Agriculture Financing
Business Model

Bundled Loan, Advisory and Crop Insurance Services for Corn Farmers

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Background
Corn is one of the strategic commodity crops of the Indonesian Government, with the government targeting corn self-sufficiency within the next three years. According to the results of the 2013 Indonesian Agricultural Census, of the approximately 25 million farming households, around 5.1 million households are farming corn 5.1 million (20%). The results of a baseline study by the AgriFin Mobile program (2012) and studies conducted by other institutions show that corn farmers face three main constraints in expanding their agricultural businesses: limited access to technology, poor agricultural infrastructure, and obstacles to working capital. Studies have shown that these constraints limit the productivity of corn crops by 50 percent and in 2014, Indonesia had to import 3.6 million tons of the corn needed for the livestock feed industry.
Mercy Corps Indonesia is a member of PISAgro (www.pisagro.org) and a participant in the Rice, Corn and Agrifinance Working Groups (WG). In line with the strategy of the Ministry of Agriculture, to achieve domestic self-sufficiency in corn production, several regions outside the island of Java were designated as corn production centres. Based on the results of preliminary discussions, Syngenta Indonesia, Bank Andara, and the AgrifIn Mobile Programme conducted an assessment on corn farmers’ demand for financial services and performed a GAP analysis in July 2014 in four corn production centre subdistricts in Dompu and Bima Districts. The assessment results showed a need for capital before the planting season started to purchase production inputs and existing financing facilities were not meeting this demand. The lack of access to capital pushed farmers to informal sources of credit, such as agriculture input dealers and local traders, who were willing to offer the corn farmers loans, but at higher interest rates. Furthermore, the assessments showed farmers also needed access to technology and guidance to improve crop productivity. Based on these findings, Mercy Corps Indonesia, Syngenta Indonesia and Bank Andara began developing a product that would meet these farmers needs.

**Products/Services**

One of the key findings from the research was, corn farmers’ need Rp 8 million/hectare (USD 615/hectare) working capital per planting season to cover their initial production cost. Bank Andara provided credit to BPR Pesisir Akbar, and BPR Pesisir Akbar disburse loans to individual farmers based on their creditworthiness and the area of land submitted by the farmer. So that the loan disbursement can support an increase in crop productivity of at least 20 percent, the value of the credit per hectare was given in the form of vouchers for production inputs and to cover labor costs for land preparation and harvesting. In November to mid-December 2014 (pilot phase), 198 farmers covering 385 hectares signed a credit agreement with BPR Pesisir Akbar. The term of the farmers’ loan is eight months, and the loan principal was paid from the proceeds of the crops sold by the farmers to local grain traders, who are participating in the project.
Each loan is insured against drought and cyclone. (see figure 1, business model of Sumbawa Districts).

For farmers who do not sell their crops to a grain trader partnering with the project, the farmers will provide cash funds to the grain traders and the grain traders will make the payment to BPR Pesisir, or the farmers can also make payments directly to BPR Pesisir’s field personnel. Farmers pay a flat interest rate of 1.8%/month.

Model for Corn Farmers in Sumbawa Island. The detailed roles and responsibilities of the different partners in this figure are described in the table below.
The credit agreements with BPR Pesisir Akbar provides farmers with:

- Microfinance loan of Rp 8 million/hectare (USD 615/hectare), in the form of a package of agricultural input products (seed, pesticide, herbicide, fungicide) and cash to buy fertilizer, pay for labour for land preparation and harvest, agricultural insurance premiums, and credit administration fees
- Financial literacy module and training
- Assistance from agronomists on Syngenta’s Start It Right (Awali Dengan Benar [ADB])
- Market access to participating project grain traders
- Agricultural insurance if the farmer experiences crop failure of at least 75%, due to drought or cyclone (availability began in the second phase)
- Access to an interactive SMS based information service: farmers can send questions and reports on crop conditions to receive customized answers and guidance
- Loan officers and Syngenta representatives visit farmer groups to distribute agricultural inputs and sign credit agreements due to the remote location of many of the farmers
- Since the pilot of 198 farmers covering 385 hectares in 2014, the loan product has expanded to 805 farmers covering 1,546 hectares in 2017
**Partners**

The below table summarizes the roles and responsibilities of the partners involved in delivering the products and services to the farmers.

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<th>Partners</th>
<th>Roles and Responsibilities</th>
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| Bank Andara  | • Developed loan product for corn farmers that will be carried out through executing partners, such as BPR Pesisir Akbar  
• Loans funds to rural banks, such as BPR Pesisir Akbar, to be used to provide microfinance loan |
| Syngenta     | • Determines the composition and volume of the agriculture inputs that will be included in the credit agreement  
• Appoints a Syngenta retailer in both Bima and Dompu Districts, to distribute inputs to participating farmers  
• Provides information on Start it Right to farmers/farmer groups, either in person or through mobile devices  
• Provides agronomists to conduct Start It Right trainings and provide direct assistance in production for farmers who have outstanding loans  
• Prepares the assistance schedule for agronomists to meet with farmer/farmer group that received a loan from BPR Pesisir Akbar;  
• Records corn growth data (30 day after planting (DAP), 90 DAP) using a mobile Android based data collection application  
• Uses the Syngenta platform to send the SMS Blast on the Start it Right platform or other information related to loan, harvest loss insurance and financial education to the corn farmers’ mobiles |
**Bank Perkreditan Rakyat (BPR) Pesisir Akbar (Rural Bank)**

- Provides loans to farmers with a maximum value of Rp 8,000,000/hectare over a term of eight months. The loan is disbursed in the form of vouchers for production inputs (seed, herbicide, fungicide, pesticide) and in cash to cover costs associated with land preparation, harvesting, crop insurance, and loan administration.
- Carries out assessment of farmer credit worthiness in line with principles of prudence as specified by the banking sector regulator.
- Validates the administrative requirements submitted by the farmer groups/farmers through local grain trader partners.
- Publicizes the loan product and administrative fees that must be paid by farmers.
- Bank field staff provide assistance to farmers.
- Coordinates with grain traders, heads of farmer groups and the Syngenta field workers for monitoring activities.
- Repays loan to Bank Andara in accordance with the agreed Credit Agreement.
- Prints the harvest loss insurance policies issued by Asuransi Central Asia and share them with loan recipients.
- Enters the profile/information of corn farmers and land location using the mobile Android based data collection application.

**ACA Insurance**

- Provides a microinsurance product in case of crop failure due to extreme weather, such as cyclones or drought.
- Obtained approval from Financial Services Authority to distribute a microinsurance product for corn farmers in Bima and Dompu Districts.
- Provides training to field personnel of Syngenta and BPR Pesisir Akbar on the crop failure insurance product and other information needed by farmers to submit claims.
- If crop failure occurs, and fulfils the requirements and conditions stipulated to receive a claim, ACA pays a claim of Rp 8 million/hectare directly into the farmers’ savings accounts at BPR Pesisir Akbar.
- Issues crop failure insurance policies to farmers, which are printed by BPR Pesisir Akbar.
Sustainability of Business Model

The Agriculture Financing Business Model for Corn Farmers is built on a partnership agreement between Bank Andara, Syngenta Indonesia, (BPR) Pesisir Akbar and ACA Asuransi. Currently, (BPR) Pesisir Akbar is the only rural bank participating in the partnership. For the business model to succeed, the credit agreement between Bank Andara and (BPR) Pesisir Akbar will need to be replicated with additional rural banks.

The Agriculture Financing Business Model for corn farmers pilot successfully tested the foundation of partnership agreement and helped to establish the necessary processes to execute the loan product successfully. One of the key next steps is to replicate the loan product with additional rural banks. Finding banks that have the staffing and capacity to execute a loan that provides a bundle of services will ensure that the business model is scalable.

Also, the rural bank partners will need to grow their customer base and farmers accessing the loans must continue to see growth in income and productivity. BPR Pesisir Akbar is continuing to expand its reach, enrolling additional farmers each planting
cycle into the loan product. For the 2016-17 planting phase, Bank Andara increased the funds available for the loan product but due to weather uncertainty and water availability as a result of La Niña, the period for enrolling farmers into the loan was shortened. For the loan product to grow and be sustainable long term, rural banks are going to need to identify more farmers who are interested and can qualify for the loan.

The farmers who are currently participate in the loan product have seen increases in productivity and incomes compared to before joining the program. During the pilot phase farmers experienced a 20% increase in productivity and 13% increase in income and during the second phase, which was impacted by El Niño, farmers saw an average income increase of 24% while experiencing a 8% decline in productivity. During the second phase, corn prices in Indonesia were dramatically impacted by El Niño and the Indonesian government began to regulate the corn market, which is why farmer incomes increased compared to productivity. The sustainability of the business loan is dependent on farmers continuing to see productivity and income gains.

Ultimately, the sustainability of the business model is dependent on the private sector partners being able to reach profitability and to continue to invest resources into the loan product. There are already positive signs in that direction, with Syngenta involving their commercial team more closely in the most recent phase and with plans to have the commercial team responsible going forward. ACA has a pipeline to provide agriculture crop insurance to over 50,000 hectares in Sumbawa Island and other regions in Indonesia over the next 5 years, the farmers receiving the Corn Farmer Loan Product are helping ACA to reach that target. Additionally, Bank Andara is committed to growing the credit backing for the corn farmers in Sumbawa Island and BPR Pesisir Akbar is investing additional resources and staff in expanding its customer base. Sustainability will ultimately be achieved if the number of farmers and amount of land covered continues to grow, which is promising based on the results of the first three phases.

About AgriFin Mobile

Funded by the Swiss Agency for Development and Cooperation, AgriFin Mobile operates Indonesia, Uganda and Zimbabwe and is working with private sector partners, including both the financial services and the telecommunications industries, to develop sustainable business models that provide bundled financial and agriculture services to 280,000 smallholder farmers.
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About Mercy Corps
Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within. Now, and for the future.