Livestock and crop insurance	Medium	2-5 years	Assumption: for crop insurance existence of meteorological databases	
	Warehouse receipt system	Medium	2-5 years	Assumption: partner with IFC and Bank Jatim ongoing activities	
	Alternative credit and delivery mechanisms	Medium	1-4 years		Expanded access of target group to finance
Policy and Institutions	Alternative types of collateral	Medium	2-5 years	Risk: most financial institutions not willing to consider alternative collateral types	Policy regulation on alternative types of collateral
	Alternative structures for UPK	High	2-5 years	Risk: most UPK would like to remain as they are	Self-sustaining institutions to provide A2F to target groups

# 7 RECOMMENDATIONS

# 7.1 Demand Analysis

109. Given the variety in the types of farmers targeted (in terms of their income, assets, products), it will be a crucial first step to establish whether there is indeed an 'effective demand' for financial services. This 'market research' can be a stand-alone study (e.g. a FinScope-like survey of targeted beneficiaries in the pilot locations) or be integrated in the baseline studies that will anyway be conducted once AIP-PRISMA is up and running.

# 7.2 Initial Technical Assistance on Agrifinance

110. It might be useful for AusAID to consider strengthening the capacity of the AIP-PRISMA team by incorporating some standalone expertise on agri-financial services in the initial months of operation. This additional expertise can be used to (a) respond to ad-hoc requests received in the pilot locations to assess financial service needs; (b) develop some capacity among AIP-PRISMA personnel (e.g. value chain managers, district facilitators) to respond to access to finance issues if and when they arise in the course of implementing the interventions during the pilot phase; (c) developing guidelines (to support AIP-PRISMA personnel in the long term); (d) negotiating with other potential financial service providers.

# 7.3 Increasing the Awareness of Current Government Loan Programs and Facilitating Smallholder Farmers' Access

111. The existing government loan programs such as KKPE, KUPS, & KPENRP that are targeted to smallholder farmers could be made more effective by increasing farmers' awareness and facilitating farmers' access to the programs. The establishment of individual consultants whose functions is similar to KKMB could help farmers understanding the required procedures. The establishment of these individual consultants will bridge the gap between banks and farmers and hence increase the likelihood of financing. In KKMB the consultants bridge the gap between small entrepreneurs and banks; in this case, the consultants will bridge the gap between farmers and banks in order to access the government loan programs targeted to farmers.

# 7.4 Product Development.

112. There are opportunities in the locations visited where relationships between financial service providers and targeted beneficiaries can either be established or strengthened:

- Where some degree of lending already exists to the target group, financial institutions can be supported in terms of further developing products / delivery mechanisms – e.g. tying existing credit products with savings and insurance. In some cases, institutions that provide direct lending to farmers may face other disadvantages – such as having limited capital / funds available for lending. These institutions could be linked to wholesalers – but due diligence is required.
- Where some degree of lending already exists to other actors in the value chain (e.g. traders or input suppliers), relationships can be strengthened e.g. by making more explicit roles (and accountability) among actors in the value chain to underpin the provision of credit (this can usually be facilitated by some 'third-party broker').

### 7.5 Financial Literacy of Farmers

113. Most poor and near poor farmers in the targeted areas are found to be deficient in basics of financial literacy such as financial planning, farm budgeting, and cash flow management. It might be useful for AusAID to support institutions and service providers specialized in training farmers and their organizations in financial literacy basics. Improvement of knowledge of farmers will encourage farmers to see the benefit of investments on improved technologies such as better seeds and fertilizer to generate more output and income.

### 7.6 Agricultural Value Chain Financing for Financial Institutions

114. Effective value chains are organized systems of linkages among value chain actors with the purpose of increasing value. In order to function well, a value chain has to have governance systems and established trusting relationship among members. This is key to the success of a value chain. An effective value chain has therefore several elements of social capital that is key to facilitate finance to its actors both for investment (upgrading of the value chain) and working capital purposes. Unfortunately, the complexity of value chains (particularly agricultural value chains) are not well understood by bankers, including commercial bankers. Capacity building in agricultural value chain financing would facilitate the work of loan appraisal officers through enhancing their understanding of value chain linkages role in achieving scale economies. This technical assistance would increase understanding and encourage financial institutions to provide more financial services to the agriculture sector.

# 7.7 Policy and Regulations Advising

115. A number of regulations by Bank Indonesia and local government affect the access of farmers to financial services including regulation relating to (i) alternative forms of collateral; (ii) accelerating productive sector lending; (iii) interest rate ceilings; (iv) options for evolution of RLF; (v) promotion of warehouse receipt systems (WRS). Perhaps the most effective use of AusAID resources for this purpose is to conduct a number of pilots on (i) alternative products; (ii) alternative forms of collateral; and (iii) future structure of UPK, and draw lessons that could be brought into the policy debate.

116. **Development of Effective and Sustainable Farmer Organizations**. Throughout its implementation AIP-PRISMA will work towards improving farmer organizations (e.g. farmer groups and cooperatives) to be more sustainable, link with value chain, and better able to help their members to access finance. Sustainable farmer organizations will however require a long-term program that goes beyond the term of the first phase of the Project.

### Table 5 Recommendations and Assessment

Term	Measure	Advantages	Disadvantages	Factors to be Considered
	Demand Analysis Study	<ul> <li>Provide basis for designing specific measures relevant to the Project</li> </ul>	<ul> <li>Academic exercise unless action oriented and undertaken within a short period (4 months)</li> </ul>	Other similar surveys for households and MSME
	Standalone Expertise on Agrifinance	<ul> <li>Complement existing skills of AIP-PRISMA team</li> </ul>	Resource trade off with     other types of TA	Flexibility in using this     resource
	Awareness of Government Programs	Consulting services     available to farmers	Cost-effectiveness might     be limited	Role played by NGOs
Short (1-2 years)	Financial literacy of Farmers	<ul> <li>Support implementation of all other measures</li> <li>Relatively easy to do through existing NGOs and service providers</li> </ul>	Remain abstract unless linked to other concrete measure	<ul> <li>Needs to be continued throughout the Program</li> <li>Link with similar initiative undertaken by BI and other partners</li> </ul>
	Improved understanding of financial institutions of agricultural value chains	<ul> <li>Support implementation of all other measures</li> <li>Relatively easy to do through existing service providers and international TA</li> </ul>	<ul> <li>Remain abstract unless linked to other concrete measures</li> </ul>	<ul> <li>Needs to be continued throughout the Program</li> <li>Link with similar initiative undertaken by BI and other partners</li> </ul>
Medium (3-5 years)	Value Chain Financing	<ul> <li>Integrates well with value chain approach of the Project</li> <li>Integrates farmers with enterprises</li> <li>Provides stronger reassurances for financial institutions (risk sharing, providing information,</li> </ul>	<ul> <li>Requires complementary measures on capacity building and technology</li> <li>Strong dependence on technical assistance in the initial stages</li> </ul>	<ul> <li>Important to prioritize a small number of value chains. The ones currently identified by the Project are probably too many.</li> </ul>

Term	Measure	Advantages	Disadvantages	Factors to be Considered
		economy of scale in technology, marketing,)		
	Product development	<ul> <li>A more diversified range of financial products</li> </ul>	<ul> <li>Requires dedicated expertise within project which currently is not planned</li> </ul>	<ul> <li>Ongoing experimentation by financial institutions</li> </ul>
	Insurance products development (e.g. livestock insurance)	Reduce risk of investment	Highly dependent on initial subsidies	Ongoing pilots
	Mobile Banking	Reduce costs of delivery	Possible breach of security of transaction	Declining cost of mobile and mobile communication
	Policy advising based on lessons drawn from pilots on alternative products, alternative collateral types, and alternative institutional structures for UPK	<ul> <li>Possibility of overall impact beyond the target area</li> </ul>	<ul> <li>PRISMA does not seem to have been designed to have a strong policy impact</li> </ul>	<ul> <li>Link with ongoing efforts in policy advising conducted by development partners</li> </ul>
Long (5-10 years)	Farmer Organizations development	<ul> <li>Overcome small-scale limitations</li> <li>Stronger bargaining power</li> </ul>	<ul> <li>Very long lags to institutional development</li> </ul>	Politicization

# APPENDIX 1. KEY INDICATORS IN TARGET PROVINCES

- 117. In the first quarter of 2013, the economy of East Java grew at 6.62% relatively to the previous year. East Java economic performance slowed compared to the previous quarter when East Java grew at 7.09%. However, economic growth in East Java is higher than national economic growth, which stood at 6.02%.
- 118. The economic structure of East Java is dominated by three sectors, including (i) Trade, Hotel and Restaurant (31% of GDP); (ii) Manufacturing (26%); and (iii) Agriculture (18% of GDP). Employment of the three sectors is respectively 21% of the total (in trade), 39% (in agriculture), and 15% (in industry).
- 119. The development of SME loans disbursed by banks in East Java has increased steadily. In the first quarter 2013, total SME loans disbursed amounted to Rp. 70.4 trillion an increase of 11.48% compared to the same period a year earlier. The People Business Loan (KUR) program in East Java performed very well. In the first quarter of 2013, loan approved reached Rp 16.32 trillion. However, only Rp 6.11 trillion were withdrawn or outstanding.
- 120. Total loan disbursed in the first quarter of 2013 reached Rp. 245 trillion, representing a growth of 26%. This figure indicates that East Java economy is growing. However there is inequality in the loan distribution among economic sectors. Agriculture sector absorbs 39% employment and contributes 18% to the economy but receives only 2.6% of total loan.
- 121. In West Nusa Tenggara (NTB), the economy grew at 4.7% in the first quarter of 2013. When the calculation excludes the mining sector, the province growth increases to 5.85%. The high instability of the mining sector affects the overall economic growth of the province. Agriculture is the most important sector of the economy with a share of 24% of regional GDP; the trade, hotel and restaurant sector contributes 19% of the regional income; and mining contributes 16%.
- 122. In terms of total loans, only 2.3% go to agriculture. Almost one third of the loan goes to trade, hotel and restaurant and absorbs Rp. 4.9 trillion. The proportion of total workforce in agriculture reaches 44%, however only 2% of total credit goes to agriculture. The growth of agricultural loan is very rapid and is above 100%.
- 123. During the first quarter 2013, NTT economy grew at a rate of 5.37%. Agriculture and manufacturing sectors are the only sectors that grow less that average 5.37%. Agriculture sector grew 2.67% and manufacturing sector grew 1.53%. Since 2011, agriculture is a stagnant sector and the only sector that did not experience growth above 4%. Agriculture contributes 36% to the provincial GDP and generates employment for 61.2% of the labor force.
- 124. Total loan disbursed during the first quarter 2013 amounted to Rp. 12.844 trillion. From that figure, only 33% is classified as productive use. Total SME loan is Rp. 3.294 trillion or 26% of total loan. Loan below Rp. 50 million is Rp. 678 billion or 5% of total loan. Total loans for agriculture sector represent only 2% of the total.
- 125. The previous indicators indicate agriculture as an important sector in term of its contribution to the economy and employment of the target provinces. However, sector growth is weak and less than 5% of total loans goes to this sector. Moreover, most farmers in this region are near poor (see Table 6)

# Table 6Poverty in Targeted Areas

	Total Farmers	Non-Poor Farmers	Near Poor Farmers	% Near Poor Farmers
Indonesia	42,600,196	17,741,448	24,858,748	58.4%
East Java	8,188,984	2,835,820	5,353,164	65.4%
NTB	1,024,174	317,689	706,485	69.0%
NTT	1,307,546	469,000	838,546	64.1%

Source: AIPD-Rural

# APPENDIX 2. PERSONS MET

### Table 7 Persons Met

No.	Date	Day	Organization	Person	Position	Location
1.	June 3	Mon	Bank Jateng (Regional Bank for Central Java)	Ali Santoso	SME Division	Jakarta
2.	June 3	Mon	IFC	lan Crosby	Manager, Sustainable Business Advisory East Asia and Pacific	
				Ernest E. Bethe III	Program Manager Agribusiness	
				Hans Dellien	Senior Operations Officer	
				Nyoman Yogi	Operations Officer Access to Finance Program Advisory Services in Indonesia	Jakarta
				Rick van der	Operations Officer	
				Kamp	Agribusiness	
				F. Elaine	Senior Security	
				MacEachern	Transactions Specialist East Asia-Pacific	
3.	June 4	Tue	Australian Community Development and Civil Society Strengthening Scheme (ACCESS) Phase II	Paul Boon	Program Director	Jakarta
4.	June 4	Tue	BAPPENAS (National Development Planning Agency)	PungkiSumadi	Director of Financial Service and State Owned Enterprise	Jakarta
5.	June 5	Wed	Bank Indonesia	Yufrizal WiniPurwanti	Assistant Director Division Financial Inclusion and SME	Jakarta
6.	June 5	Wed	OJK/Australia Indonesia Partnership for	Gavin Forte	Lead Finance Sector Adviser	Jakarta
			Economic Governance (AIPEG)	Nia Nadya R. Nur	Financial Sector Adviser	
7.	June 5	Wed	Mercy Corps	Paul Jeffrey	Country Director	Jakarta
				Andilkhwan	Indonesia Program Coordinator Agri-Fin Mobile	
8.	June 5	Wed	BRI-Agro	NovinsaIndra	Chief Division Agribusiness	Jakarta
9.	June 5	Wed	ОРМ	Robert Stone	Team Leader IFCPENSA Evaluation, Financial Inclusion Specialist	Jakarta
10.	June 7	Fri	Andara Bank	David Yong	President Director CEO	Jakarta

No.	Date	Day	Organization	Person	Position	Location
11.		Mon	Perbarindo	Hary Wuryanto	Chairman Perbarindo East Java Chapter	Surabaya
12.	June 10	Mon	East Java Regional Loan Guarantee	Chusnul Maarif Mohammad	Director	Surabaya
12		Man	Company PASKOMNAS	Sulthon Trisilia	Site manager	Surahava
13. 14.		Mon	UPK Poncokosumo	Arief	Site manager District Facilitator	Surabaya
14.			UPK Poncokosumo	Shukry	Group Leader	Malang Pocokusumo
				Frida	Group Leader	Wringinanom
16.	Jun 11	Tue	Farmer-collector	Sujud	Farmer-collector	Argokusumo
17.			Farmer	Didik	Farmer	Poncokusumo
18.			Sub-dealer	Fathur Ridhoi	Input sub-delear	
19.			East-west Seed	A Sujianto	Assistant Area manager	
20.	June 12	Wed	Bank Jawa Timur	DJoko Lesmono Rudie Hardiono	Director Corporate Secretaty	Surabaya
21.	June 13	Thu	Farmer 1	Usman	Shallot & Paddy farmer	Bima
22.			Farmer 2	Afradin	Shallot & Paddy farmer	Bima
23.			Farmer 3	Usman	Farmer & seed producer	Bima
24.			PNPM Facilitator	Zainal	Kabupaten Facilitator	Bima
25.			PNPM Facilitator	Radiaturrahma	Financial Facilitator	Bima
26.			ИРК	M. Syafei	Chairman of UPK Sapeh	Bima
27.			Trader 1	Nasrudin	Trader	Bima
28.			Trader 2	Nurdin	Trader	Bima
29.			Bank NTT	Endri Wardono	Group Head Managers SME Lending	Kupang
				Boy Renado Nunuhitu	Group Head Micro Lending	
30.			Maize Seed Producer	Victor	Owner and Manager	Kupang Timur
31.			Pig farm	Budi	Manager	Kupang
32.			Bank NTT	Prof. Ir. Fred Benu, M,Si, Ph.D	Commissioner	Kupang
33.	June 14	Fri	BPR NTB Bima	Hamdan	Director	Bima
34.				Iwan	Director	Bima
35.			BRI Bima	Lalu Fadlan	Asst Mgr Micro Unit	Bima
36.				Zia Ulhaq	Woha Unit Mgr	Bima
37.				Ritmansyah	AAO Program	Bima
38.			Trader	Iwan Setiawan	Trader	BIma (Sapeh)
39.			MFI BREUNG	Angela Lena Kaha and Patrick	Supervisor MFI associated with SINARSARON Credit	Larantuka (from)
40.			YMTM	Yoseph Sumu from YMTM 5 farmer group representatives	Union Mitra Tani Mandiri NGO providing TA and financial services to farmers	Timor Tengah Utara

No.	Date	Day	Organization	Person	Position	Location
41.			UPK	Simon Gades	Village Head	Village Tuapukan/ Kupang
42.			East West Seed	Sarwoto	Technician	Kupang
43.			Farmer	Jack Hofni Adu	Vegetable Farmer	Kupang
44.			Dunia Tani	Herry Hariyanto	Manager	Kupang
45.			Svadaya Utama Credit Union Association	WEN FESLAUS WANDELINUS	Credit Union Manager	MAUMERE
46.			Farmer 1	Mesak Kolo	Cooperative Chairman Vegetables farmer	Kupang
47.	June 15	Sat	Farmer 2	Isac Atin	Vegetables farmer	Kupang
48.			Trade collector	Adison Atin	Trader	Kupang
49.	June 17	Mon	AusAID	Petra <i>rca</i> Karetji	Counselor Decentralization and Poverty Reduction and Rural Development Section	Jakarta
50.			Banda Ghara Reksa	Andy Pratama	Manager	Jakarta
51.	June 20	Tue		Samto Pramono	Director	
52.	Julie 20	Tue	CSUL Finance	Suwandi Wiratno	Director	Jakarta
53.	June 21	Wed	Swisscontact	Peter Bisengger	Director	Jakarta
54.				Prashant Rana	Regional Director	

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# **APPENDIX 3. REFERENCES**

- Abdurrachman, Sukri, 2004, Land dispute in the reformation era: Conflict in the tourist area: Bali, NTB, East Java, Indonesia Science Institute
- IFC 2007, Indonesia: Rural Finance Mapping, International Finance Corporation
- IFC 2010, Weather Index Insurance for Maize Production in Eastern Indonesia, IFC World Bank and AustraliaIndonesia Partnership
- Microsave and e-Mitra, 2013, Market Insights into the Financial Behaviors and Design of Mobile Financial Services Products for Cocoa Farmers in Indonesia.
- Ian Patrick, 2004, Contract farming in Indonesia: Smallholders and agribusiness working together, the University of New England (UNE). Australian Centre for International Agricultural Research, Canberra, 2004
- USAID, 2008, USAID/Indonesia Economic Growth Sector Assessment.
- World Bank, 2007, Agriculture Extension Services in Indonesia: New Approaches and Emerging Issues, WB East Asia and Pacific Region, Publication No. 38468
- World Bank 2010, Improving Access to Financial Services in Indonesia
- World Bank, 2011, East Java Growth Diagnostic: Identifying the Constraints to Inclusive Growth in Indonesia's Second-Largest Province, World Bank Study Report 2011

# APPENDIX 4. MISSION TO EASTERN INDONESIA

126. The Mission to Eastern Indonesia took place between June 9 and June 15 and included the four consultants and two PRISMA staff members - Angela Clare (in Eastern Java during June 9-12) and Daniel Nugraha (in NTT during June 12-15). The consultants' team stayed together in the visits to East Java (Surabaya and Malang) and then split into two groups: one group covering NTB and one group covering NTT. The list of persons met is in APPENDIX 2; Table 8 categorizes the persons met. Within the available time, the team had the opportunity to interact with a number of stakeholders including value chain actors (farmers, input providers, and collectors), representatives of banks, other financial institutions, macro level institutions, and relevant project personnel.

Туре	Jakarta	East Java	NTT	NTB	Total
Macro level institutions (BI, BAPPENAS)	2				2
Banks (Commercial, BPD, BPR)	2	2	1	2	7
MFIs and Other FI including UPK		2	3	1	6
NGOs			1		1
Projects/ Donors	4				4
Farmers		2	4	3	9
Collectors and Input Providers		2	4	3	9
Other	2	2			4
Total	10	10	13	9	42

### Table 8 Types of Stakeholders met during the Mission

# APPENDIX 5. MAIN CREDIT PROGRAM FOR AGRICULTURAL PROMOTION

#### **Table 9 Agricultural Credit Programs**

	Kredit Ketahanan Pangan dan Energi (KKPE)	Kredit Pengembangan Energi Nabati dan Revitalisasi Perkebunan (KPENRP)	Kredit Usaha Pembibitan Sapi (KUPS)	Kredit Usaha Rakyat (KUR)
Year Starting	2007	2006	2009	2008
Legal Document	Minister of Finance Regulation (MFR): No.79 / PMK.05 / 2007, MFR No. 48 / PMK.05 / 2009, MFR 198 / PMK.05 / 2010	Minister of Finance Regulation No. 117 / PMK 06 / 2006	Agriculture Miniter Regulation No. 40/ Permentan/ PD.400/9/2009	Presidential Instruction No. 6 / 2007
Sector	<ol> <li>Paddy, maize, soybeans, sweet potato, sugar cane, cassava, peanuts, buckwheat, chilly, shallot, ginger, potatoes, bananas</li> <li>Livestock: cow, chicken, duck, quail</li> <li>Fisheries (including seaweeds)</li> <li>Procurement and rejuvenations of equipments for above-mentioned sectors</li> </ol>	Expansion and rejuvenation for palm oil, rubber, and cacao	Cow breeding	Productive enterprises
Credit Limit	<ol> <li>For farmer and fisherman; maximum IDR 50 millions</li> <li>For cooperatives for the purpose of procurement of staples; maximum IDR 500 millions</li> <li>For cooperatives for procurement and rejuvenation of equipment; maximum IDR 500 millions</li> </ol>	Determined by the Director General of Plantation	Maximum IDR 66,315,000	KUR Micro; maximum IDR 5 million KUR Retail; maximum IDR 500 million
Interest Rate	For sugar cane is 7% p.a and for other crops 6% p.a	For palm oil and cacao is 7% p.a and for rubber is 6% p.a	5% p.a	KUR Micro 22% p.a KUR Retail 14% p.a
Loan Terms	Maximum 5 years	For palm oil and cacao 13 years and for rubber 15 years	Maximum 6 years with grace period of 24 months	Working capital loan; maximum 3 years and can be extended to 6 years Investment loan; maximum 5 years and can be extended to 10 years

	Kredit Ketahanan Pangan dan Energi (KKPE)	Kredit Pengembangan Energi Nabati dan Revitalisasi Perkebunan (KPENRP)	Kredit Usaha Pembibitan Sapi (KUPS)	Kredit Usaha Rakyat (KUR)
Implementing Banks	BRI, BNI, Bank Mandiri, Bank Bukopin, BCA, Bank Agroniaga, BII, Bank CIMB Niaga, Bank Artha Graha, BPD Sumatra Utara, BPD Sumatra Barat, BPD Sumatra Selatan, BPD Jawa Barat, BPD Jawa Tengah, BPD DIY, BPD Jawa Timur, BPD Bali, BPD Sulawesi Selatan, BPD Kalimantan Selatan, BPD Papua, BPD Riau	BRI, BNI, Bank Mandiri, Bank Bukopin, Bank Agroniaga, BII, Bank CIMB Niaga, Bank Artha Graha, Bank Mega, BPD Sumatra Utara, BPD Sumatra Barat, BPD Sumatra Selatan, BPD Aceh, BPD Kalimantan Timur, BPD Papua, BPD Riau	Timur, BPD Jawa Tengah, BPD DIY,	BRI, Bank Mandiri, BNI, BTN, Bank Bukopin, Bank Syariah Mandiri, Bank DKI, BPD Sumatra Barat, BPD Jawa Barat, BPD Jawa Tengah, BPD DIY, BPD Jawa Timur, BPD NTB, BPD Kalimantan Barat, BPD Kalimantan Selatan, BPD Kalimantan Tengah, BPD Sulawesi Utara, BPD Maluku, BPD Papua
Target Areas	Sumatra Utara, Sumatra Barat, Sumatra Selatan, Jawa Barat, Jawa Timur, Jawa Tengah, Bali, Sulawesi Selatan, Kalimantan Selatan, Papua, Riau	Sumatra Utara, Sumatra Barat, Riau, Jambi, Bengkulu, Sumatra Selatan, Bangka Belitung, Lampung, Jawa Barat, Kalimantan Barat, Kalimantan Tengah, Kalimantan Selatan, Kalimantan Timur, Sulawesi Utara, Sulawesi Tengah, Sulawesi Barat, Sulawesi Selatan, Sulawesi Tenggara, Maluku, Papua, Papua Barat	Jawa Timur, NTB, DIY (Yogyakarta), Jawa Tengah	All provinces