Strengthening Agricultural Finance in Rural Areas

(SAFIRA)

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Annex 4 Government credit programs for promotion of agriculture .... **Error! Bookmark not defined.**

Annex 5 Distribution of FI branches and outlets across provinces 714

Abbreviations

A2F	Access to Finance
ADB	Asian Development Bank
AIP- Rural	Australia-Indonesia Partnership for Decentralisation – Rural Economic Development (AIP- Rural
AM	Aide Memoire
AusAID	Australian Agency for International Development
BAPPENAS	Badan Perencanaan Pembangunan Nasional (National Planning Board)
BI	Bank Indonesia
BKD	Bank Kredit Desa (Rural Credit Bank)
BPD	Bank Pembangunan Daerah (Regional Development Bank)
BPR	Bank Perkreditan Rayat (People's Credit Bank)
BUMDes	Badan Usaha Miik Desa (Village Owned Enterprise)
BRI	Bank Rakyat Indonesia
DCA	Development Credit Authority
FI	Financial Institution
GDP	Gross Domestic Product
IFC	International Finance Corporation
Jamkrida	Penjaminan Kredit Daerah (Regional Loan Guarantee Company)
KFW	Kreditanstalt für Wiederaufbau
Kopdit	Koperasi Kredit (Loan and Saving Cooperative)
KUR	Kredit Usaha Rakyat (Peoples Business Credit)
MNO	Mobile Network Operator
MSME	Micro Small and Medium Enterprises
OJK	Otoritas Jasa Keuangan (Financial Services Authority)
PODES	Statistik Potensi Desa (Village Potential Statistics)
PRISMA	Promoting Rural Income through Support for Markets in Agriculture
RBI	Reserve Bank of India
RLF	Revolving Loan Fund
SME	Small and Medium Enterprise
Susenas	Survey Sosial Ekonomi Nasional (National Socio-economic Survey)
TNP2K	Tim Nasional Percepatan Penanggulangan Kemiskinan; (National Team for Accelerating Poverty Reduction)
UMKM	Usaha Mikro, Kecil dan Menengah (Micro, Small and Medium Enterprise)
VCF	Value Chain Finance

1. Summary: Overview and rationale of the Project

The Theory of Change underpinning AIP-Rural is that agriculture is three times more efficient in reducing poverty when compared to other major economic sectors[1]. Moreover, if more farmers understand the impact of, and have access to, improved assets, technology, inputs and services, this can lead to improvements in their level of competitiveness and an increase in incomes. Increasing access to improved assets, new technology, better inputs and services, including financial services. While it is clear that access to savings is an important part of financial services, this project will focus its initial attention on lending.

At the farm level, most additional investments are small (i.e. $200-1,000), but they do require financing. For lower income farmers this financing can come through savings, loans from family and friends, advances from buyers or suppliers, informal providers such as rotating savings and credit associations. In some cases, financial services can be accessed through cooperatives, microfinance organisations or state banks. For many smallholder farmers, access to finance from the more formal institutions can be difficult because of the scarcity or unavailability of assets that can be pledged as collateral, their low financial education, the limited range of risk mitigation options such as insurance schemes, and the lack of a robust asset base to help ease shocks. In eastern Indonesia and East Java, farmers also face constraints in terms of having small plots of land, being unfamiliar with the banking system, low access to land with legal titles, underutilization of technology applied to their farms, and having limited market opportunities.

These factors, combined with the high transaction cost for lending in small amounts, make small-scale farmers very unattractive clients for the more formal financial institutions. This reluctance of financial institutions to lend to the agriculture sector can be seen in the proportion of lending portfolio going to this sector, which for the past 10 years has hovered around 2-4% for the private and regional banks and 6-9% for the state and rural banks.

Recognising these constraints, the core rationale for this project is to leverage the usually intangible assets that smallholders do have, namely their long term relationships with their suppliers and buyers, to access small credits for small investments. For example, in Kupang District of NTT, AIP-Rural helped to facilitate the extension of a loan amounting to $70,000 from a regional bank for a maize seed producer, who then repackaged this finance into 40 smaller uncollateralized loans for his contract farmers. These smaller loans enabled the farmers to pay for the inputs to produce the seeds that the maize seed producer needed to expand his sales. This loan was repaid within six months and this seed producer has currently applied for a second loan to undertake the same arrangement for the following season. In another case involving the palm oil sector, Bank Mandiri has structured a loan to a cooperative that then on-lends to farmers based on a 100% guarantee provided by a third party-crushing mill that purchases the primary crop directly from farmers.

[1]World Bank, 2008; Agriculture for Development, World Development Report, Washington

This form of lending is frequently called “value chain financing”. Value chain finance is a method that has been used successfully worldwide, but only to a limited extent in Indonesia (although it is probable that more of this kind of lending is taking place in Indonesia, but individual initiatives may not be fully documented as such). The rationale for these types of financing arrangements is that, when they are properly constructed, they are profitable for and beneficial to providers of financial services (e.g. banks), their customers (e.g. seed producers, processors, buyers), and farmers. The aim of this project is to develop and formalise value chain finance with selected banks in eastern Indonesia as one way to scale up cost effective and sustainable lending to rural smallholder farmers.

1.1 What is Value Chain Financing?

"....Value Chain Finance is made possible by value chain relationships and mechanisms: for example, a bank issues a loan to farmers based on a contract with a trusted buyer or a warehouse receipt from a recognised storage facility."[2]

Value chain finance mechanisms are used primarily to reduce:

- Lending risks by leveraging relationships as assets, and/or
- Transaction costs of lending by using value chain actors as loan assessors, distributors or collectors for financial services.

The Theory of Change for this project is that if more financial institutions in eastern Indonesia are equipped with the skills and capability to engage in profitable applications of agricultural value chain financing (VCF), then farmers will have greater access to the kinds of small-scale loans they need to make the investments required to enhance their competitiveness and increase their incomes.

There are a number of advantages to this type of lending, most of which address the constraints which smallholders face when accessing credit:

1. VCF is usually built into the standard buy-and-sell mechanisms that already exist within value chains. Farmers are more comfortable with this type of transaction and it is a more cost effective means of delivery when compared with direct delivery by financial institutions.
2. VCF can use existing assets (often non-tangible), and smallholders therefore do not need to provide formal collateral in order to access loans. When collateral is required by the main source of the loan (e.g. by a bank), this can be provided by larger agribusinesses (with whom financial institutions will have a direct relationship), who have sufficient assets with titles in place.
3. It is in the interest of buyers and input suppliers to extend financing to smallholders to either facilitate an increase in their sales to farmers or enhance the quality of the commodities that farmers produce.
4. Repayment of credit can be assured, as farmers can receive payment for their commodities, after deducting the loan payment.

[2] "Agriculture Value Chain Finance Tools and Lessons" by Calvin Miller and Linda Jones.

5. Often internal value chain finance does not take place unless smallholders receive the technical assistance needed to improve their production.

On the other hand, one should be aware of the disadvantages to this type of lending:

1. This type of credit is usually only short term in nature and dedicated to one crop. The credit portfolios (of those providing lending to farmers) are usually less diversified.
2. The price of the loan is often hidden in purchase prices, so it is not always a transparent transaction.
3. If credit is provided by the input supplier, it is usually tied to certain products which the farmer may or may not want.
4. Disbursement is usually only done in kind: e.g. in the form of fertilisers, seeds, bio-chemicals; and as such, other costs such as labour are not typically covered.

1.2 Why is more of this financing not available?

Value chain financing often requires a different mindset by financial institutions and hence most loans are “one off” and ad-hoc. Even though the individual farmers’ loan analysis, the administration of the loan transaction, and monitoring is passed on to the value chain actors, it does require a measure of trust between financial institutions and the actors in the value chain. To mitigate some of the risks, the financial institution requires a greater understanding of sector dynamics like crop cycles, productivity and externalities like weather and international commodity prices. This is knowledge that most rural banks do not possess.

At the same time, some value chain actors (which are typically SMEs or larger agri-businesses) that act as intermediaries also need to develop certain skills. They need to understand how credit works, how to make good loans and how to monitor these loans so that they get their money back. These businesses may be capable providers of other non-financial services, and may lack good credit management capabilities. They also need to understand how they can effectively work with banks to expand and improve the quality of their loan portfolios.

1.3 The focus of the Project

This project seeks to address some of these gaps by introducing more rural banks to the agricultural sector and by developing their competencies to take advantage of the opportunities that this sector can provide to them. In this way the project can play a vital role in helping to make the agricultural sector more attractive to formal financial service providers. At the same time, the project can assist value chain actors to: interact more effectively with financial institutions; deliver credit to smallholders more efficiently; and, facilitate the growth of their businesses through expanded outreach.

This task will require a number of interventions primarily in the form of capacity building and technical support for:

- **A range of 5-6 financial institutions** in eastern Indonesia that are interested to develop their agricultural lending portfolio. The project will help them understand the dynamics of the agricultural sectors in their market areas and then structure agriculture value chain products, leveraging value chain relationships to mitigate risk and lower costs of delivery of finance to SMEs and smallholders; and

- **The sector teams of AIP-PRISMA and other AIP-R projects**, on agriculture and value chain finance to assist them when advising SMEs and other value chain actors that will then on-lend to smallholders in their ~15 commodity sectors.

Through its work with these two principal partners, the project will also develop modest capacity building or credit education instruments for the SMEs or value chain actors so that they either:

- Improve the cost effectiveness of their on-lending to their customers or suppliers, or
- Mitigate the risks of providing guarantees for large number of farmers to financial institutions.

The table below summarises the nature of the capacity building support envisaged for these three target groups.

Table 1. Capacity Building Support to Project Partners / Intermediaries

Financial Institutions: • Understanding agricultural value chains, their dynamics and their opportunities; • Demonstrating the comparative advantages of agricultural financing over other sectors currently financed by the banks • Adapting, developing or structuring value chain products and schemes; • Developing due diligence instruments for prospective SMEs for financing; • Helping financial institutions to leverage different third party guarantees (that are available); • Helping financial institutions to assess and mitigate credit risk in innovative ways (co-financing, cash flow lending, as well as disbursement and collection mechanisms, etc.).
PRISMA and other AIP-Rural projects: • Understanding agriculture finance; • How to identify SME partners suitable for value chain finance; • Developing a capacity building approach for PRISMA's value chain finance borrowers (i.e. business plans for loan applications, management instruments for credit portfolios, etc.).
SMEs: • Technical assistance and training in credit management; • Technical assistance and training in financial administration; • The preparation of viable business plans for banks.

A fourth set of partners may emerge if this type of financing proves to be highly beneficial. This will include partners that share the project's objectives of achieving scale through "systemic change". This systemic change objective will be to facilitate these institutions to encourage and support their clients and partners to institutionalise this type of lending. These partners might include institutions such as Perbarindo (the Association of Rural Banks), Bank Andara, MICRA and others that are interested in promoting innovative approaches to agricultural financing.

The goal of the project is to facilitate income increases from agriculture, of at least 30%, for 12,000 farmers by improving their access to new loans facilitated through value chain actors and financial institutions in eastern Indonesia by December 2018.Background

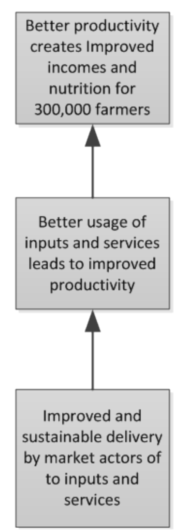
2. Background

DFAT has a long history of rural development in Indonesia. There have been two main predecessors to AIP-Rural: ANTARA (2005-2010) with a budget of $AU 30 million for five years in NTT province; and, SADI (2006-2010) also with a budget of $AU 30 million for four years for NTT, NTB and Sulawesi provinces. DFAT's most recent program, AIP-Rural, has been designed as a 10-year program ending in June 2022. The first phase of the program, ending in December 2018, has a budget of $AU 112 million and is aimed at increasing, by at least 30%, the agricultural incomes of 300,000 smallholder farmers living in five provinces of eastern Indonesia: NTT, NTB, East Java, Papua and West Papua.

The Theory of Change underpinning AIP-Rural is that agriculture is three times more efficient in reducing poverty compared to other major economic sectors[3]. And, if more farmers understand the impact of, and have access to, improved assets, technology, inputs and services, they will increase their competitiveness and incomes (see Figure 1). The key strategies that AIP-Rural will use to improve access to these assets, technologies, inputs and services are:

- To identify agricultural commodity sectors (e.g. maize, beef, cocoa, etc.) or cross-cutting sectors (e.g. mechanisation, irrigation, technology, finance) that are most relevant to generating pro-poor outcomes in the selected provinces; and then,
- To analyse these sectors, to assess the systemic or binding constraints that are most important to increased farm incomes, and then,
- To design sustainable and market-driven interventions which generate "scaleable" impact and outreach to small farmers for whom these sectors are relevant.

Figure 1: Theory of Change Summary



AIP-Rural will consist of several sub-projects:

- PRISMA, commissioned in November 2013, concentrates its interventions mostly in selected commodity sectors;
- A tertiary irrigation project (TIRTA), which will boost agricultural productivity through improving farmers' access to water;
- An agricultural research and innovation project (ARISA), which will improve farmers' access to new processes and technologies; and
- A financial inclusion project (SAFIRA), which will work mainly though micro finance organisations to address smallholder farmers' access to credit.

Each of these projects has the same overall goal of increasing farmer incomes. The program will be delivered through a series of over a hundred interventions with partners from the private, public and civic sectors of the economy.

[3] World Bank, 2008; Agriculture for Development, World Development Report, Washington

The Government of Indonesia's executing agency for PRISMA is BAPPENAS; for ARISA it is BPPT; and for TIRTA it is the Ministry of Public Works. For the SAFIRA project the counterpart will be the Directorate of SMEs and Financial Inclusion in BAPPENAS. To maintain the coherence of four separate AIP-Rural projects, each of them will use the same results measurement system called the Donor Committee for Enterprise Development (DCED) Results Measurement Standard. This system is designed to provide "real time" feedback loops to program management on: impact, outreach and value for money.

To understand how the SAFIRA project fits within the overall structure of AIP-Rural the reader should refer to Section 5.8 of this document on project governance.

2.1 AIP-Rural's approach to rural development

Conventionally, rural development programs have tended to be public-sector focused, with an emphasis on agricultural extension and research, food security, infrastructure and rural livelihoods. Reviews of experience have shown that such approaches have frequently been unable to ensure the sustainability of benefits to the poor once program-funded activities cease. AIP-Rural supports a progressive move for DFAT in Indonesia towards a "market systems" or a "making markets work for the poor" approach. This approach has emerged as one of the preferred methods for smallholder farmer development for many bilateral donor agencies over the last decade, and has been successfully applied in other rural situations in other countries (including DFAT's CAVAC program in Cambodia and DFAT's MDP project in Fiji and East Timor). The approach uses conventional analysis to identify key farmer constraints. Once these constraints have been identified, it looks for "market actors" that have a vested interest in overcoming these constraints.

In the case of the AIP-Rural's finance project, these market actors are (a) the financial institutions that have an interest in expanding their client base and financing profitable businesses, and (b) the SME value chain actors/agribusinesses who have a vested interest in either securing their supply of products or ensuring quality.

2.2 The state of overall lending to agriculture in Indonesia

The graph below shows the trend in agricultural lending by the banking industry since 2002. It shows that financing to this segment has remained flat or declined as a proportion of the total loan portfolio. While the total amount has increased nominally each year, the actual proportion of all bank lending seems to have bottomed out at 5.71%.[4] Perceived high risks, especially those from natural disasters, are among the major reasons cited for the decline in agricultural finance (at least by those financial institutions who have been interviewed during the design mission). Additionally, the ageing of the smallholder population and the lack of technology improvements in smallholder farms have made agriculture a less attractive investment for banks.[5]

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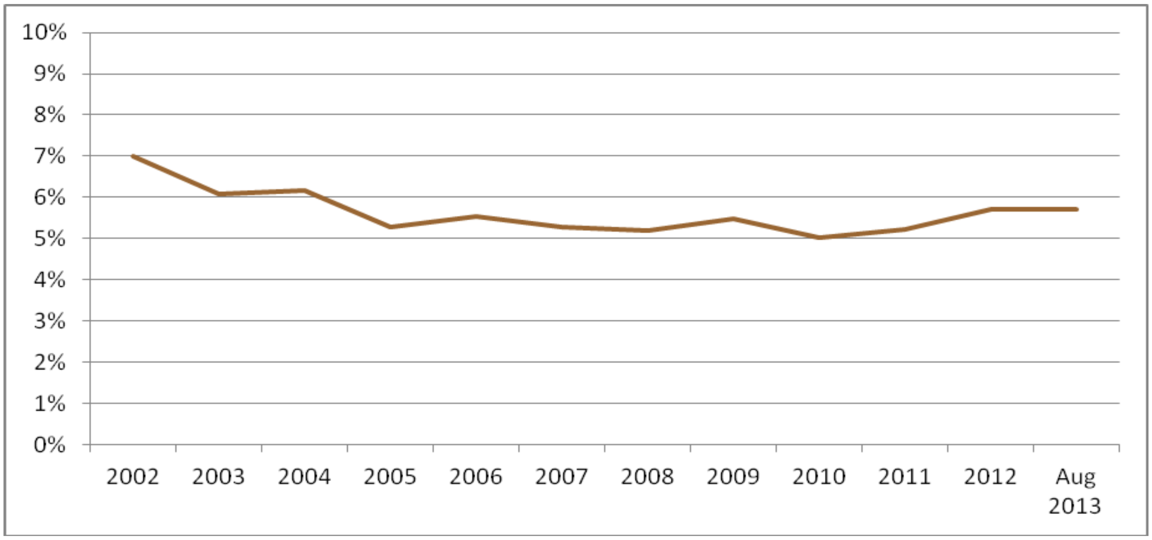
[4] "All bank lending" refers to lending to business/industry, as well as consumer and mortgage lending.

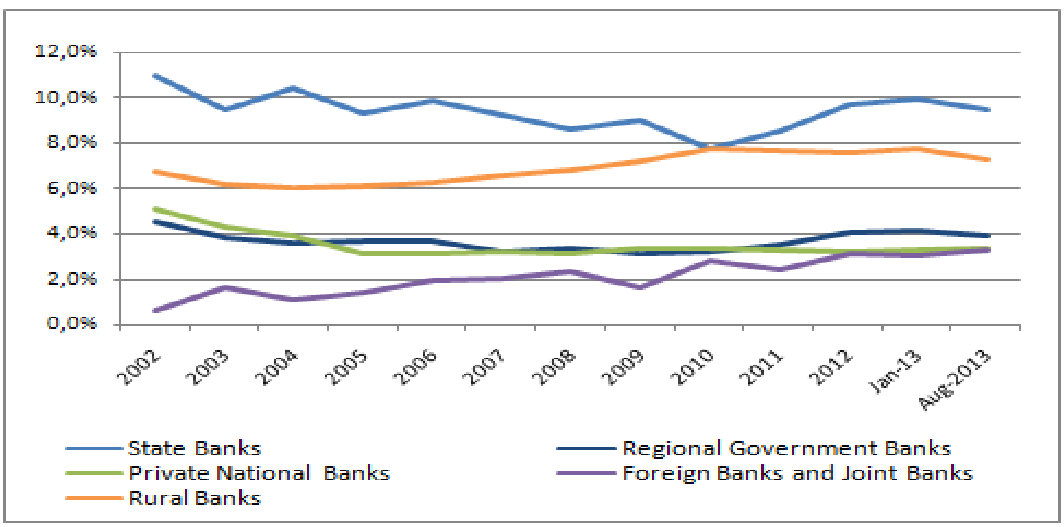
[5] See http://www.gbgindonesia.com/en/agriculture/article/2011/agriculture_overview_of_indonesia.php.

Graph 1 Indonesia banking system lending to agriculture, livestock, forestry and fishery, as a proportion of total lending[6]



A disaggregation of this declining lending pattern (see Graph 2 below) shows that while the overall proportion of lending to agriculture is declining, rural and state banks appear to have a relatively more favourable performance in terms of their exposure to agriculture in recent years. But overall, their lending to agriculture still remains very low.

Graph 2 Indonesia banking system lending to agriculture, livestock forestry and fishery, as a proportion of total lending, by type of bank[7]



This pattern in overall lending does not reflect the importance of agriculture to the national economy. For example, in December of 2012, only 8.78% of total *lending to industry* was to

[6] Source: Bank of Indonesia.

[7] Source: Bank of Indonesia

agriculture, livestock, forestry and fishery sectors,[8] while these sectors contributed 14.43% of the total GDP.[9]

The picture appears even bleaker when we consider eastern Indonesia. The figures in Table 1 below show that banks in AIP-Rural target districts appear to have decreased the proportion of their agriculture loans, even though the nominal value has increased.

Table 1. Value and percentage of lending to agriculture (direct) in the AIP-Rural target districts[10]

Indicator	Dec 2013			Dec 2012		
	East Java	NTB	NTT	East Java	NTB	NTT
Total Loan (IDR billion)	325,970	19,080	15,170	257,410	15,670	12,700
Business Loan (Work. Cap. & Inv)/ IDR billion	239,630	8,170	13,990	184,690	7,060	11,840
SME loan (IDR billion)	90,110	17,990	4,260	74,470	15,130	3,410
Agriculture Loan (IDR billion)	8,247	296	119	6,770	261	201
Proportion of Agriculture Loan (%)	2.53%	1.55%	0.78%	2.63%	1.67%	1.58%

2.3 Government policies and programs relevant to agricultural finance

Government loan programs to farmers have a long history in Indonesia. They started with the Bimas (Bimbingan Masal) program in the 1970s and continued in the 1980s 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. Details on these government credit programs are provided in 0nnex 5.[11]

There are typically two types of schemes that the government uses to encourage banks to lend more to agriculture and to small enterprises, i.e. by subsidising the interest rate or by providing loan guarantees. KUR is a major program that provides loan guarantees. The other programs (KKPE, KUPS, and KPENRP) are mainly schemes that provide subsidised interest rates. The current policy of the government is for these schemes to operate independently of one another. Thus, as the KKPE scheme applies a subsidy (from government) to reduce the interest rate, KKPE loans are not guaranteed by the government. On the other hand, KUR loans are backed up by a guarantee, but receive no subsidy, which partly explains why the interest rate of KUR is higher compared to the other government loan programs.[12]

[8] Note: this includes other sectors beyond agriculture.

[9] The figures presented in Graph 2 include all types of lending including consumer loans. The value quoted for total lending to industry – i.e. 8.78% - however, only includes productive loans (i.e. it does not include consumer and/or mortgage lending), which was considered in light of the comparison made against the data on contribution to GDP.

[10] Source: Regional Economic Report from each province, published by Bank Indonesia (Central Bank Regional Office).

[11] In addition to these main government credit programs, it is also worth noting that the Ministry of Cooperatives and SMEs is managing a revolving loan fund called LPDB (Revolving Loan Fund Managing Agency), which is meant for cooperatives to on-lend to their members. As of June 2014, a total of IDR 4.4 trillion has been disbursed to 3,119 cooperatives and non-cooperatives (BPRs and SMEs). Another credit program is PUAP, which is coordinated by the PNPM program. PUAP provides loans to farmers through farmer groups (gapoktan). The program uses agriculture field officers, who are assigned to support these farmer groups.

[12] A recent impact evaluation of KUR is provided in Bahtiar Rifai 2013. The main conclusions of the evaluation are: (i) generally, KUR has been accessed by SMEs that have monthly incomes above than poverty line. It means that poor people are reached only to a limited extent by KUR; (ii) for selected groups, KUR brings several impacts particularly

The provision of microfinance services, and more specifically **lending to micro, small, and medium enterprises (MSMEs or UKM)** in Indonesia, is regulated by Undang-Undang (UU) No. 20/2008 dated on 4 July 2008. The definition of MSMEs as described in the regulation is as follows:

- A micro business is a business unit with total maximum assets valued at IDR 50 million (excluding land and building), or maximum annual sales of IDR 300 million;
- A small business is a business unit with total assets valued at IDR 50 million – IDR 500 million (excluding land and building), or annual sales of IDR 300 million - IDR 2.5 billion; and
- A medium business is a business unit with total assets valued at IDR 500 million – IDR 10 billion (excluding land and building), or maximum annual sales of IDR 50 billion.

The regulation's objective is that 20% of any bank's loan portfolio should be directed towards lending to UMKM. Achieving this target is, however, staggered according to the following schedule:

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

This regulatory pressure exerted on banks does not specify whether any proportion of this lending should be earmarked for the agriculture sector, nor does it stipulate what proportion of the 20% must be for micro-enterprise lending (a category which PRISMA's smallholders would fall under).

It is meaningful to consider that these types of lending policies have had mixed reviews. In India, for example, the RBI set a directive in 1990 stating that 18% of bank loans must be directed to agriculture. While this probably led to greater lending to the sector, there is also evidence that these policies became politicised and led to higher Non Performing Assets.[13] Moreover, only 30% of public sector banks and 50% of private banks in India achieved this target as of 2011. In light of such policies on lending, banks may prefer to pay penalties than invest in these sectors.[14] Others have suggested that fiscal policies, guarantee funds, and

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for income, expenditure, saving and asset; (iii) confidence and interactions have been well developed; and (iv) the following constraints appear during program implementation: KUR paradigm, collateral, technical problems, trade-offs between prudential aspect, target achievement and outreach program. See: http://www.seadiproject.com/0_repository/Edited%20Session%204A%20-%20Bahtiar%20Rifai(1).pdf.

[13] See: http://www.moneylife.in/article/commercial-banks-priority-sector-lending-for-40-years-has-had-limited-success-its-time-for-a-complete-overhaul---i/20447.html and http://www.moneylife.in/article/commercial-banks-priority-sector-lending-a-strategy-to-give-it-more-focus-and-thrust/20481.html.

[14] See http://business.inquirer.net/152069/relaxation-of-rules-on-directed-lending-eyed and http://www.livemint.com/Opinion/FXd3iB5xOQMKdfjeYppqUJ/The-big-problem-of-agricultural-loans.html.

investments in supporting the development of credit bureaus and moveable collateral registries are a more efficient way for the government to increase lending to one sector or another.[15]

A scoping mission commissioned by DFAT in 2013 concluded that, in the presence of subsidised loans to smallholder farmers, it will be more difficult for a sustainable supply of financial services to emerge, a point that has already been emphasised in a number of studies on global microfinance best practice, as well as financial inclusion assessments undertaken in Indonesia.[16] There are a number of subsidised government lending programs in operation, which are run by different government departments and state-owned enterprises – each having a different set of approaches and motivations. Not only do they compete with commercial providers of financial services, they also sometimes undermine financial service providers (both the established ones, as well as those relatively new in the market) - for example, by replenishing schemes that are not working well. Moreover, poorly designed credit programs (typical of those that are not designed by financial institutions, rather by government agencies who know very little about the market) also do very little to effectively encourage commercial financial institutions to expand into un-banked markets. Poorly designed credit products, whose product features and delivery mechanisms do not match the specific requirements of the target market, often lead to very high default rates, which makes financial institutions even more wary of new or unbanked sectors, such as agriculture.

It is also worth noting that a national Financial Inclusion Strategy has been drafted, but this is subject to revision and the responsibility for its implementation is, as yet, unclear.

2.4 Supply of formal financial services in the rural and agricultural sector

As pointed out in the Rural Finance Scoping Study (2013) commissioned by DFAT, 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.

Among the formal financial institutions, **BPRs (Bank Perkdreditan Rakyat) are an important source of financing in rural areas in Indonesia**. They are small-scale unit banks, also typically referred to as rural banks. The term covers various commercial and secondary banks,

[15] See: Policy measures to improve access to credit for SMEs: a survey. Sarah Holton, Fergal McCann, Kathryn Prendergast, David Purdue, and SME Finance Policy Guide, October 2011, IFC.

[16] The World Bank (2010) report on Improving Access to Financial Services in Indonesia, for example, notes that the "effectiveness of the players at the lower end of the pyramid in reaching the poorest depends in large part upon operational soundness of the MFIs, especially their sustainability. For example, if they are competing with subsidized government credit programs, their commercial viability is probably at risk. Likewise, if a significant portion of the MFIs' financing originates with governments, international institutions or private donors, they are exposed to shifts in the internal policies of those collaborators. Global experience shows that for such institutions to achieve independence and viability, they must achieve a self-sustaining profitability, rather than dependence upon transfers, no matter how well-meaning the source of those transfers" (p. 33). The IFC (2007) Rural Finance Mapping report also identified "continued government-sponsored subsidized agricultural credit programs" as one of the key obstacles in expanding rural financial services. The report has in fact proposed "to educate policymakers on the hazards of subsidized agricultural credit by quantifying the related high costs vs. limited benefits and offering alternative strategies (e.g. developing sustainable products and encouraging banks to offer them)" (p. 48).

such as BKDs, BPRs and/or LDKPs. They are locally based and mostly privately owned institutions, but there are also several government-owned BPRs. BPRs tend to be closer to the communities than the traditional commercial banks. In 2009, there were less than 2,000 BPRs, and several thousands of additional LDKPs and BKDs.[17]

Table 2. No. of BPRs, by ownership (as of Dec 2013)[18]

Province	Private Company	Local Government Owned	Cooperative	Total
Java	846	149	28	1,023
Off Java	531	76	4	611
TOTAL				**1,634**
East Java	288	14	23	325
NTB	21	8	0	29
NTT	11	0	0	11

Table 3. BPRs Interviewed during the design mission

Province	Private Company	Local Government Owned	Cooperative	No. of branches & cash outlets
Bank UMKM/BPR Jatim		x		155
BPR Artha Samudera, Kediri	x			12
BPR TLM, Kupang-NTT	x			28
BPR Pesisir Akbar, Bima-NTB	x			11

BPRs can have one business unit or several hundred business units, and those with wider branch networks tend to be the government-owned BPRs. BPRs provide microfinance services, as well as services to other market segments. While many of these BPRs are located in rural areas, a significant number operate in urban districts. The distribution of these banks' branches and outlets also tends to be more pronounced in other regions (i.e. outside eastern Indonesia).[19] On average, there is only one BPR branch in provinces in eastern Indonesia for every two branches in other provinces / regions.[20] There are many factors that explain the

[17] See "Commercialization of Microfinance in Indonesia: The shortage of funds and the linkage program", Miki Hamada, The Developing Economies 48, no. 1 (March 2010) 156-176.

[18] Source: Statistics on Conventional BPRs from Bank Indonesia, December 2013 (www.bi.go.id).

[19] See Annex 5: Distribution of branches and outlets of BPRs and financial cooperatives across provinces.

[20] The available data (presented in Annex 5) on savings and lending cooperatives only captures data up to March 2005. The data shows that the number of financial cooperatives in provinces in eastern Indonesia represent only a third of those found in other provinces / regions.

limited presence of formal financial institutions like BPRs in eastern Indonesia but the most significant of these is the relatively high levels of poverty in the region.[21]

A number of the BPRs (plus LDKPs and BKDs) participate in linkage programs in order to secure funds for on-lending, as they have found it difficult to attract deposits (i.e. in competition with other commercial banks). These linkages may be with commercial banks or sometimes with subsidised credit from state-owned enterprises and/or financial institutions. In 2009, a microfinance wholesale bank called Bank Andara was created after the purchase of Bank Sri Partha, with funds from Mercy Corps, IFC, KfW, Triodos and a US-based impact investor. Its primary purpose is to lend to private BPRs and Coop Banks, but it also provides training and technical assistance services usually under donor-funded programs. Several discussions have been held by DFAT with Bank Andara and their management is interested in SAFIRA because they are increasingly under pressure from their board members to encourage their BPR clients to lend more to agriculture. This aims of SAFIRA therefore fit well into their expansion plans. For this reason Bank Andara could become a core partner and an agent of scale should the business model be found to be profitable at the micro level.

While the overall picture for smallholder finance appears quite dismal, there are some indications of renewed interest in the sector. Some of the regional BPRs and banks (e.g. those described in Table 4 below) offer loans amounts (often with guarantees) that may be considered relevant to the smallholder farmer market segment.

Table 4. Average loan size for agriculture of some financial institutions in AIDP-Rural districts

Bank	Location	Loan Size (IDR)	
		(IDR)	(USD equivalent)
BPR Artha Samudera	Kediri, East Java	10.000.000 – 20.000.000	1,000 - 2,000
Bank UMKM (BPR Jatim)	Kediri Branch	10.000.000 – 15.000.000 Maximum 70.000.000	1,000 – 7,000
Bank NTT	Manggarai District and East Manggarai District, Flores Island	5.000.000 – 15.000.000	500 – 1,500
BPR Pesisir Akbar	Bima	5.000.000 – 10.000.000 Average: 5.182.927	500 – 1,000 Average: 520

Some of the banks interviewed during the design mission did note that they were interested in investing further into this sector, but that they lacked the know-how to do so. Some banks have

[21] According to the BPS National Census of 2010, 8/10 of the provinces with the highest levels of poverty in Indonesia are in the eastern region. These include Papua (poverty rate of 36.8%), Papua Barat (34.88%), Maluku (27.74%), Sulawesi Barat (23.19%), NTT (23.03%), NTB (21.55%), Gorontalo (18.7%), and Sumatera Selatan (18.3%).

even demonstrated a significant annual growth rate in agriculture lending, fuelled in part by funds from government and a corporate commitment to the sector.[22]

There are a few cases of banks that provide direct lending to farmers (for specific commodities), although these banks require guarantees that are either provided by regional guarantee companies or by donors. In some cases (e.g. in NTB), guarantees are used to complement the collateral that farmers are able to provide, which is valued at only 70% of the loan. In other cases (e.g. in East Java), the guarantee was just used as additional collateral. Bank Danamon, a commercial bank, utilises a DCA (Development Credit Authority) issued by the US Embassy (available to regulated financial institutions), which provides a 50% guarantee for lending to certain commodities. In this case the bank does not require any additional collateral on the part of the borrower. Bank Mandiri has also structured a loan to a cooperative that then on-lends to farmers in the palm oil sector, based on a 100% guarantee provided by a crushing mill that purchases the primary crop directly from farmers.

2.5 The use of informal microfinance schemes in the rural and agricultural sector

Similar to what can be observed in other countries, formal financial institutions in Indonesia tend to provide services that do not reach or cannot be accessed by smallholder farmers. An international survey of banks conducted in 2012 (Catalyzing Smallholder Agriculture Finance) showed that only 290 banks out of a potential of 1,770 banks in Latin America, Sub-Saharan Africa, and South and South East Asia, serve smallholders. South and South East Asia tend to be better served than their counterparts in other regions.[23]

It is therefore not surprising that the vast majority of smallholder farmers in different parts of the world access finance mainly through informal sources: these consist of loans from family, friends, local moneylenders, or others in the agricultural value chain, such as input suppliers, buyers, and traders. Access can be uneven, especially for farmers who are not integrated with structured value chains.

It is estimated that about 37% of agriculture sector workers borrow informally, such as through a neighbourhood scheme, from friends and family, from employers and through short-term credit from a shop.[24] These sources of finance can be expensive, and almost always, the capital is insufficient and primarily acts to moderate cash flow in lean seasons to finance inputs.

[22] Interviews from the SAFIRA Design Mission field trip: April 2014.

[23] It is estimated that there are globally approximately 450 million smallholder farms. About half of all smallholders farms are at a subsistence level only, and therefore are not included as part of the market estimate for financing. It is estimated that the 225 million smallholders who do sell and trade each require approximately $1000 short-term financing and $1000 in long-term financing amortized over multiple years. Based on these assumption it has been suggested that the smallholder demand for short-term financing amounts to $225 billion, and smallholder demand for long-term financing amounts to another $225 billion. Not including China this figure is reduced to $300 billion. (Dahlberg et al)

[24] See: Improving Access to Financial Services in Indonesia – The World Bank - April 2010.

Many smallholders access credit through agribusinesses in the value chain, where input finance is prevalent and secured not through collateral, but through relationships.[25] There are a number of examples in the areas of teak, cocoa, dairy, and within the PRISMA project itself (e.g. in shallots and maize seed value chains).

In other cases, finance is provided via small, locally managed revolving loan funds. DFAT, through its PNPM or community development program, has been providing assistance to the development of UPKs or revolving loan funds. There are approximately 17,000 of these throughout the country. They have reached about 1.5 million borrowers in both urban and rural areas with average loan sizes ranging from \$100 to \$150. A study conducted in 2012 by a credit ratings agency, M-CRIL, pointed out high levels of non-performing loans among these UPKs: the lowest being in West Sumatra at 31.3%, and the highest in NTT at 67%. The M-CRIL review suggested that this poor collection rate was primarily due to the perception by borrowers of the UPKs being more of a source of public grants rather than loans. Given their poor track record on financial and operational sustainability, the future of the UPKs is in question.

Given the very nature of informal financing relationships and in the absence of demand-side market data on the use of financial services in Indonesia, it is hard to assess the volume and type of informal credit that is making its way to smallholder farmers in eastern Indonesia. Nonetheless, one might assume that all of these sources are important whether for emergencies, consumption or investment purposes.

One way of increasing this volume of “informal” credit (directed to smallholder farmers) is by linking formal financial institutions with less formal credit suppliers that have credible value chain relationships with the smallholders themselves.

2.6 Lessons from agricultural finance initiatives in Indonesia

There have been a number of initiatives undertaken in Indonesia to support agricultural finance, some of which are still on-going. Some of these initiatives have not been successful in enabling a sustainable supply of financial (often credit) services to targeted farmers; while others which have achieved a relative degree of success have not, for various reasons, been implemented at scale. In other cases, some of the initiatives are still in their early stages of implementation. Nevertheless, these initiatives do offer some useful lessons that can inform the design of future agricultural finance interventions.

Agricultural finance initiatives

The **Microfinance Innovation Centre for Resources and Alternatives (MICRA)** a locally-based foundation focused on the development of the microfinance sector in Indonesia, has identified agricultural finance as a key area for investment. It has recently started pilot interventions with donor support in eastern Indonesia (which include some of the AIP-Rural target areas), primarily working through financial cooperatives, but also through some BPRs and

[25] See: IFC: Diagnostic Study on Indonesian Oil Palm Smallholders, September 2013; and Dr Ian Patrick: Contract farming in Indonesia: Smallholders and agribusiness working together, University of New England, ACIAR Technical Reports No. 54 2004.

other banks. The project, which is funded by the Ford Foundation, is still in its early stages of development. It seeks to address limited access to financial institutions in rural / agricultural areas, the limited range of financial products offered to farmers, and the need to coordinate support among public and private stakeholders (especially with respect to the development of infrastructure such as roads, warehouses, etc.).

As noted in the previous section, some of the larger banks (e.g. **Bank Danamon** and **Bank Mandiri**) have also developed value chain finance schemes, using corporate buyers (of the commodities) to guarantee loans extended to smallholders in sugar cane, cocoa, and palm oil value chains.

The **IFC** have also implemented a value chain finance project in Sulawesi targeting cocoa farmers. The project seeks to develop commercially feasible, replicable smallholder credit models by: (a) forming a consortium of agribusiness partners who can participate in the extension of rural credit; (b) developing loan products; (c) assisting farmers on good agricultural practices that would help them increase yields by 20%; and (d) assisting the screening and inclusion of farmer groups in supply chains, providing tools to improve management and to integrate supply into global chains. The project is founded on the premise that enabling a farmer to buy $300 worth of inputs may increase his income by $600.

IFC has also worked with **Bank Tabungan Pensiunan Nasional (BTPN)** for the development and roll-out of agricultural credit products, and bank staff were assisted with technical expertise and training. **Armajaro**, a global soft commodity trading house, served as the off-taker, providing knowledge on its existing farmer base to the USAID-funded project.[26] As of June 2012, BTPN provides a loan product that includes a fertilizer and a cash component, which is tailored to the cocoa production cycle. The project has initiated three loan cycles and disbursed a total of 588 loans, with an average loan value of $321. The project also provided training to 48 field workers, who in turn worked with 674 farmers on adopting good agricultural practices. While the initiative has shown remarkable progress in terms of key outputs (such as loans disbursed), there are early indications of the initiative is not being able to meet certain desired outcomes - e.g. loan repayment rates among targeted farmers were reportedly low, which is prompting BTPN to take a more cautious stance with its general engagement with the agricultural sector.

The **Rabobank Foundation** is another institution engaged in initiatives that promote agricultural finance in Indonesia. The support provided by the Rabobank Foundation reflects Rabobank's history; it is focused on the development of small cooperatives located in rural regions. The Foundation's core business is in supporting savings and credit cooperatives, farmer producer organisations and agri-SMEs with technical assistance, loans, trade finance and guarantees. It works with cooperatives to enhance savings activities among the rural poor and supports NGOs that work on the development of microfinance and cooperatives. The foundation draws on expertise from within the Rabobank, as well as from external consultants, to provide technical

[26] The project was implemented in conjunction with Amarta-II, a USAID-funded cocoa and coffee development project, through which technical training and credit promotion activities to the farmers were supposed to be delivered. The Amarta-II project has, however, been terminated by USAID.

assistance to institutions in the areas of food and agribusiness. It links supported cooperatives with the branch network of Rabobank Indonesia (which operates 89 branches, sub-branches and cash offices in 30 cities in Java, Sumatra, Kalimantan, Sulawesi and Bali).

Rabobank Foundation, in cooperation with **MicroSave Indonesia**, has initiated a microfinance technical assistance programme, aimed at strengthening a selected group of MFIs. MicroSave works with a number of local banks (BPRs and rural credit and savings cooperatives), following rapid institutional assessments carried out in the whole of Java. The programme includes implementing a Strategic Business Planning exercise to help partner financial institutions analyse their present strategic position and develop an action plan to meet their desired goals and key objectives. MicroSave is also working with some partner financial institutions to develop products and help introduce innovations in delivering financial services, especially for hard-to-reach rural-based clients.

The gender dimension to financial services

Successful initiatives in microfinance – both in Indonesia and in many other countries – have underscored the important role that women play as users of financial services. Many financial institutions acknowledge that the credit risk among female borrowers tends to be lower when compared to their male counterparts. A survey on microfinance services conducted by the Asia Foundation,[27] for example, revealed that many MFIs (both banks and non-banks) recognise the advantages of reaching female borrowers. Women are said to be more prompt in meeting their loan repayment obligations and are considered easier to transact with, according to the financial institutions surveyed.

Table 5. MFI Responses regarding the advantages of serving female customers (Asia Foundation survey, 2002)

	% or MFIs who observe that women are…			
	Prompter payers	**Usually have fixed businesses**	**Easier to collect from**	**More honest**
All Banks	**66.0**	**42.0**	**66.0**	**66.0**
Government banks	*78.6*	*57.3*	*78.6*	*57.3*
BPDs	*66.7*	*16.7*	*50.0*	*100.0*
Private banks	*25.0*	*25.0*	*0.0*	*50.0*
BPR	*63.6*	*36.4*	*72.7*	*63.6*
BPR units	*66.7*	*46.7*	*73.3*	*60.0*
Non-banks[28]	**65.3**	**34.4**	**64.0**	**60.3**

[27] The Asia Foundation (2002): Microfinance Services in Indonesia – A Survey of Institutions in 6 Provinces, p 71-72. The survey involved 374 MFIs in 6 Province of Indonesia (West Java, East Java, West Kalimantan, East Kalimantan, North Sulawesi, and Papua).

[28] Non-banks include BMTs (Baitul Maal Wat Tamwil or MFIs that operate under Islamic principles), Kopkar, KSPs Koperasi Simpan Pinjam or Savings and Loan Cooperatives), Other MFIs, microfinance programs and USPs (Unit Simpan Pinjam or Savings and Credit Units of Cooperatives).

PNPM Mandiri, the Indonesian Government flagship poverty reduction program, operates a microfinance component called Revolving Loan Fund (RLF). The RLF uses group lending and consists of UEP (mixed male and female group lending) and SPP (female only group lending). The repayment rate for SPP is reported to be significantly higher than for UEP.[29] In view of this, PNPM Mandiri has therefore focused on increasing its engagement and lending via SPP.

Apart from the lower credit risk among female borrowers, studies also show that loans extended to women tend to have a greater positive impact on household food consumption and on the quality of life of children, compared to similar loans extended to men.[30]

Specific experiences in the agriculture sector also reveal that women play an important role especially when judging what investments the household should make in farming activities. In a recent evaluation of the IFC-PENSA project in Indonesia (by Oxford Policy Management), for example, it was found that in most cases, women are the ones who decide whether or not to purchase the fertilizer needed to increase the productivity of coffee plants (an observation made in North Sumatra). The project realised later on that it was not sufficient to only convince male members of the households (the husbands) about the benefits of using new types of fertilizers – women (the wives) had to be involved. Moreover, as most of the agriculture work is anyway undertaken by women, it was crucial for the project to ensure that women participated in trainings provided on good agricultural practices. It is anticipate that because of the more informal nature of value chain financing promoted by SAFIRA more than 50% of borrowers are likely to be women.

Lessons learned

Providing profitable financial services, and in particular lending to farmers and agri-businesses (SMEs), is very demanding in any context. Financial institutions like banks must be able to deal with a combination of risks – e.g. weather shocks, fluctuating input and output prices, contract-enforcement difficulties, potential government interventions that can negatively affect the behaviour of market participants, etc. While there are approaches that can be applied more generally, financial institutions will also need to consider more specific approaches that are appropriate to the markets they are targeting (i.e. given the differences in the characteristics of market locations, the commodities produced and traded, the kinds of actors involved, etc.).

The table below outlines some of the important lessons that can be drawn from the early experience in agricultural finance in Indonesia – lessons which are also echoed in the experiences of other countries.

[29] MCFS NMC, June 2010. The repayment rate for UEP is 88% and for SPP is 94%.

[30] See: IFAD, Rural Finance: Small amount making a big difference.

Challenges to overcome	Lessons learned
High transaction costs (dealing with small-scale transactions, involving those in hard-to-reach locations)	• Dealing with organised groups of farmers and other **ways of aggregating demand (for financial services)** can help to reduce the costs of delivering financial services. This may come in the form of value chain financing (especially for high-value crops and more integrated supply chains), specifically when it is part of a broader package of financial and non-financial services. For less integrated value chains (e.g. in staple/food crops or low-value crops for semi-commercial farmers), producer organizations can play an important role in aggregating demand and in effectively reaching smallholders.
	• There are opportunities to introduce innovation in terms of **using alternative channels or ways of delivering services** – such as through mobile banking or establishing linkages (partnerships) with non-banks (institutions, as well as individual operators). Building a high quality portfolio entails intense monitoring of borrowers throughout the production cycle, especially at harvest season. Financial institutions need to explore other non-traditional ways of receiving frequent information and being able to monitor borrowers – e.g. by establishing partnerships with rural banks that have branches that are closer to the targeted borrowers, through correspondence banking, or through other participants along a value chain.
Limited understanding of the agricultural sector	• Financial institutions need to **invest in understanding agriculture**, including specific agriculture sub-sectors, and adapt their products to meet specific demand patterns. This also involves undertaking a good analysis of the key drivers of profitability for both the bank and the actors involved in the lending chain. • In order to effectively lend to agriculture, banks need to understand different segments of farmers and agri-SMEs. This segmentation should go deeper than simply identifying whether farmers or agribusinesses are small, medium or large, but should also consider the type of crop, the business prospects and commercial orientation of those involved in the lending chain, and the characteristics of the markets for commodities produced and traded (among many other relevant factors). Farmer segmentation would enable banks to start differentiating various classes of farmers, which would allow it to adopt different financing and risk mitigation approaches.
	• The agriculture sector is quite heterogeneous and many financial institutions require agricultural expertise to assess opportunities and develop appropriate financial products. **Developing agricultural lending expertise takes time**: it cannot be acquired instantly, especially when we consider

Challenges to overcome	Lessons learned
	multiple crops and/or value chains. It would be useful to begin engagement with "easier cases" (i.e. with some of the "low hanging fruit"), to allow financial institutions to steadily go through the learning phase without prejudice to developing a healthy/high quality loan portfolio.[31]
Difficulties in assessing credit risk	• Dealing with credit risk is often done through first loss guarantees, enhanced credit risk assessment systems tailored for farmers, or use of movable collateral. - In Indonesia, there doesn't seem to be much sophistication or innovation in terms of credit risk assessment techniques (e.g. use of cash flow-based assessments, agronomic models or more tailored credit scorecards). - Some of the financial institutions involved have, however, invested in learning about the specific sectors to which they were supplying credit. Some have sought to forge strong linkages with buyers, processors and traders in the value chains – which has helped them to make a more informed assessments of risk (within these sectors).
Identifying and adopting other approaches to mitigate and manage risks	• There are emerging agri-finance models in other countries where security is provided other than through the requirement for borrowers to pledge traditional collateral. Lenders are increasingly able to underwrite anticipated cash flows from the farmer and the buyer, and use **other forms of collateral** (such as movable assets). Inventory financing (using warehouse receipts) and collateral management agreements are also being used by more financial institutions worldwide. These models, are, however, not widely used (if at all) by financial institutions in Indonesia. Some banks will consider the relationship between a buyer / processor and farmers (a relationship which is typically underpinned by an unwritten promise of the farmer to deliver the crop and repay the loan); but financial institutions will still require the buyer/processor (as the borrower) to present hard collateral, and in some cases, access other guarantees when granting loans. • **Risk sharing** is a typical approach adopted – e.g. by indirectly lending through groups (e.g. farmer associations), or having savings-account-linked input loans – especially in the absence of accessible insurance products (to cover personal or production risk). • The early experience so far underscores the need for financial institutions to understand the nature of risks

[31] This can be done by helping financial institutions to identify already bankable opportunities (that remain untapped), working with the best farmers or agri-SMEs, and then seeking a multiplier effect.

Challenges to overcome	Lessons learned
	(including ways of assessing risks) among farmers and agri-SMEs to better distinguish those who have the ability and willingness to repay.
Responding to needs of farmers	• Having **a good mix of products (e.g. credit, savings, and payment facilities)** is important not only in terms of being able to respond to the needs of targeted clients, but also as part of the risk management approach adopted by banks. Savings, payment facilities, insurance, and other types of loans (e.g. loans to help bridge seasonal requirements for cash) are all very important in improving farmer livelihoods, in addition to credit that might be extended to support production activities. In some cases, financial institutions may need to take a more holistic approach to serving overall household financial needs.
	• Farmers have a variety of financial and non-financial needs. The provision of financial services should support the core business of farmers and help them generate better sales. In Indonesia and elsewhere, **financing that is offered as part of a larger package of services to farmers** appears to work well. Non-financial services that are offered alongside credit (and other financial services) might include the provision of extension and agro-technical assistance (e.g. advice on purchase of better inputs, facilitating access to market/price information, etc.) and basic financial literacy training. These non-financial services need not be provided by the financial institution/lender (and may in fact be best provided by other partners).
	• It would also be useful for financial institutions to consider the **role that women play in agriculture** (e.g. it is estimated that women carry out 70% of the agricultural work) and in managing household income. Women play an important role especially when judging what investments are needed, etc. They also act as custodians of information in terms of household cash flow and expenditure patterns, which are important when making credit assessments.

3. Statement of problem and opportunities

AIP-Rural's target clients are smallholder farmers in agriculture value chains. These smallholders exhibit significant heterogeneity across AIP-Rural districts in their value chain participation, size of landholding, sources of income (farming and non-farming), agricultural productivity and market access.

AIP-Rural aims to increase the incomes of targeted smallholder farmers by 30% over the life of the project (ending in December 2018). Some of the enhanced returns can come as a result of better access to information and know-how by farmers, but in many cases, access to external finance may help to unlock the farmers' ability to access inputs, services and technologies needed to improve their level of competitiveness.

While it is recognised that savings are also a key part of improving financial services to small farmers, this project will focus its immediate attention on lending. In 2015 AIP-Rural, in cooperation with local banks, may engage in a financial inclusion survey through which it may be possible to generate the type of market intelligence for banks to develop their own savings products. At this point the program will consider whether or not, and if so how, it will become engaged in the support for savings for small farmers in eastern Indonesia.

3.1 Demand and supply-side constraints to smallholder finance

In September 2013, AIP-Rural conducted a Scoping Mission to assess target group credit needs, as well as supply capacity suited to this target group. Both the scoping mission and a subsequent design mission found that, to this end, there are several limitations both on the demand and supply side, which make it difficult to establish financial relationships between the suppliers of financial services and smallholders.[32] The following are the key findings from the scoping mission:

1. The demand-side barriers include the lack of secure land and fixed asset titles of a large number of smallholder farmers; exposure to risks arising from shocks to production, price volatility, and highly fluctuating demand; low levels of financial literacy; weak value chain integration; and limited presence of effective farmer organisations.
2. While a range of financial service providers (the supply) are currently serving the target group (i.e. smallholder farmers),[33] there is very limited engagement of formal financial institutions and most smallholder farmers access financial services via informal channels. In most cases, commercial banks and regional development banks maintain a limited proportion of their portfolio devoted to agriculture.[34]

[32] See: Scoping Study of Rural Finance for the Australia-Indonesia Partnership for Decentralization Rural Economic Development (AIPD-Rural): Final Report; 9 September 2013.

[33] This 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.

[34] For example, for Bank Jatim, this is less than 5%; and for Bank NTT, this is about 1% of total loan portfolio.

3. 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; (ii) limited agricultural market knowledge; (iii) use of standard (less innovative) credit risk management practices among financial institutions; and (iv) a limited range of products offered.

These findings were also echoed in the field work undertaken by this project's design mission, and are complemented with the following conclusions:

1. While some Government BPRs are showing patterns of growth in terms of their exposure to agriculture, they continue to adopt more traditional lending practices, and this growth may be in part accounted for by access to subsidized funding, as well as guarantees. There is, however, no conclusive evidence to support whether these schemes (i.e. subsidies and guarantees) have a positive impact on small-scale farmers' access to finance. For example, the guarantee mechanisms and insurance facilities do not seem to always lead to a lowering of the collateral required on the part of farmer-borrowers.
2. There is a general lack of understanding of what the farmer wants/needs, which results in the provision of "unsophisticated" financial products – i.e. products that are part of the more traditional range of services offered to the mass market, and which do not adequately respond to the particular demand patterns in the rural / agricultural sector. This also explains the dearth in non-credit products for agriculture players – i.e. products such as savings, factoring, mobile banking, MNO payments, etc.
3. Chronic subsidies are rampant (credit, fertilizers, other inputs), and this causes distortions in the market and has a tendency to ration credit to smallholders.[35]
4. Value chain finance (involving banks), which include the use of triangulations, guarantees, non-monetary disbursements, etc. exist, but they are embryonic, and usually tied to "sure things" (i.e. financing arrangements that are deemed to be almost risk-free).

While there are a myriad of important issues to address in order to enable greater financial inclusion among smallholders in Indonesia (i.e. to improve their access to different forms of credit, bank accounts, insurance products, cash flow and payment facilities), **this proposed project focuses strongly on what can be done to facilitate farmers' access to short term financing**. The availability of short term financing (i.e. typically up to one year) has been identified as important for smallholders to make improved seasonal investments in their farms. Other investments, such as tree crop plantations, or farm equipment purchases, while important, are not considered at length here, in part, because the collateral requirements may be higher, and the relationship element (which is critical in value chain finance) may not prevail over the longer term. Moreover, financial institutions will usually move into medium and longer term financing of sectors only after they have become comfortable with short term financing and learn how to deal with actual and perceived risks.

[35] See: "Economic Importance of Agriculture for Sustainable Development and Poverty Reduction: Findings from a Case Study of Indonesia", Dalila Cervantes-Godoy, OECD Secretariat, dalila.cervantes@oecd.org; Joe Dewbre, OECD Secretariat, joe.dewbre@oecd.org.

The design of this proposed project recognises that there are demand and supply side constraints that can be eased, if not overcome, to effectively enable farmers' access to short term financing.

The **main demand side barriers** that need to be considered can be summarized as follows:[36]

1. Title to land: Smallholders may be owners of land, but a land title may not be available in the "official" legal form. According to an IFC report, 90% of smallholders in Indonesia do not have a formal title to their land.[37] Furthermore, there are also high costs associated with the registration of property.[38]
2. Risks related to their main asset: Smallholders may be unwilling to risk their only productive asset to secure financing for production even if long term profitability may be favourable, given risk spikes in the short term.
3. Knowledge levels related to financial products: Smallholders are not likely to be knowledgeable about financial products available to them, and/or have little experience with dealing with financial service providers.
4. Integration into value chains: Smallholders are likely to participate in value chains, but many of these value chains have an informal structure. The more formal or organised a value chain's structure is, the easier it is to attract outside financing.
5. Participation in groups: Because of past bad experience, smallholders may not participate in associations and/or cooperatives, which could serve as viable conduits for financing.
6. Small loan sizes required: Smallholders will require loans that are typically small, especially in the case of annual crops. Livestock production units and those engaged in tree crops/perennial crops may, however, require relatively larger loans.

On the **supply-side**, the constraints will depend on the kinds of financial service providers – i.e. whether formal or informal. Informal finance includes community-based lending (ROSCAs), moneylenders, shop lending, lending by value chain actors (buyers, aggregators, input providers, producer associations or cooperatives) and family and friends. The formal suppliers of finance include the commercial banks, BPRs, and financial cooperatives, etc.)

The supply of informal credit, in general, suffers from the following problems:

1. **It is typically short term:** Informal finance, while obtained in a timely fashion, does not always meet the type of capital required (i.e. long term or medium term funds).
2. **A mismatch of cash flows:** ROSCAs and other forms of community-based lending are not always appropriate for financing seasonal production, where the interest rate and repayment terms do not adequately reflect the seasonal nature of the investments and returns.
3. **Limited additional services:** Sources of informal finance are typically unable to provide additional financial services beyond short term credit and savings.

[36] See: Local Bank Finance for Smallholders: A 9 billion Dollar Drop in the Ocean. http://www.globaldevincubator.org/smallholderfinance/Initiative_for_Smallholder_Finance_Briefing_1.pdf.

[37] See: www.ifc.org/wps/wcm/connect/.../EAP-Indonesia+Agri-finance.pdf.

[38] See: http://www.gbgindonesia.com/en/agriculture/article/2011/agriculture_overview_of_indonesia.php.

4. **Restricted use of credit:** Internal value chain finance - provided by suppliers, buyers and aggregators within the value chain - is often directed to one crop only, and does not finance the farm as a whole. The cost of this form of financing may be high, but is likely to be hidden within the pricing structure.
5. **Credit delivered in kind not cash:** Internal value chain finance is typically in kind only, and cannot be used to cover contracted labour costs at the farm level.
6. **Only limited amounts are available:** Buyers, suppliers and aggregators are usually constrained by the amount of credit they have available to clients. In the case of input suppliers, they may not deliver credit and if they do, they will deliver only for a very short period.

On the other hand, the supply of formal financial services faces the following problems:

1. **Financial institutions have limited experience with the target group**. Banks maintain only a small proportion of their portfolios in agriculture (direct lending) and are unable to define how much of their portfolio is invested in agribusiness (through indirect lending). While there are some banks that have shown marked growth in their relative exposure to agriculture over the past year (which is in part fuelled by access to government funding, combined with a re-reorientation of growth strategies of some institutions), the proportion of agriculture loans of banks in all the target districts have declined from 2012 to 2013.[39]
2. **Supply is dominated by an undiversified product range**, predominantly term loans (one crop), secured with real collateral. There are no specialised products such as production or weather based index insurance, lines of credit, savings or cash flow management products. Moreover, **there are no products which recognise long term farm profitability** (yearly) over short term risk spikes (harvest).
3. **Liquidity:** Larger financial institutions do not cite liquidity as a constraint in reaching smallholders and there appears to be sufficient funds to finance short term investments. However, some private BPRs and MFIs appear to suffer from liquidity issues and/or require additional capital injections.
4. **Some of the current banking regulations act as deterrent for banks to effectively engage with smallholders.** For example, regulated financial institutions are pressured to secure loans with real collateral, for approximately 150% of the loan value (which was recently increased). This pushes banks to consider only those clients that are able to provide this amount of collateral. Moreover, as land titles are not divisible, the land value may be significantly higher than the required amount and subject to forfeiture in case of non-payment – which may deter some creditworthy borrowers (e.g. SMEs) from entering into loan transactions with banks.
5. **Financial institutions often incur high costs** when delivering small-scale financial services directly to smallholder farmers.

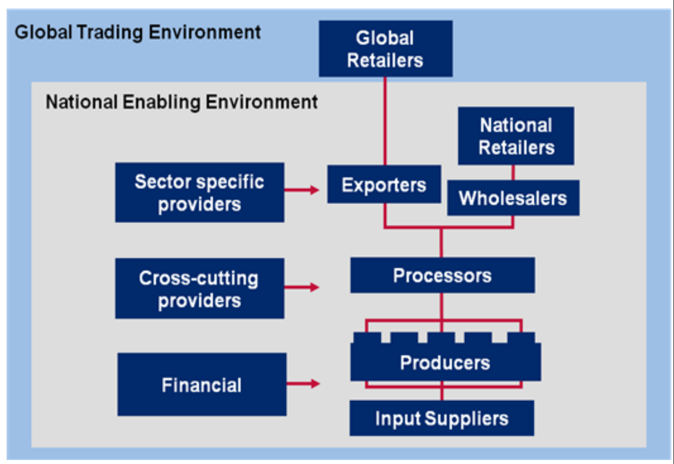
[39] It is useful to note that social investors, who typically lend to farmer cooperatives or other value chain businesses do not play a large role in financing cash crops, unlike in other countries (e.g. in Ecuador, Peru, Philippines), where cash and export crops predominate. In markets like cocoa in Indonesia, social lenders have not entered and local sources of financing from government and state bank programs are very small, meeting less than 1% of total smallholder financing demand. See Dahlberg (2012): Catalyzing Smallholder agriculture finance.

6. **Financial institutions understand very little about different value chains, commodities and their context**. Many of these institutions recognise this as a major weakness: they are usually not familiar with the dynamics and complexities of farming systems and agricultural value chains.
7. **Financial institutions typically do not use risk mitigating tools beyond the requirement of collateral**. The use of alternative types of collateral is, for example, not common: sales agreements / purchase orders, moveable assets and partial guarantees by value chain participants (such as buyers of the product), disbursement in kind and collection through value chain businesses are not used as ways to mitigate credit risk.
8. **Linkages between FIs and businesses within the value chain to facilitate smallholder finance are either weak or underdeveloped**.

3.2 Addressing some of these constraints through Value Chain Finance

A value chain consists of a range of activities involved in getting a product or service from conception, through its different phases of production and delivery to the final consumer. Figure 3 shows a typical value chain with its various stakeholders, and where financial services are supplied by external providers.

Figure 3. Generic Value Chain



Value chain finance involves a range of methods through which different actors in the value chain finance their activities. Sources of finance can be *external* (i.e. from external actors, such as banks, social investors, community savings groups, MFIs, etc.) or *internal* (i.e. from actors such as input suppliers, buyers, producer groups, exporters, etc.). Value chain actors typically have a number of financial needs, as depicted in Figure 4.

xternal value chain finance is made possible by value chain relationships and mechanisms: for example, a bank issues a loan to farmers based on a contract with a trusted buyer or a warehouse receipt from a recognized storage facility.[40] Value chain finance mechanisms are primarily used to reduce risk (i.e. by leveraging relationships or assets) and/or to reduce transaction costs (where value chain actors may act as analytical, distribution or collection points for financial products).

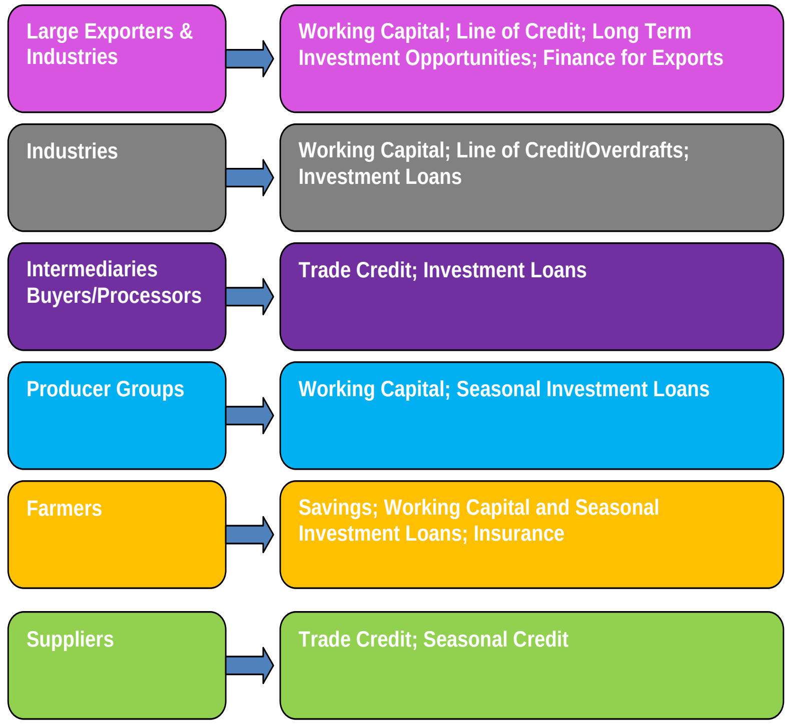
The following diagram shows a classic value chain finance mechanism, in which an exporter provides a partial guarantee for a loan made to a producer cooperative. The exporter also remits payment to the lender upon receipt of product.

[40] "Agriculture Value Chain Finance Tools and Lessons" by Calvin Miller and Linda Jones.

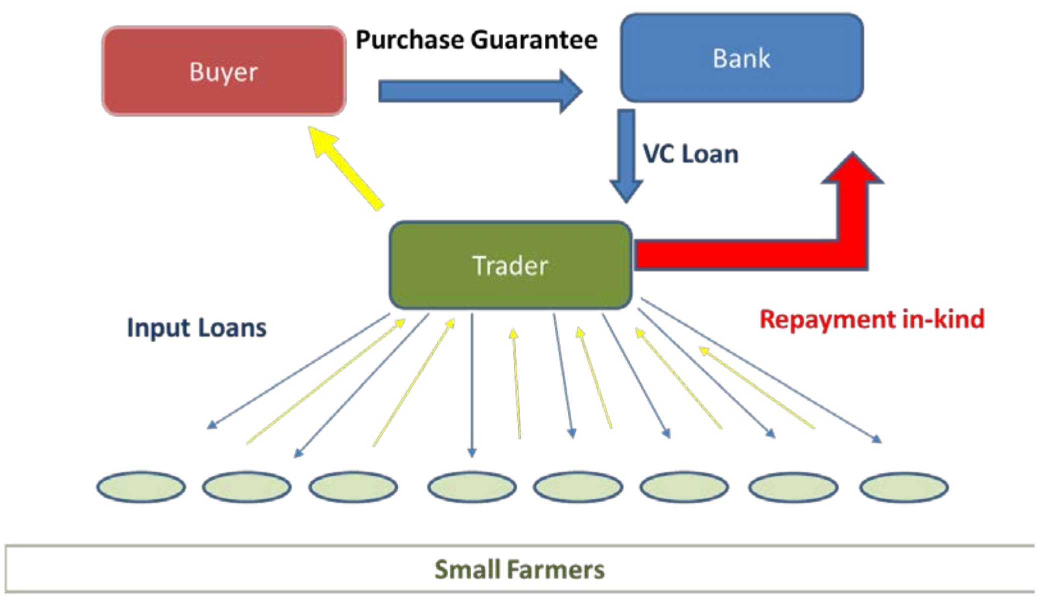
There are a number of advantages to this type of lending, most of which address the constraints which smallholders face when accessing credit in eastern Indonesia:

1. **Finance is usually built into buy-and-sell mechanisms**. This allows farmers to feel more comfortable with the transaction and it is a more cost-effective means of delivery when compared with a financial institution providing financial services directly to farmers.

Figure 4. Value Chain Actors Financial Needs



A Typical VC Loan Deal



2. **Financing can use existing assets** (often non-tangible), which do not require formal collateral on the part of smallholders. When collateral is required, it can be given by larger agribusinesses which have sufficient, titled assets in place.
3. **It is in the interest of buyers and suppliers to finance smallholders** to either increase or encourage sales (e.g. of inputs) to farmers or to enhance the quality of the supply of commodities they receive from farmers (i.e. in the case of buyers).
4. **Repayment of credit is better assured** as farmers can receive payment for their product, net of any loan repayments.
5. **The repayment rate tends to be higher.** This is often helped by the fact that internal value chain finance does not take place unless smallholders receive the technical assistance needed to improve their production.

On the other hand, there are also some disadvantages to this type of lending:

1. **This type of credit is usually only short term** in nature and dedicated to one crop. This means that there is, in most cases, less diversification in lenders' credit portfolio. This can lead to a higher risk embedded in the portfolio.
2. **The price of the financial service is often hidden in purchase prices,** so it is not always a transparent transaction.
3. **If credit is provided by the supplier (e.g. of inputs), it is usually tied to certain products,** which the farmer may or may not want.
4. **Disbursement is usually only done in kind**: e.g. in the form of fertilizers, seeds, bio-chemicals, etc. As such, cash costs, such as labour, are not typically covered.

Value chain financing often requires a different mindset by financial institutions. It goes beyond collateral-based lending and looks at relationships and existing transactions as a basis to secure the loan. It may also mean that financial institutions need to do less of the analysis, implementation and monitoring because some of these tasks are "passed on" to participating value chain actors. It therefore also requires a measure of trust between financial institutions and actors within the value chain. To mitigate risks, it requires more of an understanding by the financial institution of sector dynamics – such as crop cycles, productivity levels, external conditions that may affect production (e.g. weather), and international commodity prices.

3.3 Opportunities in value chain financing within AIP-PRISMA and other AIP-Rural projects

A number of general observations about the market for agricultural finance (particularly for smallholders) can be made that underpin the rationale for the project's design:

- AIP-Rural projects like PRISMA, TIRTA and ARISA will generate increased investment opportunities for SMEs and smallholders, which will entail an improved use of inputs and services. In many cases, these investment opportunities will require external finance.
- A market failure exists, wherein smallholders do not qualify for the financial products (in particular credit) offered by financial institutions even when the return on investment is

considered viable. Even in the absence of a comprehensive study on smallholder finance in Indonesia, there are notable cases that depict the poor levels in smallholder lending.[41]

- Financial institutions are able to lend to larger SMEs and indeed, these agri-businesses are more likely to qualify, especially considering their ability to provide the required collateral for these loans.
- Financial institutions are not currently taking full advantage of linking to the value chain to mitigate risks or to reduce costs to deliver finance to smallholders or agribusinesses.
- Financial institutions are not generally very knowledgeable about the agriculture markets and the value chains. They could benefit from better linkages and education on how these markets work, where they are located, and what the risks are in lending to them.
- Internal value chain lending (e.g. in inputs) exists and is relatively accessible to farmers, but it is limited, only short term, and is only in the form of in-kind transfers. This type of lending could be expanded to additional value chain actors, and improved within the existing lenders.
- There are some risk-mitigating instruments available in value chain financing, such as third party guarantees, but they are limited to either large commercial banks or government banks. Other risk management tools are not widely utilized.
- There is some momentum to increase finance to the agricultural sector – given, for example, how some of the regional banks and private BPRs are incorporating agricultural lending into their growth strategies.

There are observable patterns of growth in the agriculture sector worldwide and within Indonesia. The growth opportunities that the PRISMA project seeks to create for smallholders provide strong arguments for investing in agriculture. But there are market failures and issues in agricultural financial markets that need to be addressed in order to support such growth.

- **Financial institutions lack awareness and a deeper understanding** of agriculture value chains and the opportunities for them to profitably support improvements in productivity among smallholders through the provision of financial services.
- **Likewise, smallholders and some agribusinesses have limited understanding** of the financial products that are available. In some cases, they may require adjustments in the types of financial products being offered or the ways in which these services are delivered.
- **Banks tend to strongly rely on hard collateral** when making credit decisions and very few other risk mitigation tools are either available or used across the industry. While BI does not require banks (including BPRs) to take collateral such as land titles in all cases, banks are pressured to undertake the least-risky transactions. Any increase in their NPLs (e.g. if the NPL goes above 3%) would merit the scrutiny of the financial services authority. Thus, banks tend to rely strongly on collateral-based lending, which limits their ability to engage (directly) with smallholders, most of whom are not able to provide the collateral needed to back up loans.

[41] See: DIAGNOSTIC STUDY ON INDONESIAN OIL PALM SMALLHOLDERS" IFC September 2013;"Contract farming in Indonesia: Smallholders and agribusiness working together" Dr Ian Patrick at the University of New England. ACIAR Technical Reports No. 54 2004.

There appears to be adequate funds for investment in agriculture on the part of financial institutions. Over and above the existing capital base and other private sources of funds, financial institutions also have access to several subsidised funds (from government), as well as commercially-priced funds. Funding the loan portfolio is therefore not an issue at the bank level. The crux of the matter is that these funds are not getting to the smallholders for the variety of reasons noted above.

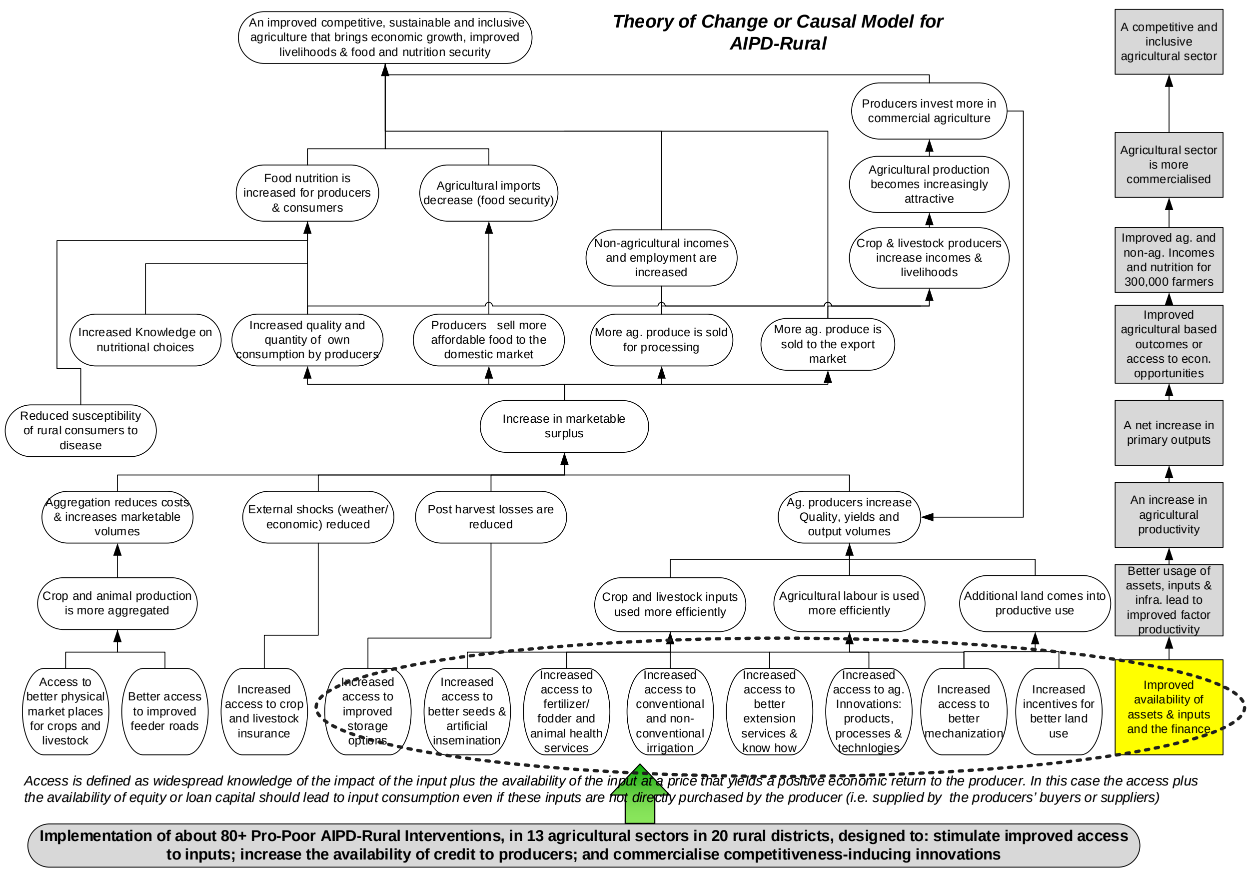
This project therefore emphasises “indirectly” supporting smallholders via value chain linkages – by promoting the provision of financial services via SMEs and their on-lending to smallholders. This will require supporting changes in the approach that banks take towards agricultural financing, with an emphasis on utilizing other more innovative risk management approaches, including using value chain actors to mitigate risks and reduce transaction costs.

4. Goals and Objectives

The SAFIRA project has the same goal as the overall AIP-Rural program, i.e. to increase farmer incomes. This project aims to increase the incomes of 12,000 farmers by increasing their access to financial services, primarily credit, through internal value chain finance.

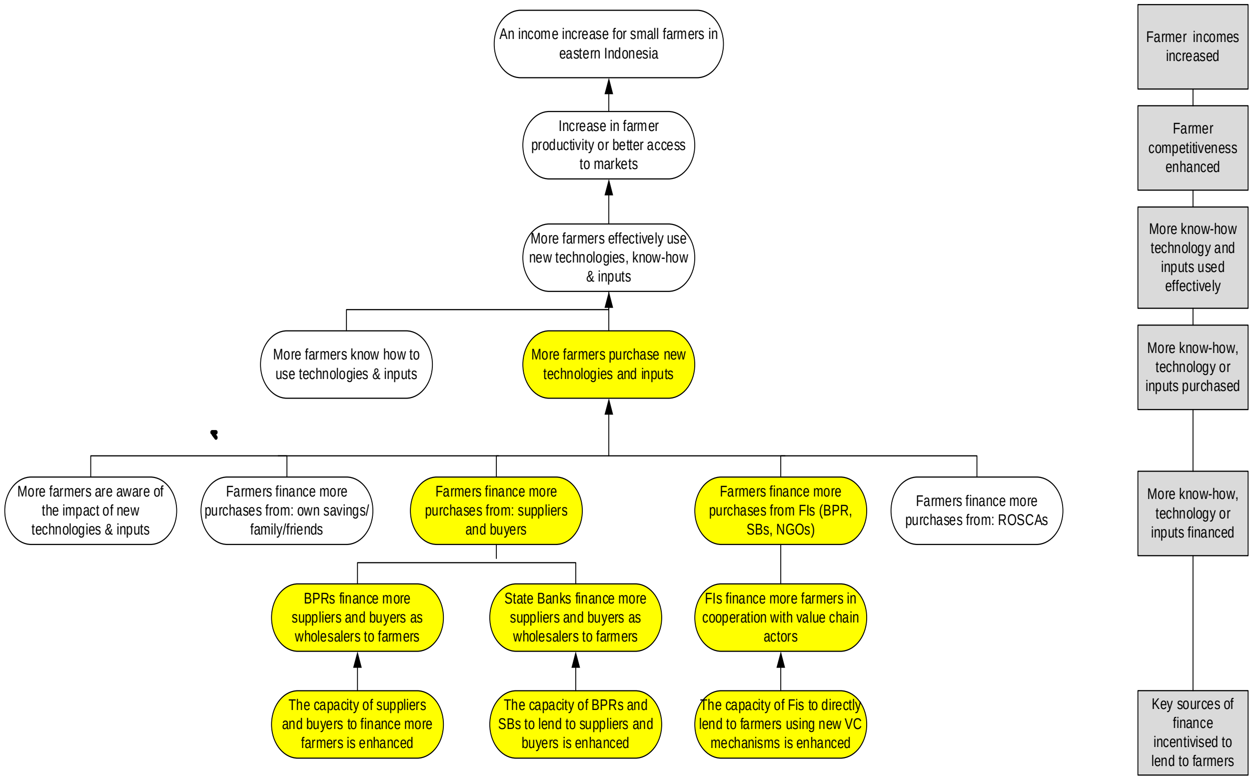
4.1 AIP-Rural Finance Causal Model

The overall causal model of AIP-Rural, with its various projects (PRISMA, TIRTA, and ARISA) is presented below. The basic logic of this model is that if farmers have better access to basic know-how, markets, inputs, technologies and finance, they will enhance their competitiveness and the consequence of this will be income growth. This logic is summarised in the grey boxes on the right hand side of the diagram below. The dotted ellipse at the bottom of this diagram is where the overall causal model of AIP-Rural intersects with the SAFIRA project.



Similarly, the causal model of SAFIRA project (presented below) intersects with the above overall causal model and provides more detail on the core logic of this project, which is contained within the dotted ellipse (in the diagram above). A summary of the logic is presented in the grey boxes to the right hand side of the diagram (below), while the core outputs and outcomes are highlighted in yellow.

Theory of Change or Causal Model for SAFIRA 24-10-14



The premise of the project is that while there are, in principle, other sources of finance for small farmers in eastern Indonesia, SAFIRA will focus its limited resources on improving the supply of finance through new and existing business relationships between smallholder farmers and other market actors in their value chains. These actors can be input suppliers, produce buyers/collectors or other service providers like equipment rental firms, transport companies and the like.

Currently, some form of value chain finance is already taking place in some of the project areas. Most of the financial institutions (e.g. regional banks, BPRs) interviewed during the project's design mission are interested in testing and/or expanding this approach, both in terms of (wholesale) lending to SMEs for on-lending, as well as lending to smallholders using value chain actors to mitigate risks and reduce costs. Capacity building support is required in order to facilitate this. This will likely be in the areas of (a) product development, (b) in identifying and implementing policy and procedural modifications for the financial institutions, (c) facilitation of SME finance through PRISMA, and (d) in improving credit and administrative management for the SMEs to support their on-lending activities.

Table 6. Abbreviated Milestone/Indicator Matrix

Desired Change	Month 1-12	Month 13-24	Month 25-36	Month 37-42
Goal: Farmers from eastern Indonesia increase their incomes from agriculture			At least 3,600 smallholders in eastern Indonesia increase their incomes from agriculture by at least 30%	At least 6,000 smallholders in eastern Indonesia increase their incomes from agriculture by at least 30%
Outcome at the Farm Level: Farmers' investments (seeds, fertilisers etc.) enhance their agricultural competitiveness			At least 3,600 smallholders benefit (improve competitiveness) from the inputs etc. purchased from their loans	At least 10,000 smallholders benefit (improve competitiveness) from the inputs etc. purchased from their loans
Intermediate and Systemic Outcome: More smallholders receive loans through value chain actors or from banks with the support of VC actors		3,000 smallholders are financed through project partners and intermediaries	12,000 smallholders are financed through project partners and intermediaries	12,000 smallholders are financed through project partners and intermediaries
Intermediate Outcome: More SMEs increase their lending to small farmers (number of SMEs and volume of their credit)	SMEs financed by partner FIs on-lend at least $75,000 to 500 farmers	SMEs financed by partner FIs on-lend at least $225,000 to 1,500 farmers	SMEs financed by partner FIs on-lend at least $675,000 to 4,500 farmers	
Intermediate and Systemic Outcome: Partner FIs increase their lending to SMEs in VCs (directly or through PRISMA) who then on-lend to farmers	At least 20 SMEs in VCs have been financed by partner FIs and they are on-lending to farmers	At least 150 SMEs in VCs have been financed by partner FIs and they are on-lending to farmers	At least 250 SMEs in VCs have been financed by partner FIs and they are on-lending to farmers	
Intermediate and Systemic Outcome: Partner FIs increase their lending to agriculture with the support of VC actors	Partner FIs finance at least 5 projects with a combined outreach of 500 farmers with the support of VC actors	Partner FIs finance at least 15 projects with a combined outreach of 1,500 farmers with the support of VC actors	Partner FIs finance at least 25 projects with a combined outreach of 2,500 farmers with the support of VC actors	
Intermediate and Systemic Outcome: Banks are lending more cost effectively either to SME VC actors or to farmers	Participating FIs increase their volume of lending to agriculture by at least 5%;	Participating FIs increase their volume of lending to agriculture by at least 10%; NPL ratio for agricultural lending is less than 8%	Participating FIs increase their volume of lending to agriculture by at least 20%; NPL ratio for agricultural lending is less than 7%	NPL ratio for agricultural lending is less than 6%
Intermediate Outcome: SMEs receiving credit from FIs increase their revenues.		At least 100 SMEs financed by FIs have increased their sales revenues by at least 15%	At least 200 SMEs financed by FIs have increased their sales revenues by at least 15%	At least 250 SMEs financed by FIs have increased their sales revenues by at least 15%

4.2 Closing the gap between supply and demand

The scoping mission highlighted a number of gaps between supply and demand. The table below outlines the strategies being proposed to address these gaps, and project interventions will be geared around these strategies.

Table 7. Identified gaps and proposed strategies to address them

Gaps identified	Proposed strategies
Financial knowledge and capability of relevant actors in the value chain	• Facilitate the provision of relevant financial and business education for smallholders and value chain actors • Develop the capacity of and leverage the role of value chain actors in helping to mitigate risks
Knowledge and capacity of financial institutions, given: - Product mismatch between banks and what is required by smallholders and agricultural value chain actors; - Need to better understand risks and identifying other risk management approaches.	• Focus on leveraging the role and work carried out by current existing value chain lenders – e.g. by facilitating linkages between value chain lenders and banks • Encourage the use of other more innovative risk mitigation strategies for smallholders and other value chain players including PRISMA • Develop financial products that are smallholder-friendly and recognises the demand patterns in the agricultural sector • Develop greater awareness/understanding of the client's business and where risk can be mitigated and whether they are adopting such risk mitigating approaches, including enabling banks to get a more holistic view of the viability of the farm as opposed to just the farmer • Facilitate immersion into and differentiation of commodity chains by financial institutions • Develop knowledge in terms of how the value chain functions, where the control is, price takers versus price makers, margins, etc. • Explore the use of (existing) insurance mechanisms • Explore setting up an "Innovation Fund" to help provide incentives for new products / tools / systems development (see Section 5.2)

5. Delivery Strategy

This section sets out how the project might be implemented, guided by the aim to achieve impact at the farm level, as well as at the institutional or systemic level. The emphasis is on increased access to finance for the smallholders, as well as a more widespread systemic change among financial service providers, both internal value chain providers as well as external providers of finance. The project will seek to build synergies between both types of financial service providers (formal financial institutions and informal SME lenders), and how they might come together to leverage finance to smallholders.

5.1 The relationship between SAFIRA and PRISMA

This project will be composed of two streams of interventions: the larger stream will deal directly with partner-financial institutions (PFIs) - i.e. 5-6 selected BPRs and state banks, which may include BPDs; while the other stream will encompass support extended to the existing AIP-Rural projects, especially PRISMA.

The core capacity building for PFIs will be in the area of administration and credit management delivery, in particular, assisting them to:

- Develop cost effective products and processes to use market intermediaries as wholesalers of small loans to farmers, and
- Lend to farmers directly, but using value chain finance to reduce costs and mitigate risks.

This is where the project's "systemic change" agenda is most pronounced. The selection of the appropriate agricultural sectors will be made by these PFIs and will be based on their own strategies for building a portfolio of loans in agriculture. For example, a BPR in Kupang in NTT may choose to finance rice farmers, even though rice is not a sector initially selected by PRISMA in this province. There will undoubtedly be, however, some overlap with other AIP-Rural projects in irrigation, innovation and some of PRISMA's sectors, in which case the banks may draw on some of the sector-based analysis already prepared by these project. The ultimate choice of sector and market intermediary must however, be solely that of the banks.

The second stream of interventions will be delivered in collaboration with other AIP-Rural projects, especially PRISMA. The easiest way to envisage this relationship is to cast the other AIP-Rural projects in the light of another one of SAFIRA's project partner. In this case the partner is interested to develop its facilitation or brokering function in the area of value chain finance. This may entail, for example, helping PRISMA's Sector and Intervention Coordinators to: identify value chain financing opportunities, structure loans for SME intermediaries, and then providing guidance on how to broker these loans successfully with financial institutions. It could be that some of these loans will involve the above mentioned PFIs; in other cases, however, this might involve other financial institutions (non-PFIs). For example, an SME intermediary in a sector may already have some established track record with a bank, which has not been selected in the above mentioned first stream. In such cases, it makes little sense for the SME to leave this bank and start a new relationship, unless this new bank is prepared to offer the SME an attractive set of new services.

There are many synergies that may arise between SAFIRA and the other AIP-Rural projects and to create an artificial separation would be unproductive. Nevertheless in order to preserve the "Chinese Wall" principle (between targeted client of the credit, represented by the other AIP-Rural projects and the credit provider supported by SAFIRA), the roles and responsibilities of each of the AIP-Rural projects will be monitored throughout implementation and AIP-Rural's Program Secretariat will help guide areas of independence and synergies between SAFIRA and the other AIP-Rural projects. Each project has its own outreach targets and while there may be some overlaps the project area (eastern Indonesia) is so large and heterogeneous these overlaps and synergies will be handled on a case by case basis rather than constructed out of a need to appear "integrated". These synergies are more likely to occur in the case of PRISMA and so the table below is presented to show where the "grey" areas are likely to appear and how they will be handled.

Table 8. Roles and responsibilities: SAFIRA and PRISMA

SAFIRA	PRISMA
• Sourcing of financial opportunities in agriculture for partner FIs • Relationship management with financial providers (internal and external to VCs) • Technical assistance and training to financial providers (internal + external) in: - Agricultural sector analysis and competitiveness trends - Product design (structuring arrangements, agreements) - Admin and credit system support - Legal support - Innovation support (delivery, products, systems) • Technical assistance to PRISMA staff in: - Helping SMEs meet FI requirements - Liaising/advocacy - Pre-emptive information - Reference/branding system for farmers and agribusinesses in assisted value chains	• Identifying financial opportunities in selected agricultural sectors • Relationship management with SMEs • Technical assistance to SMEs in: - Business planning - Credit management

As noted earlier, there will be overlaps between the two projects. For example, SAFIRA's technical assistance to one of PRISMA's sectors in a given area may lead, in one intervention, to an outreach to 1,000 farmers with significant income gains. Assuming that impact is recorded it may be necessary to clarifying "which of the two projects can take credit for this success". To create the right supporting incentives between the two projects, the outreach and income achievements for smallholders due to financial access interventions will be credited to both projects' targets (i.e. attribution will be shared), but any overlap will be eliminated in the overall reporting of AIP-Rural against its aggregated targets for income and outreach to 300,000 farmers.

5.2 Interventions

In the context of AIP-Rural, the term intervention is defined as a set of activities, outputs and outcomes, with a partner, linked in a causal model ending with the achievement of significant income change for farmers in the five selected provinces of eastern Indonesia. What distinguishes one intervention from another are: the partner or set of partners, the geographic location of the intervention, the nature of the target group and lastly, the core elements of the intervention's causal model. Even though capacity building is an important means to a result, it is nevertheless not an intervention in its own right. For example, in the case of a financial institution, an intervention could be the development of a new and better loan product aimed at SMEs in value chains in agriculture. The outcome of this intervention would be income gains for farmers attributed to their investment in some new competitiveness enhancing activity enabled by their access to finance through the SMEs. In this case, the intervention might result in 10 SMEs getting loans from BPR "X" in location "Y" reaching 500 farmers, resulting in increased incomes of "A". The capacity building of the BPR in product development would be included in this intervention. If a second BPR, in another location, had a similar need for product development then this would be another intervention. Any generic capacity building for the PFIs, not related to an intervention, would simply be delivered as generic capacity development and not as an intervention. It is expected that the bulk of capacity development would, however, be related to the specific delivery of new financing models to increase agricultural lending.

In the case of PRISMA-related interventions, the demand for these interventions would be initiated by PRISMA. For example, if an SME maize seed producer in NTT needed a loan to finance the purchase of fertilisers for 50 farmers to produce better seeds with an eventual potential outreach to 2,000 farmers, the Maize Intervention Coordinator of PRISMA might approach SAFIRA to provide them with some technical assistance or support the SME in the preparation of a business plan targeted to a specific financial institution. This may be categorised as one SAFIRA intervention with an outreach to 2,000 farmers whose incomes are expected to increase because of higher productivity and improved quality. The attribution of the results to one project or another would be determined on a case by case basis.

It is difficult at this stage of the project's design to estimate the total number of interventions, but a total outreach of 12,000 farmers has been identified and this could be tentatively divided between: (a) 10,000 farmers reached through the PFIs, and (b) 2,000 farmers reached through specific PRISMA interventions.

Within the capacity building activities, it is critical that there is some hands-on product design advisory service that makes it easier for the banks to design and implement these products. The table below is illustrative of the kinds of capacity building measures envisaged.

Table 9. Illustrative types of capacity building measures

Theme[42]	Illustrative Capacity Building
Linking/Facilitations	• Support to PRISMA and other AIP-Rural projects in linking project partners (e.g. SMEs) with financial institutions • Design and develop value chain finance arrangements to minimize risk/costs
Upgrading	• Technical assistance to SMEs in administration and credit management, in conjunction with PRISMA • Technical assistance to PFIs in product development, cash flow based finance, building linkages value chain business opportunities, developing tools, etc.
Knowledge	• Helping to develop greater understanding of competitiveness in agricultural sectors (among PFIs) and where there are financing opportunities • Developing and dissemination of training / tools to manage risk • Pilot testing new products • Facilitating field visits / interactions between providers and targeted users of financial services • Developing financial education for farmers and for SMEs
Innovation	• Support for innovation, first in lending and then potentially for savings through technical assistance and training • Establishing an Innovation Fund for strategic cost-sharing for innovative products, delivery systems, etc.

Capacity building will need to recognise the needs of the implementing partners, and how the objectives of the implementing partners may be aligned with the project's goals.

The project will have financial specialists who will essentially be client managers and work together with the partners to expand outreach (either through SME lending or directly to farmers). At least one financial specialist will be dedicated to working with the SMEs alongside PRISMA. The financial specialists will draw upon short term consultants and technical assistance providers to develop tools to screen and diagnose potential implementers. The diagnosis will help define short and long term objectives and identify the existing gaps which prevent the implementers from achieving the objectives. MOUs and work plans will be designed around this. From these diagnoses, the training and technical assistance needs will be highlighted and the project will develop these in-house for a systematic (but still needs based) implementation, or will contract the services externally, as needed. Capacity building support for common capacity building needs will be developed and can be used with multiple partners. Where there are specialised and one-off needs, these can be contracted externally.

In addition to these tools and training, the project may develop and use a small **innovation fund** to help create a greater appetite among financial institutions to invest in innovations in systems, technology, products, etc. While some trainings and tools may be common to all

[42] These are themes identified in the AIP-Rural's Scoping Mission.

implementing partners, it is likely that the financial institutions and the SMEs may have different needs, but the project will seek to identify and build on common areas of interest.

5.3 Underlying principles of the delivery strategy

In order to make the most effective use of project resources, a number of principles will guide the project's delivery strategy. Although best practices of agriculture finance will be encouraged and promoted where possible, implementers must recognise that systemic change may only become evident after a certain period (time). For example, while the project will aim for systemic change in the provision of agriculture finance when working with individual PFIs, this may take some time to manifest. The project must, therefore, in the short run, build up a sufficient number of successful cases of value chain financing to demonstrate its value to both banks and their clients.

Table 10. Underlying Principles of the project's Delivery Strategy

Principles	Delivery Response
Complementary (to PRISMA) but not exclusive	The core objective of the project is to increase the volume and type of lending to small farmers. For some banks this is already a big step! If a PFI feels more comfortable financing, for example, a non-PRISMA agricultural sector, this will be acceptable as long as the outreach is to low income farmers in the AIP-Rural selected areas of eastern Indonesia.
Catalytic but not dogmatic	Dogmatic introductions of best practices or innovations into FIs, especially banks, usually meet with resistance. Best practices will be learned through a guided, iterative process, starting with small interventions and growing within the institution as trust and acceptance increases.
Synergistic - knowledge building	The target markets may be well known to PRISMA and other AIP-R projects. Synergies between both sets of projects will allow institutional clients to benefit from how the value chains work, who the actors are, what the key drivers are, etc.
Opportunistic – Finding the best partners and most attractive value chains to work with	A few key partnerships will be developed upfront to serve the most imminently attractive markets. Not all commodities or PRISMA interventions will require access to credit.
Maintenance of the "Chinese Wall" principle	The best credit decisions take place with full access to information and appropriate analysis. However, this needs to be independently verified. There should, therefore, be a clear division between the deal sourcing and the financing element. This is why the main element of the project should **NOT** be delivered through PRISMA.

5.4 Partner selection

The project will select supply side partners (i.e. PFIs), initially through a rapid diagnostic process. As the project is implemented, other potential PFIs may be identified and further assessed, as needed. A set of criteria for selecting PFIs is outlined in the table below (although it is anticipated that other criteria may be developed). The most important of these criteria will be the willingness of the PFI to participate.

Table 11. Selection Criteria for Partner Financial Institutions (PFIs)

Type of partner	Selection criteria
PFIs (Commercial banks, financial cooperatives (and other MFIs), BPRs)	• Institutions which have networks in areas covered by AIP-Rural. • Larger institutions preferred, but smaller ones may be easier to change and innovate. • Institutions should have agriculture finance as part of their growth strategies. • Demonstrated interest in serving smallholders – e.g. through their engagement with relevant SME market actors. • Other selection criteria: outreach potential, willingness to innovate, management capacity and interest.

It is not expected that all of the partners will be the same throughout the project. Some may be dropped due to lack of participation or results, and others may be added as the project's momentum and results become more evident. A demonstration effect will be important to attract new partners. In the initial stage, 5-6 financial institutions (meeting the criteria listed above) plus PRISMA will constitute the *initial* set of partners.[43]

The table below sets out the criteria for selecting the set of SMEs or larger agribusiness that might play the role in the delivery of financial (credit) services to smallholders – e.g. on behalf of the wholesale lender (bank).

Table 12. Selection criteria for participating SMEs and other value chain financing conduits

Type of partner	Selection criteria
SMEs and larger businesses in target value chains	• Willingness to act as a conduit for offering more accessible financial products to smallholders • Willingness to fully bear or to share in the liability for the loan, as evidenced, for example by his/her willingness and ability to pledge some assets to support the financing arrangement • Positive / strong track record in terms of real and expected returns for the business

Another set of partners may emerge if this type of financing proves to be effective and beneficial. This set of partners would be those that share similar objectives as the project's "systemic change" agenda. (These partners might, for example, include Bank Andara, MICRA, Perbarindo, and others that are interested in increasing financial access for smallholders.) Criteria for their inclusion will evolve as the project does, but the key criteria will be their ability to provide scale for the approach to value chain financing.

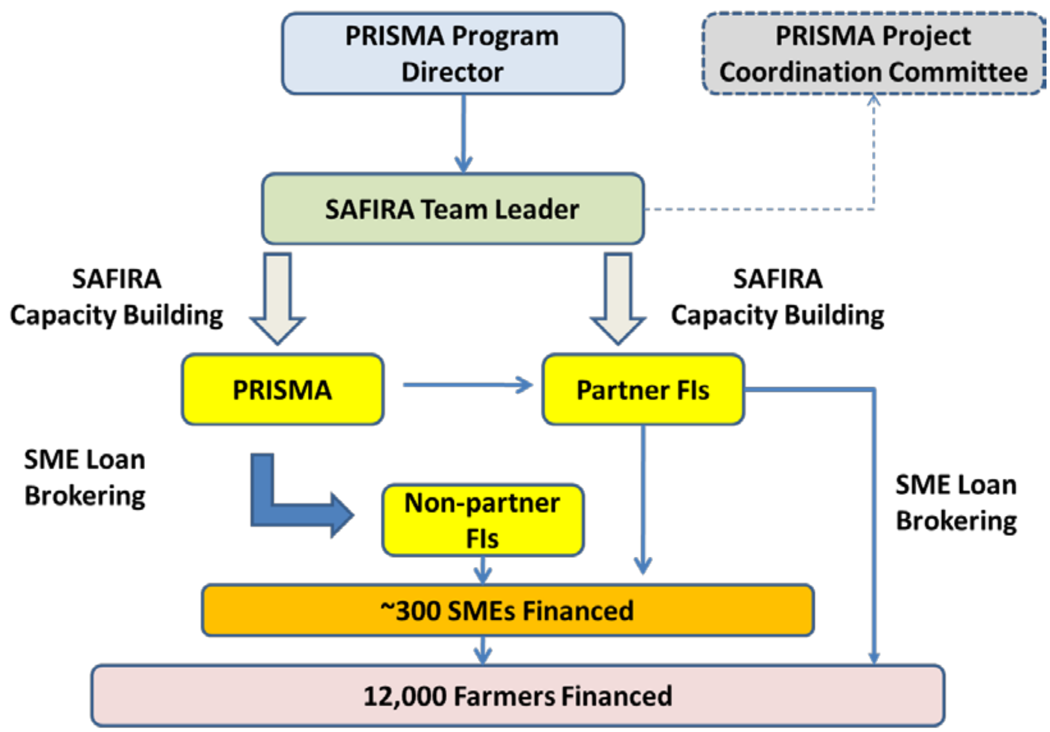
[43] Eventually other AIP-Rural projects in areas like irrigation and innovation may take advantage of SAFIRA's competence in the field of agricultural finance.

5.5 Proposed delivery structure

The delivery structure leverages the strengths of PRISMA and other AIP-Rural projects as advocates of the value chain actors' businesses, and the stand alone AIP-Rural SAFIRA project which will act as the resource for all activities that are related to access to finance.

The strategy is essentially two-pronged. Firstly, this will encompass working with the agribusinesses in AIP-Rural-supported value chains to enhance and improve financing of smallholders (by them). In the initial stages of project execution PRISMA will be the most relevant of these project. Secondly, work will also be carried out with the financial institutions to not only enhance and improve their direct finance of smallholders, but also to assist them in understanding and lending to agribusinesses (who are in turn on-lending to farmers).

Figure 6. Proposed Delivery Structure



There are multiple synergies in this strategy:

- PRISMA or other AIP-Rural projects and SAFIRA will be able to leverage off and complement each other's strengths.
- Knowledge and relationships with their clients (i.e. agribusinesses and financial institutions) will help to effectively reduce the level of collateralization needed (for financing).
- Support by AIP-Rural projects to selected agribusinesses in areas such as administration, markets and technical management, coupled with technical support through the SAFIRA project in credit management will help make the identified opportunities for financing more attractive to the financial institutions.

- Stronger businesses will be able to work with the financial institutions to provide a mutually beneficial working relationship, which may lead to some of the advantages of value chain finance, including acting as disbursement and/or collection agents, up to co-guarantors.

5.6 Exit strategy

The exit strategy for this project is implicit in the design. Strengthening existing institutions and helping them to capitalise on tools and products to increase their business and profitability are expected to create sustainable changes. Businesses will pursue advantageous profit-making opportunities. And as such, this project, as designed, is well poised for exit. However, the project should seek to help the institutions to systematise the ways it conducts business with SMEs and smallholders in the agriculture sector in order to ensure that interventions and their outcomes are indeed sustainable. Moreover, the project should seek to identify possible opportunities to involve other implementing partners – e.g. institutions engaged in the provision of relevant technical assistance (such as MICRA, the Rabobank Foundation, etc.), or those that are supporting the rural banking sector (e.g. Bank Andara, which provides wholesale lending to BPRs). This engagement with a broader set of partners will help to ensure sustainability and scale in the transfer of skills, experience and tools needed for developing agricultural finance on a larger scale.

5.7 Duration

The project is designed to run for 3.5 years, starting in June 2015 and finishing in December 2018. The project will be independently assessed through a mid-term review, towards the end of its second year of operations, and if the results are promising and it is deemed to be potentially cost effective, an add-on phase of two years can be anticipated.

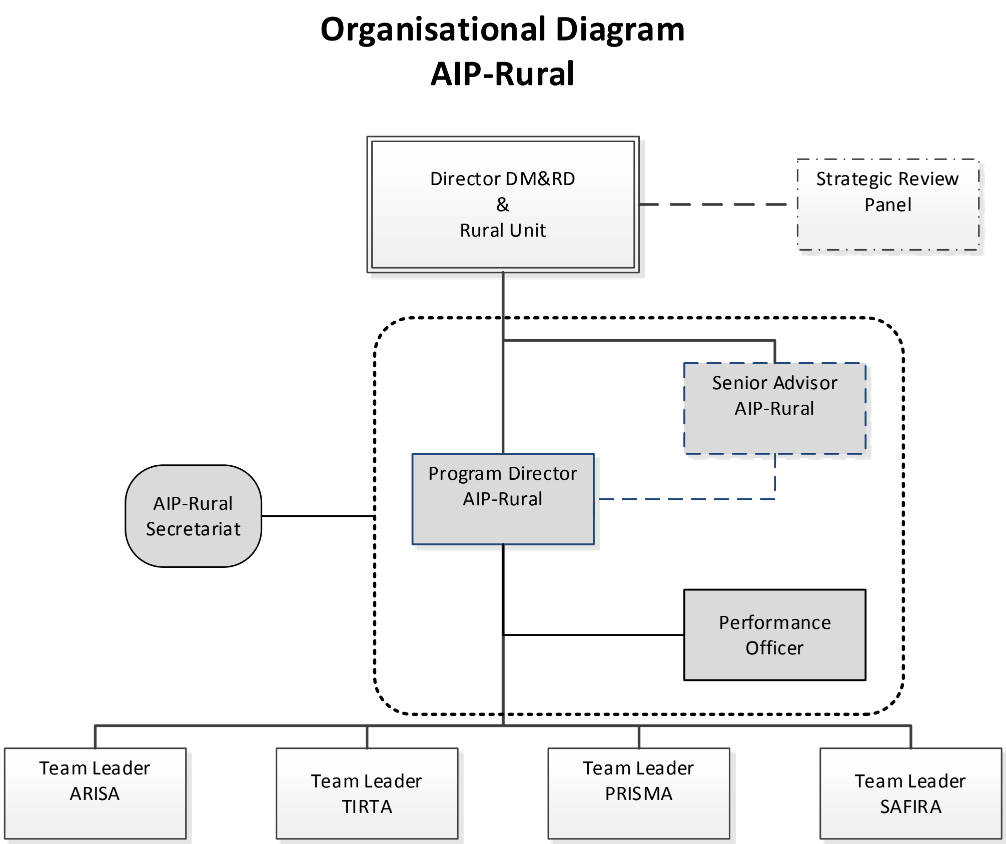
Sustainable business linkages between farmers, agribusinesses and financial institutions will be the hallmark of success for this project. It is expected that these will not follow a linear growth pattern, but will rather be exponential. The first year is intended to lay the groundwork, and provide demonstration relationships. Thereafter, the project should anticipate greater momentum in terms of being able to develop greater interests from multiple stakeholders. A Strategic Plan covering the 3.5 years will be prepared in month 6 of the project to identify outreach growth targets for the project duration.

5.8 Governance

AIP-Rural falls within the Disaster Management and Rural Development Section of DFAT-Indonesia. Under the guidance of this section's Director, the program will be led on a day to day basis by the AIP-Rural Program Director, supported by a Senior Advisor. These positions have been hired directly by DFAT specifically for the purposes of: (a) developing and completing the design for AIP-Rural; and (b) overseeing program implementation through projects which, for the most part, will be either delegated to other international or Australian public organisations or commissioned to managing contractors.

As presented in Figure 7 below, there are several sub-projects of AIP-Rural. AIP-PRISMA has already been designed and is already outsourced to a managing contractor. The other projects for agricultural research and innovation, financial services, and a tertiary irrigation project, are at various stages of scoping and design (as of November 2014). Decisions on the relative allocation of resources within these components will be driven by four criteria: pro-poor relevance, growth potential, scope for interventions, and value for money. To assist AIP-Rural management, a Strategic Review Panel (SRP) has been created. The purpose of the SRP is to provide advice on the coherence of the different projects under the program (PRISMA, TIRTA, ARISA and SAFIRA).

Figure 7. Governance of AIP-Rural



The governance structure of AIP-Rural is a DFAT construction. Each of its projects (Irrigation, Innovation, SAFIRA, and PRISMA) has or will have their own separate governance structures and GoI partners.

5.9 Management

Day-to-day guidance over the project will be provided by a SAFIRA Team Leader. This Team Leader will report directly to the Deputy Program Director of AIP-Rural. SAFIRA's management team will be co-located in Surabaya with three other projects of AIP-Rural (PRISMA, Innovation, and Irrigation Services), but will maintain its own reporting structure in order to preserve the integrity of the “Chinese Wall” principle. The tasks of the key personnel constituting the SAFIRA project management team are as follows.[44]

The **SAFIRA Team Leader** (ARF position) is responsible for strategic direction and decision making for the project including: oversight of project implementation; promoting and communicating the project to project stakeholders and carrying out relevant knowledge management activities (to support the aim of reaching scale through a wider range of implementing institutions); coordination with PRISMA and other AIP-Rural projects, with the implementing partners, and with counterparts at relevant government agencies; facilitation of investments for all interventions; and oversight of the project’s monitoring and evaluation system and reports. Over and above this management role, the SAFIRA Team Leader will also serve as the agricultural finance technical lead within the SAFIRA project management team and will supervise the work carried out with PFIs (e.g. through oversight of the activities undertaken by the Rural Finance Specialists to support credit administration and management of PFIs). Together with the Rural Finance Specialists, s/he will develop the selection criteria for partners (i.e. PFIs and value chain actors); manage the diagnostic process; and provide guidance to the delivery of capacity building to the agribusinesses. S/he will support Rural Finance Specialists in managing client relationships.

The **Rural Finance Specialists** (non-ARF positions) will report to the SAFIRA Team Leader. It is anticipated that the project will require 3-4 of these specialists and they may have either territorial, institutional or functional responsibilities. Their areas of technical expertise will cover working with smallholders, SME finance, financing specific commodities, etc. Each of these Rural Finance Specialists will manage a portfolio of up to 5-10 clients/interventions at any one time, and their responsibilities will include:

- working closely with PFIs to determine their capacity building requirements, the approach to providing technical assistance to PFIs, and delivering or facilitating the provision of technical assistance (e.g. through mentoring);
- working closely with other AIP-Rural project such as PRISMA, including delivering capacity building (training and technical assistance) to relevant project staff;
- identifying potential co-investors for the Innovation Fund;
- coordinating with the Results Measurement Manager in the development of the results chains for their interventions;
- preparing implementation plans and results measurement plans for each of their interventions; and
- compiling quarterly progress reports for each of their institutional clients and their results against the project's indicators.

The **Results Measurement Manager** reports to the SAFIRA Team Leader. S/he will be responsible for the monitoring and measurement of progress according to the project’s key performance indicators (see milestone table). In cooperation with the SAFIRA Team Leader and the Rural Finance Specialists will be expected to:

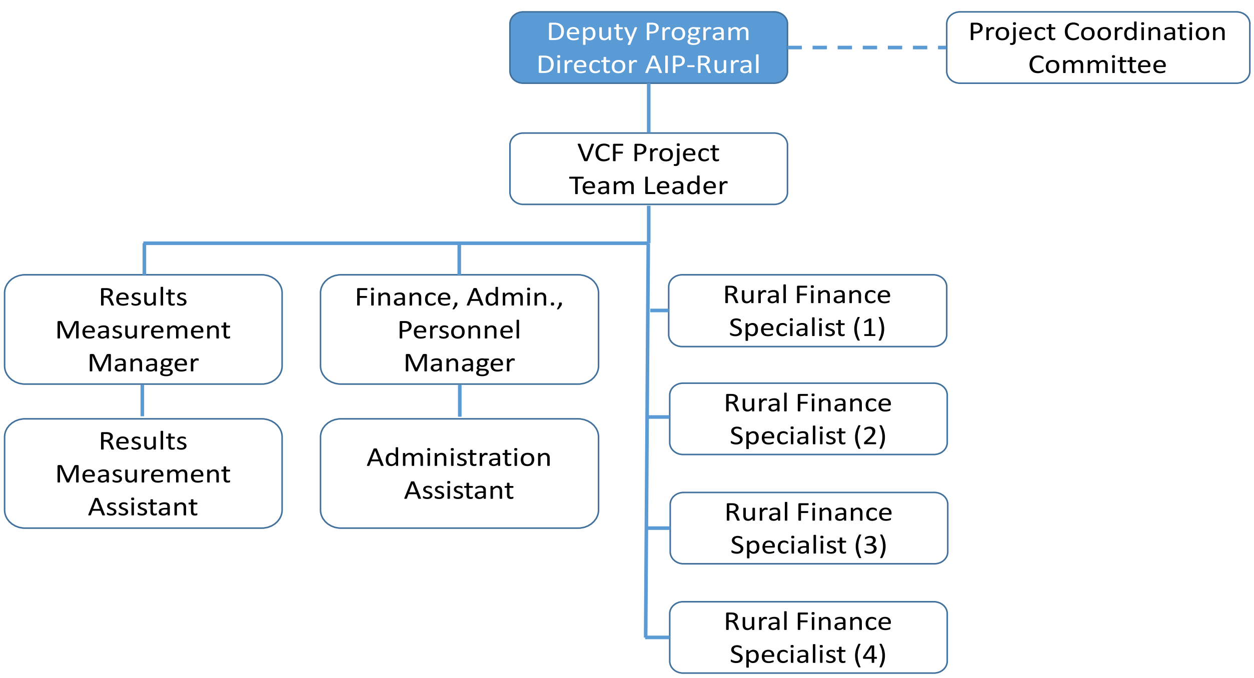
[44] The draft Terms of Reference for each of these posts are provided in Annex 3.

- develop with the Finance Specialists detailed results chains or causal models for each of the project's interventions in compliance with the DCED results measurement standard;
- identify the indicators for each of the critical links in the causal chain for each intervention;
- establish baselines for each of these indicators (e.g. by implementing small-scale surveys) and assess and measure progress against these indicators through follow-up surveys; and
- produce six-monthly progress reports, which will provide the aggregated qualitative and quantitative results.

The **Finance, Administration and Personnel Manager** reports to the SAFIRA Team Leader. S/he will be responsible for: establishing the projects financial systems (books of accounts, payment processes, etc.) and the preparation of budgets and reconciliations; project administration processes; procurement and contracting; and, the recruitment and administration related to project personnel.

The proposed management structure for the SAFIRA project is depicted in Figure 7 below:

Figure 8. Proposed SAFIRA Management Structure



5.10 Monitoring and Evaluation

The senior management of AIP-Rural have decided to use a common results measurement framework for all components of the program – i.e. the Donor Committee for Enterprise Development or DCED's Results Measurement Standard.[45] This framework sets out key guidelines for establishing a results measurement system for a project of this nature, and it identifies control points and compliance criteria for the implementation of the system to allow

[45] See: http://www.enterprise-development.org/page/measuring-and-reporting-results.

audit by a third party. This framework also sets out the principles for assessing systemic change (i.e. through replication, copying and crowding in). In addition to the compilation of impact, the system will enable simple value for money calculations to be made on each of the interventions, as well as for the project as a whole.

The draft Milestone Matrix and Theory of Change for this project is provided in Annex 1. The key performance indicators that will be assessed in this project and which are consistent with the overall Theory of Change for AIP-Rural will include:

	Key Performance Indicators (KPIs)
1	Poverty outreach (number of smallholder farmers, male and female)
2	Income impact (increase in net income) of smallholder farmers
3	Utilisation of loans and other financial services by targeted SMEs or farmers
4	Number of smallholder farmers who (indirectly or directly) gained access to financial services (short-term loans) from participating FIs
5	Number of local service providers (FIs and SMEs) who benefited from the interventions
6	Additional volume of lending to agriculture by partner FIs
7	Quality of agricultural loan portfolio of participating FIs (repayment rate or NPL ratio)
8	Number of innovations introduced to support FIs and SMEs to expand lending in agriculture
9	Number of intervention partners (both private and public sector)

Because the system will be common to all components of AIP-Rural, it is anticipated that, in addition to collaborating with other colleagues working on results measurement in other AIP-Rural projects, technical support will need to be made available to the Results Measurement Manager. This would include the use of short-term experts to help with the establishment and rolling out of the system.

The key milestones for the development of the results management system are as follows:

- By, at least, the end of month 6, a short term expert (contracted by the project) will have identified key areas of the project's results measurement system that require improvement before an audit.
- By the end of month 9, the project should be ready for an "in-place" audit and should have recruited an auditor to verify that the system complies with the DCED standard.
- By the end of month 24, the project should be ready for a full "in-use" audit so that key results are verified as plausible at least six months prior to the completion of the project.

In addition to estimating the net income changes of farmers attributable to new investments stimulated through the project's interventions, the project will monitor the volume and success of the PFIs' agricultural portfolio. Based on interviews of potential financial institutions during the design mission, it is clear that most of these FIs will not have this data readily available. Some of this information will therefore have to be estimated based on a combination of analysis of existing bank records and interviews with bank loan officers. The specific method of data collection will be tailored to each FI.

Two other layers of monitoring for this project should be considered.

- The first layer involves the Program Director of AIP-Rural, whose support can be enlisted in: a) effectively handling relations with the Government of Indonesia; b) in the coordination of SAFIRA with other AIP-Rural projects; and c) in dealing with the interface of the project with DFAT. The project can also draw on strategic guidance from the Senior Adviser in areas related to: a) market development and sustainability; b) systemic change; and c) results measurement systems.
- A second layer of monitoring is provided for this project in the form of AIP-Rural's Strategic Review Panel. This is a high level body that oversees the overall strategic allocation of AIP-Rural's resources and the assessment of the "value for money" for each of these project allocations.

Annex 1 Milestone Matrix

Desired Change	Month 1-6	Month 7-12	Month 13-18	Month 19-24	Month 25-30	Month 31-36	Month 37-42
Goal: Farmers from eastern Indonesia increase their incomes from agriculture[46]						At least 3,600 smallholders in eastern Indonesia increase their incomes from agriculture by at least 30%	At least 6,000 smallholders in eastern Indonesia increase their incomes from agriculture by at least 30%
Outcome at the Farm Level: Farmers' investments (seeds, fertilisers etc.) enhance their agricultural competitiveness[47]					At least 2,400 smallholders benefit (improve competitiveness) from the inputs etc. purchased from their loans	At least 3,600 smallholders benefit (improve competitiveness) from the inputs etc. purchased from their loans	At least 10,000 smallholders benefit (improve competitiveness) from the inputs etc. purchased from their loans
Intermediate and Systemic Outcome:[48] More smallholders receive loans through value chain actors or from banks with the support of VC actors[49]			1,500 smallholders are financed through project partners and intermediaries	3,500 smallholders are financed through project partners and intermediaries	5,000 smallholders are financed through project partners and intermediaries	9,000 smallholders are financed through project partners and intermediaries	12,000 smallholders are financed through project partners and intermediaries

46 Means of verification: Before and after or difference of difference surveys of agricultural households in project locations conducted by independent consultants.

47 Means of verification: Before and after or difference of difference surveys of loan recipient farmers in project locations conducted by independent consultants.

48 Systemic outcomes are related to changes that are both sustainable and likely to be extended without further project support.

49 Means of verification: Survey of participating FIs or SME or VC actors.

Desired Change	Month 1-6	Month 7-12	Month 13-18	Month 19-24	Month 25-30	Month 31-36	Month 37-42
Intermediate Outcome: More SMEs increase their lending to smallholder (number of SMEs and volume of their credit)[50]			SMEs financed by partner FIs on-lend at least $175,000 to 1,500 farmers	SMEs financed by partner FIs on-lend at least $300,000 to 2,000 farmers	SMEs financed by partner FIs on-lend at least $600,000 to 4,000 farmers	SMEs financed by partner FIs on-lend at least $1,050,000 to 7,000 farmers	
Intermediate and Systemic Outcome: Partner FIs increase their lending to SMEs in VCs (directly or through AIP-R projects) who then on-lend to farmers[51]			At least 75 SMEs in VCs have been financed by partner FIs and they are on-lending to farmers	At least 150 SMEs in VCs have been financed by partner FIs and they are on-lending to farmers	At least 200 SMEs in VCs have been financed by partner FIs and they are on-lending to farmers	At least 250 SMEs in VCs have been financed by partner FIs and they are on-lending to farmers	
Intermediate and Systemic Outcome: Partner FIs increase their lending to agriculture with the support of VC actors[52]		Participating FIs increase their volume of lending to agriculture by at least 2%	Participating FIs obtain a positive margin on their VC lending products	Participating FIs increase their volume of lending to agriculture by at least 5%	Participating FIs increase their volume of lending to agriculture by at least 10%	Participating FIs increase their volume of lending to agriculture by at least 15%	

[50] Means of verification: Survey of participating FIs or SME or VC actors.

[51] Means of verification: Survey of participating FIs or SME or VC actors.

[52] Means of verification: Survey of participating FIs s

Desired Change	Month 1-6	Month 7-12	Month 13-18	Month 19-24	Month 25-30	Month 31-36	Month 37-42
Intermediate and Systemic Outcome: Banks are lending more cost effectively either to SME VC actors or farmers[53]		NPL ratio for agricultural lending is less than 8%	NPL ratio for agricultural lending is less than 7%	NPL ratio for agricultural lending is less than 7%	NPL ratio for agricultural lending is less than 5%	NPL ratio for agricultural lending is less than 5%	
Intermediate Outcome: SMEs receiving credit from FIs increase their revenues[54]			At least 75 SMEs financed by partner FIs have increased their sales revenues by at least 15%	At least 150 SMEs financed by FIs have increased their sales revenues by at least 15%	At least 200 SMEs financed by FIs have increased their sales revenues by at least 15%	At least 250 SMEs financed by FIs have increased their sales revenues by at least 15%	
Output 1: Appropriate capacity building measures are provided to FI partners[55]	1 rapid selection to establish a portfolio of PFIs is conducted; 1 VC capacity needs assessment of PFIs is conducted; VC capacity building measures for FIs are designed	At least 2 VC capacity building events for participating FIs are conducted	At least 4 capacity building events for participating FIs are conducted	At least 5 VC capacity building events for at least participating FIs is conducted	At least 7 VC capacity building event for at least participating FIs is conducted	At least 8 VC capacity building event for at least participating FIs is conducted	At least 10 VC capacity building event for at least participating FIs is conducted

[53] Means of verification: Survey of participating FIs

[54] Means of verification: Survey of participating SMEs

[55] Capacity building measures and "capacity building events" are defined more broadly to include mentoring and coaching of PFI staff (not necessarily in the context of formal training). This type of training/capacity building is expected to be more effective in supporting institutional change within PFIs. It will also likely constitute the bulk of time spent by the VCF team (i.e. working closely with the PFIs).

Desired Change	Month 1-6	Month 7-12	Month 13-18	Month 19-24	Month 25-30	Month 31-36	Month 37-42
Output 2: Appropriate capacity building measures provided to AIP-R projects	1 VCF capacity needs assessment of PRISMA conducted; VCF capacity building measures for PRISMA are designed; 1 capacity building event for PRISMA is conducted	1 capacity building event for PRISMA/other AIP-R project is conducted		2 capacity building events for PRISMA/other AIP-R projects are conducted		3 capacity building events for PRISMA/other AIP-R projects are conducted	
Output 3: Capacity building provided to SMEs either through AIP-R projects or FIs	1 VCF capacity needs assessment of SMEs is conducted; VC capacity building measures for SMEs are designed; 1 pilot capacity building event for SMEs is conducted	2 capacity building events for SMEs are conducted	5 capacity building events for SMEs are conducted	10 capacity building events for SMEs are conducted	12 capacity building events for SMEs are conducted	15 capacity building events for SMEs are conducted	20 capacity building events for SMEs are conducted

Desired Change	Month 1-6	Month 7-12	Month 13-18	Month 19-24	Month 25-30	Month 31-36	Month 37-42
Management Outcomes: The project is governed and managed effectively		Managing contractors score at least 5 out of 6 on all 18 Contractor Performance Assessments criteria Managing contractor receives full outcome bonus		Managing contractors score at least 5 out of 6 on all 18 Contractor Performance Assessments criteria Managing contractor receives full outcome bonus		Managing contractors score at least 5 out of 6 on all 18 Contractor Performance Assessments criteria Managing contractor receives full outcome bonus	Managing contractors score at least 5 out of 6 on all 18 Contractor Performance Assessments criteria Managing contractor receives full outcome bonus
Output 4: The Project's Operations Manual (finance, grant approval process, personnel and administration systems) is completed and in use	A project operations manual is drafted and ready for use, defining internal procedures for partnerships, grant management and financial management An inception report, complying with AIP-Rural guidelines is completed and approved by AIP-Rural's Secretariat	An Annual Progress Report, and annual Work Plan complying with guidelines of AIP-Rural, is completed A credible plan with budgets, indicators and personnel demonstrates how and when project outcomes will be achieved over the project life is prepared and approved by the AIP-Rural Secretariat	A Semester Progress Report, complying with guidelines of AIP-Rural's Secretariat is completed	An Annual Progress Report, and annual Work Plan complying with guidelines of AIP-Rural, is completed	A Semester Progress Report, complying with guidelines of AIP-Rural's Secretariat is completed	An Annual Progress Report, and annual Work Plan complying with guidelines of AIP-Rural, is completed	An Activity Completion report, according to DFAT procedures is completed and accepted by AIP-Rural's Secretariat

Desired Change	Month 1-6	Month 7-12	Month 13-18	Month 19-24	Month 25-30	Month 31-36	Month 37-42
Output 5: The project's results measurement system is established and functioning		DCED accredited consultants have designed and installed a results measurement system compliant with the DCED standard for results measurement Baselines of farmer productivity and incomes are conducted for each of the supported schemes prior to their completion	The project passes a DCED results measurement audit Baselines of farmer productivity and incomes are conducted for each of the supported schemes prior to their completion	Baselines of farmer productivity and incomes are conducted for each of the supported schemes prior to their completion	Baselines of farmer productivity and incomes are conducted for each of the supported schemes prior to their completion	Follow up surveys of farmer productivity and incomes are conducted for each scheme 12 months after its completion to assess productivity and income changes	Follow up surveys of farmer productivity and incomes are conducted for each scheme 12 months after its completion to assess productivity and income changes
Output 6: The project and its offer are well perceived by its stakeholders	A project website with the project's offer is operational by month 6.	A communications strategy acceptable to AIP-Rural has been developed and supporting materials are developed and disseminated At least 2 public relations events with stakeholders are conducted		At least 4 public relations events with stakeholders are conducted (over the year)		At least 2 public relations events with stakeholders are conducted (over the year)	

Annex 2 Risk Management Matrix

Risks	Program Impact	L	C	R	Risk Mitigation	Responsibility
GoI's agricultural finance subsidy programs distort the effective operations of more sustainable market systems.	It becomes difficult to find private sector partners willing to work with the program and the effectiveness of interventions is diminished.	3	3	L	1. GoI subsidies are so infrequent and unpredictable and when allocated are so poorly implemented that the target group often recognises that the private sector option is more relevant and sustainable.	Project Team Leader Rural Finance Specialists
Local banks are not interested in the project's offer.	No smallholder farmers receive finance No SMEs receive finance	2	5	L	1. During the scoping for this project in 2013 and the design mission, existing and potential partner banks and SMEs were interviewed to assess their appetite for investment and were convinced that the interest from investors is high. 2. The project will rely on PRISMA's technical and business assessment to attract investors. 3. The project will also conduct a diagnostic on potential partner lenders to determine interest and capacity. 4. The project will also build the capacity of SMEs to engage with financial institutions. 5. The project will take a gradual approach to engaging financial institutions	Project Team Leader Rural Finance Specialists
There is interest among banks/FIs to participate and increase their lending to agriculture, but PFIs face limitations in accessing funds to support any significant increase in volumes of lending.	Volume of lending to the agriculture sector by the PFIs does not increase as significantly as targeted.	3	4	L	1. The project will seek to link PFIs with existing fund sources, where needed, to support any interest to expand lending. 2. The project will support PFIs in developing savings services to enable them to expand their deposit base.	Project Team Leader Rural Finance Specialists
Government creates debt forgiveness program	Banks will be more reluctant to lend in future.	1	5	L	1. SME on-lending will become more attractive	Rural Finance Specialists

Risks	Program Impact	L	C	R	Risk Mitigation	Responsibility
Dramatic weather or environmental events damage significantly portfolios	Banks will be more reluctant to lend in future.	2	3	L	1. SMEs will be better informed of potential risks (even before they materialise), and can undertake the necessary measures to prevent further losses – with the support of programs like PRISMA. 2. In the event of dramatic weather or environmental events that significantly affect production, some SMEs may be in a better position to continue paying back loans (e.g. given their other income sources and pre-existing asset levels). There is also greater scope to consider measures other than completely writing off loans (e.g. to restructure or refinance loans in order to improve or restore liquidity and rehabilitate affected SMEs so that they can continue operating and service debt obligations).	Rural Finance Specialists
Smallholders and SMEs show little interest in receiving finance (e.g. given a high level of mistrust towards PFIs).	Few applications for loans are received	1	5	L	1. The project will invest in financial education for target clientele. The content of this financial education will show where accessing credit is beneficial, to support increased investment that can lead to higher incomes. The financial education will be guided by principles of responsible borrowing. 2. New financial products will be developed to better meet the requirements of smallholders.	Project Team Leader
Poor performance by the managing contractor	A large portion of the budget for AIP-Rural is unspent by late 2017.	2	4	L	1. Quarterly assessments of the managing contractor in the first year of operations	DFAT SA DFAT DPD

Legend: L=Likelihood, (5 = almost certain, 4 = likely, 3 = possible, 2 = unlikely, 1 = rare); C = Consequence (5 = severe, 4 = major, 3 = moderate, 2 = minor, 1 = negligible) R= Risk Level (E = extreme, H = high, M = medium, L = low)

Annex 3 Proposed Job Descriptions

Position Title: SAFIRA Finance Team Leader (ARF Level 3 or 4, Discipline Group D)

Duty Station: Surabaya

Duration: Three and a half years

Background:

DFAT has a long history of rural development in Indonesia. There have been two main predecessors to AIPD-Rural: ANTARA (2005-2010) with a budget of $30 million for five years in NTT province; and, SADI (2006-2010) also with a budget of $30 million for 4 years for NTT, NTB and Sulawesi provinces. DFAT's most recent program, AIPD-Rural, has been designed as a 10 year program ending in June 2022. The program's 1st Phase, ending in June 2017, has a budget of $AUD 112 million and is aimed at increasing, by at least 30%, the agricultural incomes of 300,000 small farmers living in 5 provinces of eastern Indonesia: NTT, NTB, East Java, Papua and West Papua.

The Theory of Change underpinning AIPD-Rural is that agriculture is three times more efficient in reducing poverty compared to other major economic sectors. And if more farmers understand the impact of, and have access to, improved assets, technology, inputs and services, they will increase their competitiveness and incomes. The key strategies that AIPD-Rural will use to improve access to these assets, technologies, inputs and services are:

- To identify commodity sectors like (maize, beef, cocoa etc.) or cross cutting sectors (mechanisation, irrigation, technology, finance), that are most relevant to generating pro-poor outcomes in the selected provinces; and then,
- To analyse these sectors, to assess the systemic or binding constraints that are most important to increased farm incomes, and then
- To design 80+ sustainable and market driven interventions which generate "scaleable" impact and outreach to small farmers for whom these sectors relevant in these provinces.

The program will consist of several sub-projects:

- PRISMA, commissioned in November 2013, will concentrate its interventions mostly in selected commodity sectors,
- An agricultural research and innovation project (ARISA) will improve farmer access to new processes and technologies, and
- A tertiary irrigation project (TIRTA) to boost agricultural productivity through improving farmer access to water, and

- A financial Inclusion project (SAFIRA) will work though financial institutions to address small farmer access to credit and other financial services.

The core rationale for this project is to leverage the usually intangible or limited assets that smallholders do have, including their long term relationships with their suppliers and buyers, to access small credits for small investments.

Duties: Under the direction of the Deputy Program Director of AIPD-Rural, the SAFIRA Team Leader will be responsible for the day to day management of the project. The Team Leader will be supported by 3-4 Finance Specialists, a Finance, Administration and Personnel Manager, a Results Measurement Manager and other support staff. Specifically the Team Leader will be responsible for:

- The strategic orientation of the project to ensure that it is in line with the goals and methodologies of AIPD-Rural. This will mean that decision making on all interventions with be made against the criteria of: potential outreach, impact on farmer incomes, sustainability and value for money.
- Overseeing the establishment and functioning of the project's results measurement system. This will entail: the preparation of a systems manual with guidelines and templates; the training of project staff, the quality control of all intervention reports and the aggregation of short and long term indicators.
- Based on the above mentioned results measurement system to assess progress on key short term indicators such as numbers of clients financed, numbers of SMEs financed, etc. and, if needed, take appropriate and strategic remedial action.
- Liaising with GoI officials at both the national and district levels to introduce the project's aim and methodologies and establish acceptable intervention selection criteria.
- Establish and monitor project communication strategies including: the marketing of the project and its offer to financial institutions, agribusinesses, and public officials; assessing the attendance of appropriate stakeholders at project events; validating the nature of feedback from key stakeholders on the substance and clarity of the project's message.
- Oversee, with support from the Administration, Finance and Personnel Manager, the quality assurance of recruitment, contracting, financial management and budgeting, and administrative support systems and activities.
- Prepare in collaboration with the PD of AIP-Rural, all project related planning and reporting documents, such as: the Inception Report, 4 year Strategic Plan, Annual Implementation Plans, Risk Assessments, etc. to ensure that they are in line with the AIP-R's overall planning and reporting system.
- Over and above this management role, the SAFIRA Team Leader will also serve as the agricultural finance technical lead within the SAFIRA project management team and will supervise the work carried out with PFIs (e.g. through oversight of the

activities undertaken by the Rural Finance Specialists to support credit administration and management of PFIs). Together with the Rural Finance Specialists, s/he will develop the selection criteria for partners (i.e. PFIs and value chain actors); manage the diagnostic process; and provide guidance to the delivery of capacity building to PFIs, SMEs / agribusinesses and to the PRISMA team. S/he will support Rural Finance Specialists in managing client relationships.

Qualifications:

Essential:

- 15 or more year's professional experience in agriculture finance, with an emphasis on value chain finance;
- Demonstrated professional leadership and ability to lead a team of professionals and ability to coach and mentor more junior staff;
- Experience working with financial service providers (e.g. in product development, capacity building, and/or credit administration);
- At least 3 years' experience in a management position, ideally in an agricultural finance development project or projects involving capacity development of financial institutions;
- Excellent verbal and written communication skills in English and a working knowledge of Bahasa Indonesia.

Desirable:

- 5 or more years of professional experience developing financial products, tools and providing training in value chain finance.
- Familiarity with one or more of the agri-business sectors or value chains;
- Familiarity with international donor systems and requirements;
- Experience working with the Indonesian financial sector, including understanding of the policies and regulations surrounding the delivery of small-scale financial services in the country.

Post Title: Results Measurement Manager (Non ARF)

Duty Station: Surabaya

Duration: Three and a half years

Background:

DFAT has a long history of rural development in Indonesia. There have been two main predecessors to AIPD-Rural: ANTARA (2005-2010) with a budget of $30 million for five years in NTT province; and, SADI (2006-2010) also with a budget of $30 million for 4 years for NTT, NTB and Sulawesi provinces. DFAT's most recent program, AIPD-Rural, has been designed as a 10 year program ending in June 2022. The program's 1st Phase, ending in June 2017, has a budget of $AUD 112 million and is aimed at increasing, by at least 30%, the agricultural incomes of 300,000 small farmers living in 5 provinces of eastern Indonesia: NTT, NTB, East Java, Papua and West Papua.

The Theory of Change underpinning AIPD-Rural is that agriculture is three times more efficient in reducing poverty compared to other major economic sectors. And if more farmers understand the impact of, and have access to, improved assets, technology, inputs and services, they will increase their competitiveness and incomes. The key strategies that AIPD-Rural will use to improve access to these assets, technologies, inputs and services are:

- To identify commodity sectors like (maize, beef, cocoa etc.) or cross cutting sectors (mechanisation, irrigation, technology, finance), that are most relevant to generating pro-poor outcomes in the selected provinces; and then,
- To analyse these sectors, to assess the systemic or binding constraints that are most important to increased farm incomes, and then
- To design 80+ sustainable and market driven interventions which generate "scaleable" impact and outreach to small farmers for whom these sectors relevant in these provinces.

The program will consist of several sub-projects:

- PRISMA, commissioned in November 2013, will concentrate its interventions mostly in selected commodity sectors,
- An agricultural research and innovation project (ARISA) will improve farmer access to new processes and technologies, and
- A tertiary irrigation project (TIRTA) to boost agricultural productivity through improving farmer access to water, and
- A financial Inclusion project (SAFIRA) will work though micro finance organisations to address small farmer access to credit and micro-insurance.

The core rationale for this project is to leverage the usually intangible or limited assets that smallholders do have, including their long term relationships with their suppliers and buyers, to access small credits for small investments.

Duties: Under the direction of the SAFIRA Team Leader, the Results Measurement Manager will be responsible for the implementation of the project's results measurement system. Specifically this person will be responsible for:

- Introducing an effective Results Measurement System (see Results Measurement in AIPD-Rural). This will include a results measurement manual, a capacity building program, and assessment and remedial action processes in line with DFAT guidelines http://aid.dfat.gov.au/publications/Pages/dfat-monitoring-evaluation-standards.aspx;
- Clearing all intervention concept notes before they are submitted for management approval to ensure that they meet the compliance criteria of the project on impact, outreach, social inclusion, gender, and environment, value for money and the DCED Standard for Results Measurement;
- Overseeing regular capacity building measures of project staff to ensure that all implementation staff members are familiar with good practices related to assessing impact and measuring attribution;
- Preparing quarterly reports for management on outreach and other indicators attained by implementing partners;
- Guiding implementation personnel in the preparation of results measurement plans and the identification of attribution strategies with a view to the appropriate use of survey instruments, the commissioning of surveys and research, the processing of the results of these surveys and the identification of remedial action;
- Overseeing the process leading to the project's compliance with the DCED Standard for Results Measurement, including the formulation of relevant documentation, the organisation of mock audits and the eventual project audit by a certified DCED Results Measurement auditor;
- In collaboration with the Team Leader, preparing: public presentations, case studies, articles and materials for the project website on project impact and how impact is assessed and used for decision-making in the Project.

Qualifications:

Essential:

- 5 or more year's professional experience in monitoring and evaluating development projects, including the use of quantitative and qualitative research methods;
- Experience developing monitoring systems for development projects;
- A sound understanding of statistics and quantitative measurement through a variety of survey instruments and techniques in analysis;

- Excellent verbal and written communication skills;
- Fluency in speaking, reading and writing in English and Bahasa Indonesia.

Desirable:

- Familiarity with the DECD standard on impact monitoring for private sector development projects;
- Familiarity with international donor systems and requirements;
- Experience working in the financial sector, preferably in agriculture finance.

Position Title: Finance, Administration and Personnel Manager (non ARF)

Duty Station: Surabaya

Duration: Three and a half years

Background:

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Duties: Under the direction of the SAFIRA Team Leader, the Finance, Administration and Personnel Manager will be responsible for project operations. Specifically this person will be responsible for:

- Project financial management including: establishing the project's chart of accounts; the preparation of monthly financial statements; the reconciliation of bank accounts; the preparation of budgets; financial reporting in compliance with DFAT standards; clearing payments; and the training of staff in terms of the necessary financial reporting systems and procedures.
- Administration including: the development of contracting templates for short term consultants, local employees and grants (when appropriate) to project stakeholders; the execution of all above mentioned contracts including compliance with contractual milestones and deliverables.
- Personnel management including: staff recruitment, selection and salary negotiations, monthly staff payments, and ensuring performance assessments are regularly conducted.

Qualifications:

Essential:

- Relevant bachelor's degree or similar qualification in business or accounting;
- A minimum of 7 years of relevant work experience;
- A minimum 2 years of people management experience, including setting clear performance objectives, managing for results, giving and receiving feedback, performance evaluation and mentoring and coaching consultants/employees;
- Good communications skills in English and Bahasa.

Desirable:

- Minimum 3 years' experience at a management level for similar projects, or projects of another bilateral donor;
- Knowledge of Indonesian public sector and experience working with government agencies;
- Experience working on Rural Development or Development Finance projects or initiatives.

Position Title: Rural Finance Specialists (Non ARF)

Duty Station: Surabaya

Duration: Three and a half years

Background:

DFAT has a long history of rural development in Indonesia. There have been two main predecessors to AIPD-Rural: ANTARA (2005-2010) with a budget of $30 million for five years in NTT province; and, SADI (2006-2010) also with a budget of $30 million for 4 years for NTT, NTB and Sulawesi provinces. DFAT's most recent program, AIPD-Rural, has been designed as a 10 year program ending in June 2022. The program's 1st Phase, ending in June 2017, has a budget of $AUD 112 million and is aimed at increasing, by at least 30%, the agricultural incomes of 300,000 small farmers living in 5 provinces of eastern Indonesia: NTT, NTB, East Java, Papua and West Papua.

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The core rationale for this project is to leverage the usually intangible or limited assets that smallholders do have, including their long term relationships with their suppliers and buyers, to access small credits for small investments.

Duties: Under the direction of the SAFIRA Team Leader, the Rural Finance Specialists will be responsible for the design and management of potential and on-going implementing partners in eastern Indonesia, under the SAFIRA project. It is envisaged that up to four (4) Rural Finance Specialists will work under the project. These specialists will specifically be responsible for:

- Establishing contacts and maintaining and building relationships with potential implementing partners such as financial institutions and SMEs/agribusinesses;
- Implementing diagnostic and needs assessments to develop appropriate interventions to support partner financial institutions and SMEs/agribusinesses;
- After implementing partners have been accepted and after project approval, the preparation of MOUs and related work plans laying out the sequencing of critical activities as well as identifying what instruments should be used and when they should be applied in the measurement of key results for each of the implementing partners under management;
- Overall responsibility for the delivery of results from his/her portfolio of implementing partners under management;
- Overall responsibility for the delivery of capacity building and technical assistance to implementation partners, whether through the provision of training / capacity building events involving contracted short term experts, facilitating the participation of PFIs in appropriate capacity building events, or through close mentoring / coaching of PFI staff;
- The facilitation of agreements between SMEs and local banks and/or other financial institutions;
- Liaison, as and when required, between SAFIRA and other AIP-R projects in the structuring of relevant financial products.
- Provide inputs into the preparation of quarterly progress reports according to a format to be developed by project management, and assist the Results Measurement Manager in the collection of data from implementing partners.

Qualifications:

Essential:

- A degree in business, finance, agronomy, and/or other project related disciplines;
- Relevant experience working with the financial services industry in Indonesia, preferably in the areas of credit management, product development, and/or capacity building;
- Strong understanding of the agriculture environment in Indonesia;

- Excellent communication and relationship management skills;
- Excellent communication skills (fluency in speaking, writing and reading) in Bahasa Indonesia and English.

Desirable:

- Work experience in the project target area (in Eastern Indonesia);
- Existing networks among public and private stakeholders in East Java, NTT and NTB provinces;
- Work experience in value chain finance and with SMEs/agribusinesses.

Annex 4 Government credit programs for promotion of agriculture

	Kredit Ketahanan Pangandan 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 (Target beneficiaries)	1. Paddy, maize, soybeans, sweet potato, sugar cane, cassava, peanuts, buckwheat, chilly, shallot, ginger, potatoes, bananas 2. Livestock: cow, chicken, duck, quail 3. Fisheries(including seaweeds) 4. Procurement and rejuvenation of equipment for above-mentioned sectors	Expansion and rejuvenation for palm oil, rubber, and cacao	Cow breeding	Productive enterprises
Credit Limit	1. For farmer and fisherman; maximum IDR 50 millions 2. For cooperatives for the purpose of procurement of staples; maximum IDR 500 millions 3. For cooperatives for procurement and rejuvenation of equipment; maximum IDR 500 millions	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, 7% p.a; and for other crops 6% p.a	For palm oil and cacao, 7% p.a; and for rubber is 6% p.a	5% p.a	KUR Micro 22% p.a KUR Retail 14% p.a

	Kredit Ketahanan Pangandan Energi (KKPE)	Kredit Pengembangan Energi Nabati dan Revitalisasi Perkebunan (KPENRP)	Kredit Usaha Pembibitan Sapi (KUPS)	Kredit Usaha Rakyat (KUR)
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
Implementing Banks	BRI, BNI, Bank Mandiri, Bank Bukopin, BCA, Bank Agroniaga, BII, Bank CIMBNiaga, Bank ArthaGraha, BPD Sumatra Utara, BPD Sumatra Barat, BPD Sumatra Selatan, BPD Jawa Barat, BPD Jawa Tengah, BPD DIY, BPD JawaTimur, BPD Bali, BPD Sulawesi Selatan, BPD Kalimantan Selatan, BPD Papua, BPD Riau	BRI, BNI, Bank Mandiri, Bank Bukopin, Bank Agroniaga, BII, Bank CIMBNiaga, Bank ArthaGraha, Bank Mega, BPD Sumatra Utara, BPD Sumatra Barat, BPD Sumatra Selatan, BPD Aceh, BPD Kalimantan Timur, BPD Papua, BPD Riau	BRI, BNI, Bank Bukopin, BPD JawaTimur, BPD Jawa Tengah, BPD DIY, BPD Sumatra Barat, BPD Bali	BRI, Bank Mandiri, BNI, BTN, Bank Bukopin, Bank SyariahMandiri, Bank DKI, BPD Sumatra Barat, BPD Jawa Barat, BPD Jawa Tengah, BPD DIY, BPD JawaTimur, 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, JawaTimur, 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	JawaTimur, NTB, DIY (Yogyakarta), Jawa Tengah	All provinces

	Kredit Ketahanan Pangandan Energi (KKPE)	Kredit Pengembangan Energi Nabati dan Revitalisasi Perkebunan (KPENRP)	Kredit Usaha Pembibitan Sapi (KUPS)	Kredit Usaha Rakyat (KUR)
Issues raised[56]	The loan is channelled through farmers group and/or cooperatives. Some of the issues encountered by KKPE include: (a) difficulties by banks in selecting creditworthy loan applicants; (b) targeted borrowers are unable to provide the collateral required by banks; (c) KKPE is restricted to being channelled only through farmer groups and/or cooperatives; and (d) KKPE cannot be used to finance the acquisition of fishery equipment.	Some of the problems encountered by KPEN-RP include: (a) dealing with the perceived negative impacts of palm oil plantation to the environment; (b) the number of companies that can become “nucleus companies” are limited; (c) the lack of coordination between implementing banks and related local agencies; and (d) the lack of field staff to assist the (farmer) groups being targeted.	Some of the issues encountered by KUPS include: (a) administration requirements of banks to access KUPS is considered very complicated; (b) the payment of subsidy every 6 months is not considered favourable to implementing banks (a suggestion was made to make the subsidy payment every 3 months).	

56 See: http://www.bi.go.id/id/umkm/kredit/skim/Contents/Default.aspx#KKPE, and http://peluangusaha.kontan.co.id/news/tunggakan-kredit-dana-bergulir-lpdb-kumkm-tinggi.

Annex 5 Distribution of FI branches and outlets across provinces

Provinces		No. of BPR branches/outlets (as of July 2014)			No. of cooperatives (as of June 2014)			No. of Saving & Lending Cooperatives (as of March 2005)
		Conventional	*Syariah*	*Total*	*Total*	*Active*	*Not Active*	
1	Nanggroe Aceh Darussalam	5	10	15	7,720	3,913	3,807	1,072
2	Sumatera Utara	54	8	62	11,754	6,678	5,076	1,264
3	Sumatera Barat	95	7	102	3,812	2,609	1,203	1,300
4	Riau	33	3	36	5,144	3,112	2,032	1,017
5	Jambi	19	0	19	3,566	2,284	1,282	640
6	Sumatera Selatan	19	1	20	5,790	4,227	1,563	621
7	Bengkulu	4	2	6	2,146	1,624	522	170
8	Lampung	26	8	34	4,698	2,888	1,810	453
9	Kepulauan Bangka Belitung	3	1	4	1,030	815	215	400
10	Kepulauan Riau	40	1	41	2,034	1,173	861	n/a
11	DKI Jakarta	25	2	27	7,886	5,603	2,283	3,826
12	Jawa Barat	300	28	328	25,457	14,483	10,974	5,545
13	Jawa Tengah	251	25	276	27,499	22,188	5,311	1,254
14	D.I. Yogyakarta	54	11	65	2,733	2,176	557	4,939
15	Jawa Timur	325	31	356	30,741	27,031	3,710	867
16	Banten	65	8	73	6,550	4,578	1,972	6,080
17	Bali	137	1	138	4,691	4,236	455	1,046
18	Nusa Tenggara Barat	29	3	32	3,851	2,627	1,224	714
19	Nusa Tenggara Timur	11	0	11	2,723	2,411	312	654
20	Kalimantan Barat	20	0	20	4,670	2,765	1,905	288
21	Kalimantan Tengah	4	1	5	2,937	2,186	751	522
22	Kalimantan Selatan	25	1	26	2,537	1,668	869	507

Provinces		No. of BPR branches/outlets (as of July 2014)			No. of cooperatives (as of June 2014)			No. of Saving & Lending Cooperatives (as of March 2005)
		Conventional	*Syariah*	*Total*	*Total*	*Active*	*Not Active*	
23	Kalimantan Timur	14	1	15	5,919	3,950	1,969	607
24	Sulawesi Utara	17	0	17	6,010	3,445	2,565	106
25	Sulawesi Tengah	9	0	9	2,143	1,350	793	473
26	Sulawesi Selatan	23	8	31	8,230	5,624	2,606	358
27	Sulawesi Tenggara	12	0	12	3,290	2,484	806	524
28	Gorontalo	4	0	4	1,101	706	395	1,938
29	Sulawesi Barat	1	0	1	937	705	232	n/a
30	Maluku	2	0	2	3,095	2,238	857	296
31	Maluku Utara	2	1	3	2,816	1,676	1,140	101
32	Papua	6	1	7	1,388	777	611	501
33	Papua Barat	1	0	1	1,390	610	780	n/a
	Total	1,635	163	1,798	206,288	144,839	61,449	38,083

Sources of data: Bank Indonesia and Ministry of Cooperative & SMEs.

Notes: According to the OJK, there are 83 commercial banks (private and state-owned), 26 BPDs (Provincial Government Bank), and 10 foreign banks registered and operating in Indonesia. The distribution of commercial bank branches according to province is, however, not available.