

# Smallholder finance in the palm oil sector

## Analyzing the gaps between existing credit schemes and smallholder realities

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### Key messages

- Smallholder farmers require significant financing to establish, maintain and replant their oil palm plantations, in order to both increase productivity and improve the quality of the fresh fruit bunches (FFB) produced.
- Smallholders are also limited in their capacity to self-finance their plantation operations.
- There is a significant gap, both in terms of amount and accessibility, between the demand smallholders in the palm oil sector make for credit and the supply of that credit by banks and financial institutions.
- The majority of credit approved for smallholders can only be used for working capital and cannot cover the costs of replanting or accommodate the timeframe required for it.
- A credit maturity gap also exists in the majority of financing schemes, with loan repayment schedules beginning immediately after fund disbursement. Few financing schemes consider oil palm farmers' initial wait for a harvest, and thus provide loans with a grace period adapted to these timescales.
- Risk sharing gaps are visible when farmers repay their loans, as any variation or volatility in production costs and palm oil prices is borne by producers.
- Legal gaps are also evident, with many smallholders not holding proper documentation, which prevents them from using their land as collateral to access credit from banks.
- These gaps reduce the possibility of smallholders accessing formal credit, which in turn drives an informal local lending market with higher interest rates.
- In order to improve formal credit access for smallholder oil palm farmers, the different gaps (i.e. maturity, risk and legal) must be addressed.

### Introduction

Oil palm has the largest cultivated area and is the most significant agricultural export product in Indonesia. The area used for planted oil palm spanned roughly 11.3 million hectares in 2015, with a total production of 31.3 million tons (BPS, 2017a). This makes Indonesia the largest producer of palm oil in the world. In 2015, the value of palm oil exports was USD 15.4 billion (BPS, 2017b), which makes palm oil the largest source of Indonesian trade balance. According to official statistics, smallholders (which consist of independent smallholders and those under contract with oil palm plantation companies – called tied smallholders) contributed to about 40% of the area cultivated for oil palm in 2015 (BPS, 2016).

Oil palm plantations require significant investment throughout their entire life cycle, from establishment to replanting.

Equally, farmers require financing to meet operational expenses. Improving farmers' access to credit, as well as other financial services such as agricultural insurance, could increase their productivity, by enabling access to quality certified seeds, fertilizer and other farm inputs, as well as supporting investments in certification, all of which may translate into improved market access. In turn, improving market access may lead to increases in farmers' income (Baiyegunhi and Fraser 2014; IFC 2014; Sharma 2000). However, currently only a small proportion of Indonesia's farmers are eligible or have sufficient capacity to access credit. As such, they face obstacles when trying to improve their production systems.

There are three important aspects to consider when understanding smallholder access to finance. The first is the different financing schemes available to smallholders in the

palm oil sector. The second is the perspectives of formal and informal lenders on the effectiveness of different financing schemes for attending to the demands of smallholders for investments; both to establish plantations and to cover operational expenses. The third factor to understand is the borrowing behavior of small farmers associated with specific cash flows in oil palm production. The analysis undertaken here assesses the interactions among these three aspects so that the main gaps in the oil palm credit market can be identified. We draw here on research conducted in Ogan Komering Ilir (OKI) in South Sumatra, and Kotawaringin Timur (KoTim) in Central Kalimantan. Information was collected through focus group discussions and key informant interviews in the oil palm credit market (Sahara et al. 2017).

## Financing schemes for smallholder oil palm farmers

Various financing schemes are offered by a diversity of formal institutions, such as banks, government bodies, cooperatives, oil palm companies, and microfinance institutions, as well as by informal actors, primarily local traders. The schemes differ in terms of credit ceiling, interest rate, period of credit/tenor, credit allocation, and costs to access credit.

Three national banks (BNI, BRI and Mandiri) provide credit for oil palm farmers in the two selected districts. One local bank (Bank Sumsel Babel) also provides credit to oil palm farmers in OKI. Various credit schemes are offered by the banks, including KUR (*Kredit Usaha Rakyat*), KMK (*Kredit Modal Kerja*), and KI (*Kredit Investasi*). KUR can be used for working capital (e.g. seeds, fertilizers, pesticides, and labor), while KMK and KI can be used for financing operational and investment expenses (e.g. purchasing land, developing land, and replanting). KI provides the highest amount of loan and has the longest tenor. The government provides a subsidy towards the interest rate under the KUR scheme, meanwhile other credit schemes follow commercial rates.

Each bank applies provision and administration costs to access the credit, the amount of which depends on the individual bank's policy. The costs have to be paid in advance, prior to credit disbursement. The banks pose several requirements to access credit, including collateral (land or other fixed asset certificates). Although there is no collateral requirement for the KUR scheme, banks still impose collateral requirements on farmers in order to reduce the risk of non-performing loans.

The majority of tied smallholders access credit through a guarantor. In the two districts, the guarantors are cooperatives or companies. Tied farmers pay their loans off through the cooperatives they belong to by deducting farmers' repayments from FFB sales. In contrast, independent farmers seek credit directly from banks, and the latter conduct a feasibility study to assess the prospective borrower, using the 5C assessment criteria (Capital, Character, Capacity, Collateral, and Condition).

Cooperatives may also provide credit directly, rather than simply acting as a guarantor. This credit takes the form of a saving-loan program and farm inputs (e.g. fertilizer and pesticides) for their members. Some oil palm companies provide a refinancing program as well as fertilizer and certified seed. One microfinance institution, ULAMM (*Unit Layanan Modal Mikro*), provides credit for oil palm farmers in OKI.

Government bodies also provide limited grants to independent smallholders in the form of fertilizer and certified seeds. Recently the government has developed a subsidy program, using funding from the Crude Palm Oil (CPO) fund, for replanting smallholder oil palm estates that have reached 25 years of age, or have a productivity level of less than 10 tons of FFB per ha<sup>1</sup>.

A number of smallholder oil palm farmers access credit informally from local traders. This credit is often limited in amount and accessible only to those farmers who sell their FFB to the traders. The credit is flexible and can be used either for oil palm maintenance or alternative needs (e.g. wedding celebrations). There is no interest rate charged by traders to farmers when they borrow money from traders and no specific requirements are applied. An informal or verbal agreement is often the only form of contractual arrangement between farmers and traders. The payment system is similar to other schemes in which traders will deduct from the FFB revenue received by farmers. The tenor is based on the agreement between the individual farmer and trader, but usually is for one year.

## Lenders' perspectives on financing oil palm for small farmers

According to staff at banks in the two districts, a high number of applications for credit are received from oil palm farmers, but only a small portion of these applications are approved. A lack of collateral constitutes the main obstacle to accessing credit. Ultimately the banks prefer collateral in the form of a land certificate, which is difficult for smallholder farmers to obtain.

Although banks offer a range of credit schemes, most smallholder farmers can only access KUR for working capital. However, the amount of the credit available under KUR is not sufficient to cover higher replanting costs. Equally, the majority of lenders (formal and informal) state that the utilization of cash credit seems to go beyond farmers' oil palm farms, with the majority of credit being used instead for personal needs, such as children's education, the purchasing of vehicles, and wedding celebrations. Only a small portion of the credit is used as working capital for their oil palm plantations. Considering that only a small amount of credit is eventually dedicated to oil palm farming, the desired improvements in productivity or quality of their harvest may not be met.

## Borrowing behavior of smallholders

In the two selected districts, oil palm farmers highlighted their need for credit to finance replanting and operational expenses. Credit for replanting is a timely need in cases where the palm trees have reached about 25 years of age. The cost of replanting includes chopping down old palms, land clearing and preparation, as well as purchasing certified seeds. Based on field results, replanting costs are about USD 3,461 (IDR 45 million) per hectare. Operational costs include expenses such as fertilizers, pesticide, labor, harvesting, and transportation of FFB. The operational costs spent by farmers ranged from USD 201 (KoTim District) to USD 235 (OKI District) per year.

1 The Director General of Estate Crops Regulation No. 29/KPTS/KB.120/3/2017 on the implementation of replanting, human resource development and infrastructure assistance in the framework of the CPO fund was issued in March 2017

Several of the behaviors demonstrated by smallholders affect their access to credit. The majority of farmers do not record their cash flow (expenses and revenue). Independent and tied farmers also apply different practices when managing their farms. It is therefore very difficult for banks to assess the profitability of their oil palm operations. Smallholder farmers do not have savings accounts in the bank, which also makes it more difficult to process a loan request.

Tied farmers may have access to credit through their cooperatives or inti-plantations<sup>2</sup>, whereby repayments are deducted automatically from their monthly or fortnightly payments. In some cases, tied farmers have been known to carry out side-selling, where they sell FFB to other traders instead of their cooperative. The practice of side-selling means that farmers increase their access to cash for that month, but reduces their revenues channeled through the cooperative, thereby lengthening the time needed to repay their loan.

## Gaps between existing credit schemes and small farmers' behavior

Four gaps are evident when looking at the mismatch between demand and supply for credit. Understanding these gaps could help the financial service providers to design financing schemes that are closer matched to the characteristics of small farmers, providing small farmers with incentives to change their behavior and reducing risks for financial service providers.

### 1) Demand and supply gap

The majority of lenders (supply side) offer credit that can be used for working capital with a shorter tenor. On the demand side however, smallholder farmers request both working capital and credit for investment (establishment and replanting) with a longer tenor.

### 2) Maturity gap

A maturity gap is apparent in cases when farmers establish a new oil palm plantation or undertake replanting. Oil palm farming does not provide revenue for the first three to four years, meaning that farmers cannot repay credit during this period. Only a few loan schemes have considered this situation and have delayed their repayments until after the gestation period.

### 3) Risk sharing gap

When farmers access loans through collateral agents, such as a cooperative or inti-plantation, the agent will deduct 30% of the revenues from oil palm harvest to pay the loans. However, when farmers access credit individually, lenders ask them to repay in cash. In both instances pricing and production risks exist.

The price of FFB is set jointly between *Disbun Provinsi* (*Dinas Perkebunan Provinsi*, Provincial Agriculture Office) and oil palm

companies located in the province. In South Sumatra, the price data is published at the beginning and middle of the month. Meanwhile, in Central Kalimantan, the FFB price is published only once a month. Therefore, the price risk is more visible in Central Kalimantan compared to that seen in South Sumatra, since the price adjustment of FFBs in South Sumatra is faster compared to Central Kalimantan. In the two districts, independent farmers receive a lower FFB price compared to tied farmers. This is because oil palm companies and tied farmers have formal contracts stating that prices will follow those set by the provincial price committee.

Production risk is influenced by cultivation habits and environment. When farmers use best management practices in their plantations, they can obtain higher yields, which in turn increases their capacity to repay credit. In the two districts, the majority of small independent farmers face capital constraints (funding) for buying high quality inputs. For tied farmers, companies provide both technical assistance and support to help farmers access high quality inputs (in particular certified seeds). Forest fires are the main environmental obstacle, particularly in OKI, South Sumatra. When fires occur, they significantly reduce oil palm yields.

### 4) Legal gap

Many independent smallholder farmers do not have a land certificate because it is costly and complicated to obtain. In addition, they have to prove that the oil palm land that they manage is not designated a forest area. All credit schemes offered by the banking sector require land or other fixed assets as collateral. This is the main obstacle faced by small-scale independent farmers.

Local governments are struggling to finalize their spatial plans due to the overlaps that exist between oil palm and forest areas, which has an impact on land certification. Some banks in KoTim will accept an SKT (*Surat Keterangan Tanah*, Land Certificate) recommended by the BPN (*Badan Pertanahan Nasional*, National Land Agency) to confirm that the land is eligible as collateral. The *Distan Kabupaten* (*Dinas Pertanian Kabupaten*, District Agriculture Office) also issues an STD-B (*Surat Tanda Daftar Usaha Budidaya Tanaman Perkebunan*, Letter of Registration for a Plantation Business) and some banks have stated that they can use an STD-B as collateral. However, BPN is reluctant to provide the additional SKT for farmers that have an STD-B, as the government spatial plan is not yet clear.

## Recommendations

Considering the increasing global demand for sustainable palm oil and the key role smallholders play in the Indonesian oil palm sector, it is important to ensure that smallholder farmers can participate in the global palm oil market. One important step is for them to be able to invest in the production of sustainable palm oil by having access to the formal banking sector. Therefore, there is a need to support small farmers in accessing formal credit systems.

Since most credit schemes from banks require a land certificate as collateral, local governments should facilitate independent smallholder farmers to obtain land certificates. The local government can issue an STD-B for farmers that own an oil palm plantation. This

<sup>2</sup> Otherwise known as 'nucleus' plantations. Under the nucleus-plasma scheme, nucleus plantations (owned by companies) make a contract with the tied smallholders.

letter can be used as the basis for BPN to issue an SKT. After receiving an STD-B or SKT, farmers can register their land in order to obtain a land ownership certificate. This will reduce the **legal gap**. Allowing small farmers to start registering their existing land will in turn reduce expansion and encroachment within state forests, since illegal land cannot be owned by an individual.

To reduce the **maturity gap**, banks and other financing schemes should consider a grace period for oil palm, as well as a cost-of-living stipend during that grace period. Considering the length of the oil palm rotation period (25 years), it would be of benefit to increase the length of the tenor, particularly for replanting. In addition, it is important to educate and incentivize both tied and independent farmers to save. In South Sumatra, farmers set aside some savings for the replanting from their current harvest. This encourages greater self-sufficiency and less reliance on debt. Setting aside 100 IDR per kilogram of FFB means that small farmers can save 1.3 million IDR per hectare per year (Rp 100/kg \* 1,000 kg/ton \* 13 ton/ha/year). With 20 years of harvest and a constant level of yield, the figure translates to Rp 26 million per rotation. This will demonstrate to the bank their ability to manage their finances, as well as partly covering the costs of replanting and reducing their loan amount.

**The risk sharing gap** could be reduced by using price and production instruments. The *Disbun Provinsi* (Provincial Agriculture Office) of Central Kalimantan could review FFB pricing fortnightly, instead of on a monthly basis, in order to reduce the price risks. Production risks can be reduced if financial institutions work together with local extension services and the actors that guarantee the smallholders in order to provide technical assistance. Financial capacity assistance should also be encouraged. By training farmers to keep written records of their expenses and revenues, lenders will be in a better position to evaluate the financial situation and spending of oil palm farmers. For tied farmers, side-selling to other buyers outside their cooperatives should be avoided. To enforce this, cooperatives could stop access to credit (in the form of saving-loan programs and farm inputs) to cooperative members participating in side-selling.

## References

- [BPS] *Badan Pusat Statistik* (Central Bureau of Statistics). 2017a. *Plantation Crop Production by Province and Plant Type, Indonesia (000 Tonnes), 2012 - 2015*. Jakarta, Indonesia. Accessed 3 March 2017. <https://www.bps.go.id/linkTabelDinamis/view/id/839>
- [BPS] *Badan Pusat Statistik* (Central Bureau of Statistics). 2017b. *Oil Palm Exports by Major Destination Countries, 2012 - 2015*. Jakarta, Indonesia. Accessed 3 March 2017. <https://www.bps.go.id/linkTabelStatis/view/id/1026>
- [BPS] *Badan Pusat Statistik* (Central Bureau of Statistics). 2016. *Indonesian Oil Palm Statistics 2015*. Jakarta, Indonesia.
- Baiyegunhi L and Fraser G. 2014. Smallholder farmers' access to credit in the Amathole District Municipality, Eastern Cape Province, South Africa. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 115(2):79-89.
- [IFC] International Finance Corporation. 2014. *Access to finance for smallholder farmers: Learning from the experiences of microfinance institutions in Latin America*. Report. Washington, DC: IFC.
- Sahara S, Haryadi H and Kusumowardhani N. 2017. *Smallholder finance in the palm oil sector: Barriers and potential to support the uptake of sustainable practices*. Occasional Paper #xx. Bogor, Indonesia.
- Sharma M. 2000. *The scope of policy reforms in rural microfinance*. Policy Brief No. 14: Rural Financial Policies for Food Security of the Poor. Washington: International Food Policy Research Institute.

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