

# Risk-sharing as a Driver for Smallholders Farmer Finance: Value Chain Financing Model

## Value chain financing model offers a risk-sharing solution for SMEs and farmers

### 1 Key message

Improved access to finance is a precondition for strengthening the investment capacity of agricultural value chain actors, including farmers and Small and Medium Enterprises (SMEs). Traditional approaches to reaching this market segment have been a challenge to financial institutions especially banks, partly due to the risks associated with lending to the agriculture sector and the costs of delivering such services. In these approaches, farmers and financial institutions share the financial risks, shielding other value chain actors from the risks.

To address these challenges, there is need for an integrated approach to de-risk the overall operating environment of agricultural value chains. Innovative models that spread the risks among a wider network of stakeholders clearly offer potential solutions. In this regard, AGRA is currently piloting an innovative value chain finance model in West Africa that takes into consideration risk sharing across the value chain players. The model appears to offer sustainable agriculture finance solutions for smallholder farmers (SHFs).

This paper documents how this model works and provides examples of how financial institutions that were initially hesitant to finance smallholder production in Ghana, Burkina Faso and Mali, are using it to increase their outreach in rural areas.

### 2 Introduction

Access to appropriate and timely inputs is crucial for accelerating agricultural productivity as well as the development of farming systems. However, smallholder farmers do not always have adequate resources at the start of the planting season to buy the required inputs. Thus, finance is often viewed as the biggest challenge for SHF and SMEs in the agricultural value chains.

Statistics from the World Bank (2009-2019) show that at a macro level, more than half of the SMEs (including FBOs) in developing countries have no access to credit. This percentage increases significantly up to 80 percent in sub-Saharan Africa. As shown in Figure 1, 38.9% of African Small & Medium Enterprises (SMEs) consider access to finance as a major constraint, and that less than 10 % of African SMEs have access to loans.

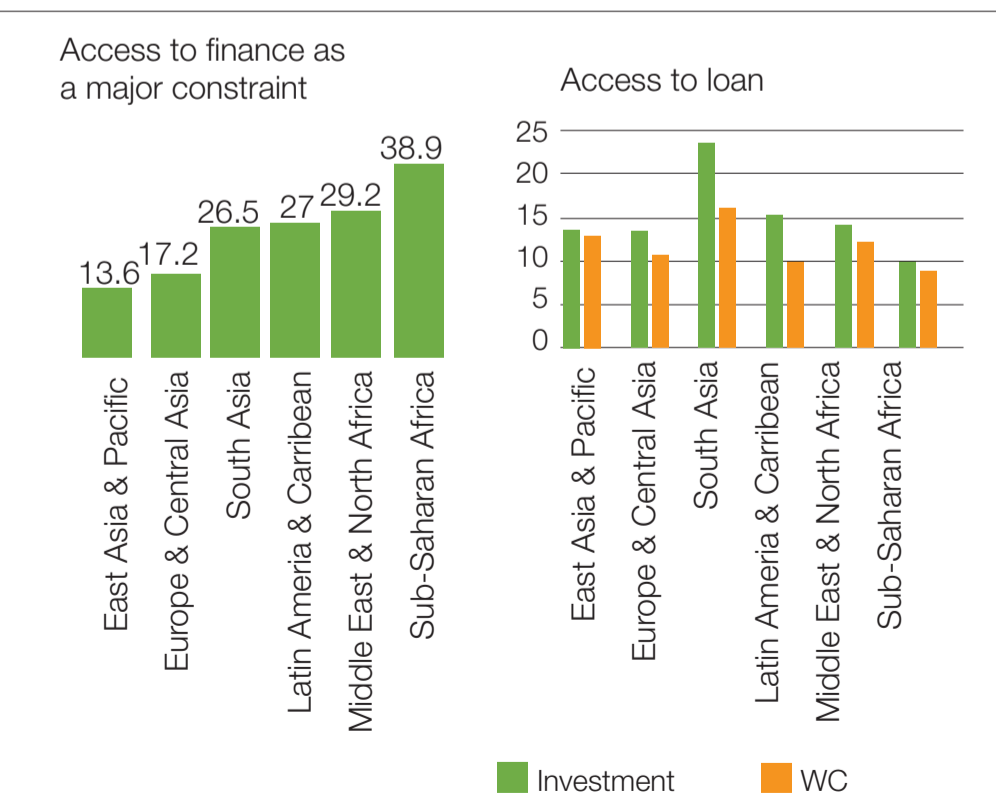


Figure 1: Access to finance and access to loans

Source: Enterprise survey data, World Bank (2009-2019)

At a micro level, the analysis conducted on the input credit systems within AGRA's consortia in Mali and Burkina Faso identifies four types of input finance systems at the level of farmers or farmer groups:

- **Input loans provided by the companies that purchase the agricultural products (aggregators, traders or processors) as part of an integrated industry**

This is credit in-kind, generally secured by a formal or informal contractual relationship between the off-takers and producer groups. The companies deduct the loans at source during procurement of the output. This system is used mainly with cash crops like cotton, cocoa or coffee. However, it is also used in the maize and rice value chains at a lower scale due to the limited financial capacities of off-takers and the price volatility that affects compliance with the contract.

- **Input payment facilities from input suppliers**

This system is used by agro-dealers at village level and fertilizer retailers at the marketplace. Based on the individual farmer's repayment capacity and reputation, they provide up to 50% of the required inputs on credit. The main constraint with this system is the higher cost of the input loan as most agro-dealers have set up a strict monitoring system that is inclusive of costs in the input loan.

- **Input loan provided by projects with government support**

This system has almost been abandoned due to high default rates. The loans are perceived by farmers as a grant and are not paid back.

- **Input loan granted by a financial institution**

Although it is difficult to estimate the demand for input credit, it is clear that the volumes of credit granted are insufficient compared to the needs of farmers. Most farmers do not apply for input loans with financial institutions, because of lack of collateral as well as the cost and risks involved. Only farmers in tightly structured value chains with secure markets and technical support have easier access to loans.

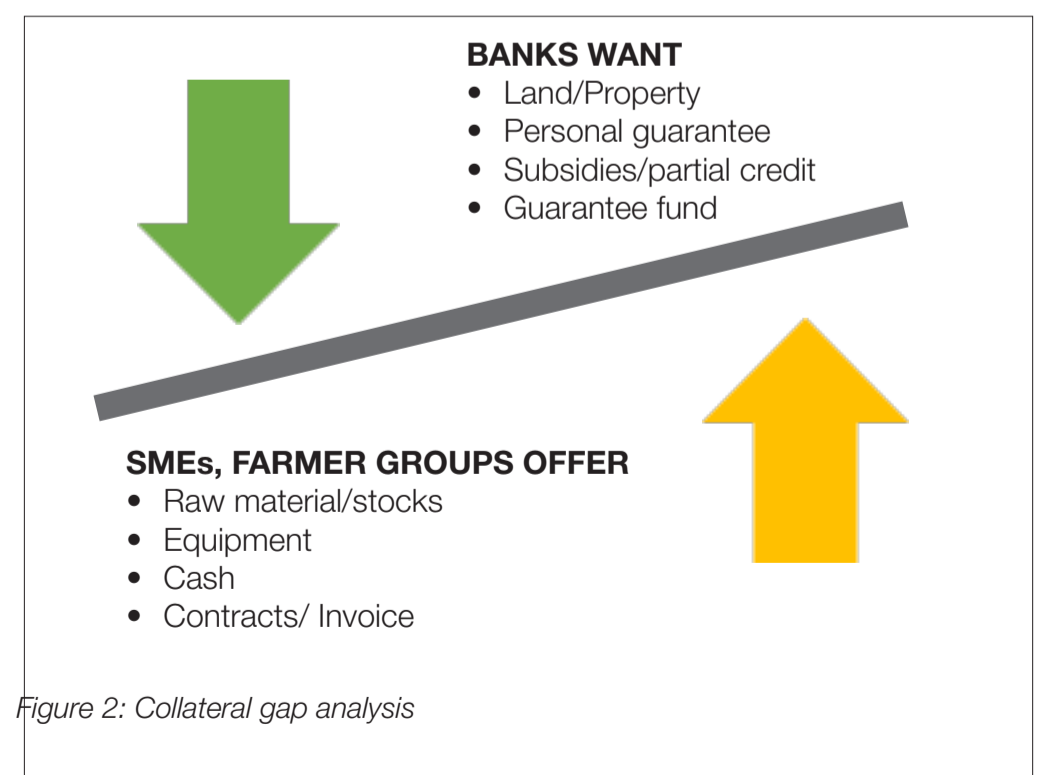


Figure 2: Collateral gap analysis

As shown in Figure 2, there is a mismatch between what banks want as loan collateral and what farmer groups or SMEs can provide.

Banks are in most cases not interested in financing inputs for SMEs and farmer groups and the collateral they offer because of:

- Lack of Law enforcement in repossession procedures
- Alternative investment opportunities that are more profitable and less risky
- Lack of know-how on agricultural finance and alternative collateral.

Therefore, there is a need to develop systems for sharing the loan risks among players with banks by using the value chain relationship.

### 3 AGRA approach to address this challenge: reinventing the loan risk perception

To address the above challenges, AGRA developed an Input financing mechanism with risk-sharing among value chain participants. In this mechanism, risks are shared between the bank and all the value chain players. Within the value chain, there is an interdependency between the farmers' business model and the other value chain participants' business models. The success of a farmer, an input dealer, a seed company, an off-taker and a processor all depend on the successful production of a crop as depicted in Figure 3 below. It is therefore not complicated to convince all beneficiaries that the risks of financing the crop should also be shared.

The mechanism of pre-financing inputs for farmer groups by value chain participants such as input suppliers and aggregators makes business sense, although it is not the core business of these value chain participants to provide financial services. It offers an opportunity for banks to become a professional partner in this interdependent relationship to allow for an increase in the volumes of inputs financed, risk sharing and professional loan management. Such an input financing mechanism through banks provides an opportunity for:

- expanding the input financing volume because value chain participants use their pre-financing working capital as cash collateral that a bank will leverage with a loan.
- farmer groups to use their working capital as a guarantee on which basis banks provide input loans.
- reducing the cost of funding and due diligence analysis, as the bank can rely on value chain participants' information on the creditworthiness of clients.

Based on these opportunities, AGRA developed an input finance model with risk-sharing principles. This model solves challenges by facilitating the use of:

- Cash collateral from value chain participants to secure farmers' loans.
- Trust among value chain participants in farmers' businesses by signing them up with supply or procurement contracts.

#### AGRA interventions

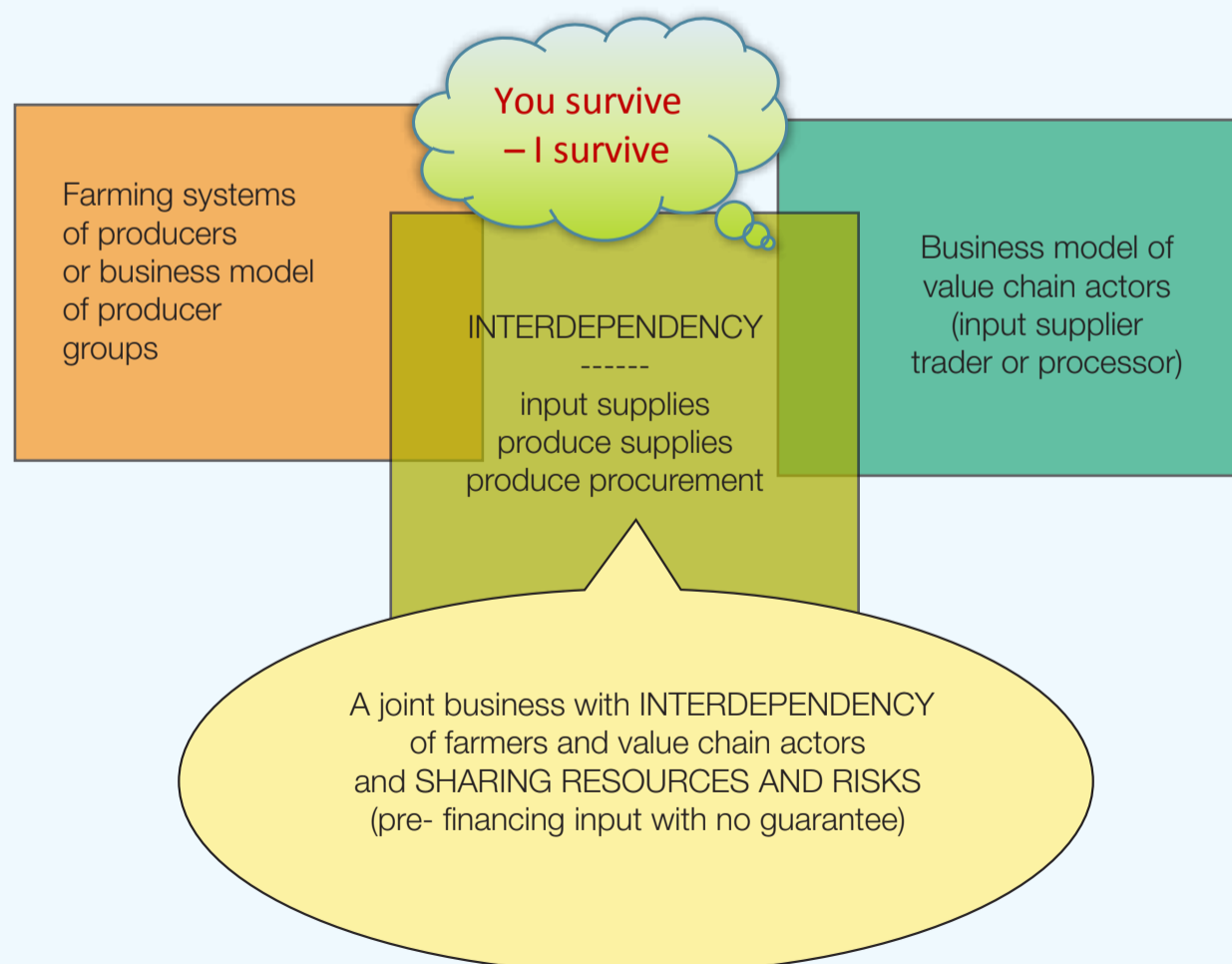
Since the implementation of this model requires value chains with strong relationships between farmer groups, off-takers and input suppliers, the first intervention is to create a business environment where such trust can emerge. To do this, AGRA developed a consortia approach where farmers' groups are connected to:

- Seed and fertilizer companies and agro-dealers to access improved seed varieties and (blended) fertilizers.
- Extension services and village-based advisors (VBAs) to be trained and coached on the use of these technologies.
- Structured markets with volume contracts signed before planting and price contracts signed before harvest.

Within the consortia, farmers are given skills for building strong and profitable relationships with the other value chain participants. All the technologies, skills and services provided at consortia level help to improve the joint businesses of farmers and SMEs operating in the same value chains and communities.

The second intervention is to support financial service providers to design and deploy affordable and appropriate input finance loans. There are many risks involved in input financing that affect the price and loan conditions offered by banks. These risks include: production level risk, market risk, and client level risk (bankability of farmers). As long as financial services providers pick up most of the financing risks related to input loans, it is difficult to increase their outreach and capacity to serve more farmers. The input finance model developed by AGRA, offers Financial Service Providers (FSPs) the opportunity to collaborate with value chain participants and share with them the loan risk. As the credit risk reduces, the FSPs are more comfortable to expand their input loan portfolio, and make the loan conditions more flexible. AGRA also supports FSPs through technical assistance interventions to adapt their loans process, tools and conditions to the model requirement. Table 1 describes the risks directly mitigated by the model.

Box 2: Value chain business interdependency



Source: Adapted from a presentation on inclusive contract farming business model

Table 1: Financing risk mitigation offered by the model

Risks	Risk Description	Mitigation
Farmers (as borrowers) level risk	Lack of information on farmers' agricultural activities and reputation	By including value chain actors in the financing scheme, FSPs can rely on those actors' experience and relationship with farmers' groups to improve their know-your-customer (KYC) due diligence. FSPs can only finance farmers pre-selected by input suppliers or the off-takers. FSPs can also access data available on farmers directly from the off-takers or the input supplier.
Production risk	Lack of quality inputs, fake seeds or fertilizer, late delivery of inputs, natural hazards	By including the input dealers and input providers in the risk sharing, they will make sure the right quality and quantity of inputs are delivered to the farmers. In order to make sure the production is successful, the input dealers make available field staff to monitor the crop and anticipate on pest and diseases. Agricultural insurance might be added to the loan model to offset risks from natural hazards.
Market risk	Lack of market opportunities	This is mitigated through the model, as the off-take agreement is the starting point of the loan model. The off-takers show their commitment to the contract by depositing a cash collateral in the bank. This risk sharing allows the off-takers to determine the type of seeds to be used, quality and quantity to be produced etc.
Defaults	The farmer might be unable to repay the loan for numerous reasons,	In the event of loan default and if the different recovery methods are unsuccessful, the FSPs will mobilize the cash collateral brought by farmer groups, input suppliers and the buyer. Cash collateral provided as loan risk shared with the bank will be mobilized as first loss coverage, one day after the due date, to reduce or cover the loan amount due.

## 4 The input finance model

### How does the model work?

Typically, there are four key parties with a vested interest in crop production: input dealers (seed and fertilizer); buyers; farmers and banks. Each party stands to benefit from quality and quantity of output. Therefore, within the 'value chain finance' model, each party shares a portion of the financial risk involved. First, the farmer and the buyer establish a market contract, then make a deposit to the bank. The bank and farmer draw up a loan contract for the full value of the required inputs, before the bank disburses part of that value to the input dealer. The input dealer delivers the inputs. The farmer produces his/her crop and delivers it to the buyer. The buyer then repays the loan and interest to the bank and remits the remainder to the farmer, while the bank pays the input dealer his/her remaining percentage.

### Principles of the model

The following principles are key to the model implementation:

**Partnership:** The model is built on existing relationships in the value chain. All parties with an interest in the success of the production or transaction agree to share the financial risks.

**Scope of negotiation:** The farmers must be recognised as 'partners in business' when contracts are negotiated. Pre-planting quality and quantity contracts followed by pre-harvest (floor) price agreements should be discussed and approved by all parties.

**Incentives:** All the participants need to understand that the model sustains because all business partners benefit ('win-win') when production is successful, and all partners lose (a bit) when the production fails.

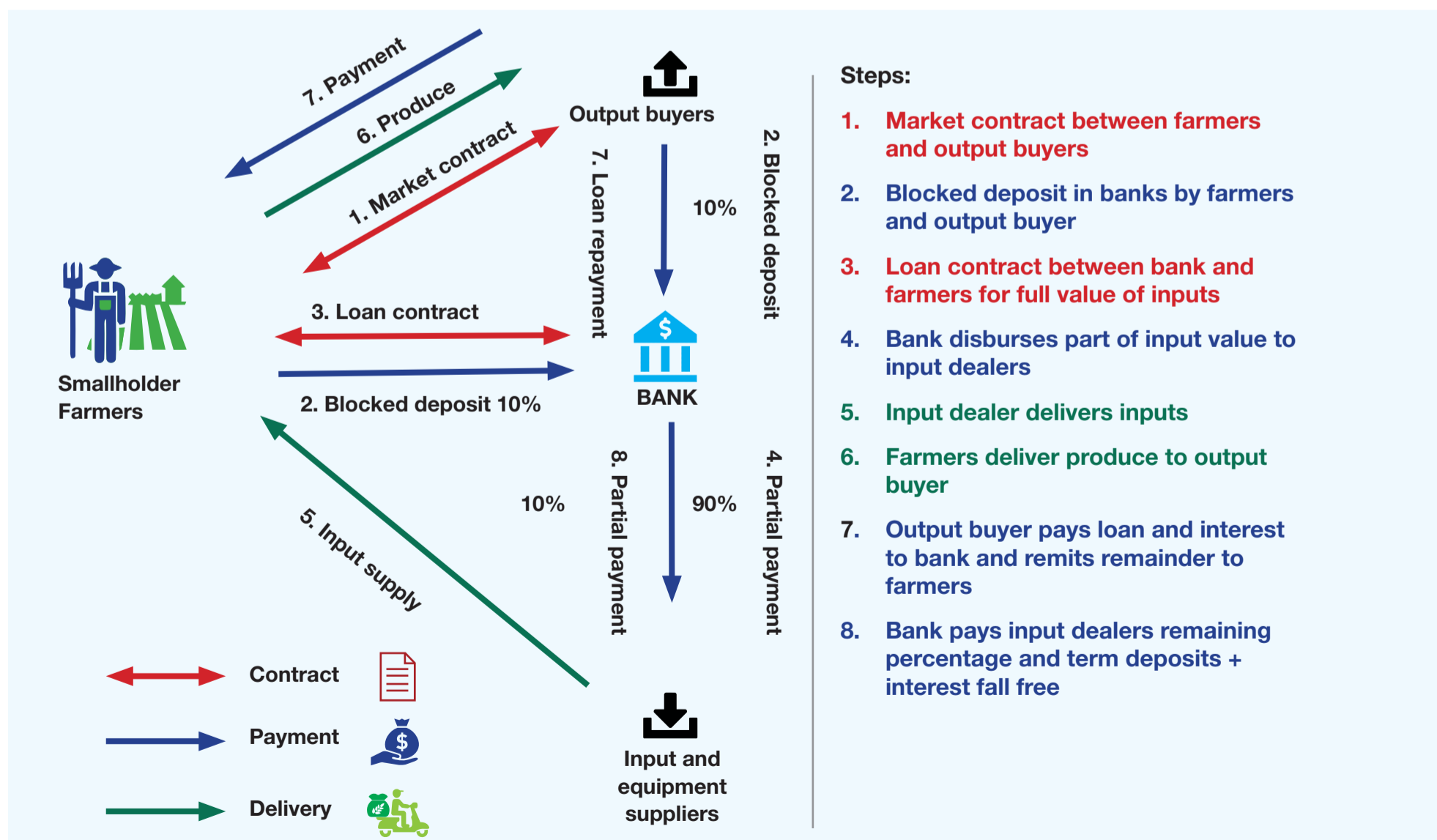


Figure 3: Value chain business interdependency

**Risk sharing:** The model requires arrangements for sharing and minimising the loan risk. The percentage of risk shared may vary according to the financial capabilities, profit expectations and investments made by all parties.

#### Model benefits and sustainability

The main incentives for FSPs and the value chain participants to adopt the model are the opportunities offered by this partnership:

- FSPs:
  - Opportunity to reduce and share the input finance risk with the direct value chain players that have business interest in farmers;
  - Opportunity to develop more specific and affordable input loan products. Because the cash collateral mobilized can be used to reduce the costs of funding and the loan risk which are major components of the interest rate;
  - Opportunity to expand their input loan portfolio with less risk exposure, because participants have vetted each other.
- Farmers (organizations):
  - Opportunity to access quality inputs with loans at better conditions;
  - Opportunity to access a guaranteed market for the produce as the loan is based on a prior contracting with an off-taker;
  - Opportunity to develop services to their members and to strengthen their financial autonomy.
- Input supplier/off-takers:
  - Opportunity to take less risk with pre-financing activity: most of the input suppliers and off-takers are already used to pre-financing farmers in order to guarantee the supply of produce. With this partnership they are taking less risk and expanding their network as well;
  - Opportunity to direct their working capital used for pre-financing to other purposes;
  - Opportunity to expand the market for their inputs.

The sustainability of this model is guaranteed by the effective participation of all the value chain actors. As long as everyone increases their turnover and profit, and the only thing they lose is their margin, it is a workable model. If the input dealer makes a 20% margin it makes business sense to invest 20% in the financing model. Thus the percentage of risk shared, depends on the profit everyone is making in the model.

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## 5 Case studies: Results and lessons learnt

### Results from bank partners in Ghana, Mali and Burkina Faso

Year	Country	FSP partner	Value chain	VC partners	Achievement # farmers Value of Loans
2017	Ghana	Advans Ghana	Rice Cocoa Cashew	Wienco, Nyonkopa Cocoa, Volta Cashew Farmer Groups	5,432 farmers US\$700,726
2019	Mali	Soro Yiriwasso	Maize	Guina Agricole Farmers groups	14 Producer groups US\$ 335,454
2019	Burkina	Agricultural Bank of Faso	Maize	Gnissien sarl UPPA	14 Producer groups US\$140,000

### Lessons learnt so far:

- The need to empower farmers through training on financial literacy, placing emphasis on the use of mobile financial services, personal financial management, awareness about financial products and services, knowledge on basic banking operations and relationship management.
- Even through value chain partnerships, it still remains difficult to decrease operational costs in reaching very small and remote farmers. Hence, relatively cheaper funding sources and digitization of payments are needed to serve these farmers in a sustainable manner.
- Mindset change is necessary to accept the risk sharing principle (from an interview with value chain actor Guina Agricole who shared 30% of input finance risk in Mali).
- The model leads to huge improvements in loan repayment (Advans Ghana obtained 100% loan repayment with the model).
- Lower cost of finance for end users (Interview with Soro Yiriwasso, who lowered their interest rate based on the model).