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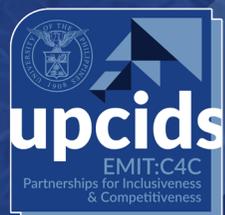
PROGRAM ON ESCAPING THE MIDDLE-INCOME TRAP:
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Breaking barriers in agriculture financing: Enhancing the resilience of agriculture value chains through interlinked inclusive financing models¹

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ABSTRACT

In the Philippines, smallholders need agriculture financing while banks are penalized for insufficiently lending to the agrarian and agriculture sectors. This finance gap proves difficult to fill for a number of reasons: (a) limited understanding of the conditions under which smallholders can become and stay competitive; (b) limited appreciation of the resilience of value chains; (c) difficulty in assessing and mitigating risks at all levels of value

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- ¹ Inputs from Anthony John Rodriguez and Camia Tangco and comments from Dr. Annette Pelkmans-Balaoing, Ronald Chua, Reinier de Guzman, Rapa Lopa, and colleagues from Jollibee Group Foundation (Leonardo Cortez, Joanna la'O, Gisela Tiongson, and Sharleene Kay Alayan) and PinoyME Foundation (Danilo Songco and Maria Laiya Delos Reyes) are gratefully acknowledged. This paper was presented in the UP Center for Integrative and Development Studies (UP CIDS) Program on Escaping the Middle-Income Trap: Chains for Change (EMIT C4C) public conference entitled *Chains-for-Change: Emerging Lessons on Inclusive Agriculture Value Chains* on 18 July 2018 at the University of the Philippines School of Economics Auditorium. The inputs of Dr. Piedad Geron, Dr. Felipe Calderon, and Danilo Songco, who all served as panel discussants, and of Ronald Chua, who served as moderator, are highly appreciated. The editorial support of Camia Tangco is also valued. Photos used in this paper were taken by Noel San Andres for the EMIT C4C Action Research.
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chains; and (d) non-aligned business model of financial institutions with the demands of inclusive value chains. Drawing from EMIT C4C’s action research on the Farmer Entrepreneurship Program (FEP) of the Jollibee Group Foundation and the SKK Rice Processing Center, a social enterprise partner of PinoyME Foundation, this paper unearths how formal financing flow to smallholders in inclusive and competitive value chains. In the models, interlinked transactions—contracts where smallholders borrow resources for production capital on condition that they will sell part of their harvest to their cooperative or off-taker—were utilized. Unlike trader-lenders who also use interlinked transactions, “interlinked inclusive financing” has mechanisms that improve the financial institutions’ assessment of lending costs and risks. This paper offers key recommendations for banks, government agencies, and other stakeholders and identifies areas for further research.

Keywords: agriculture financing, business case for interlinked inclusive financing, interlinked transactions, value chain financing, partnerships



Introduction: Filling the finance gap

Despite the smallholders’ need for agriculture financing, the Agriculture Credit Policy Council (ACPC) in the Philippines estimates a credit gap of Php 366.6 billion in 2014. This pertains to the variance between the credit requirements of the priority commodities of the Department of Agriculture in 2014 and the financing supplied by banks in the same year. This gap includes the credit needs of smallholders who find it difficult to borrow from formal financial institutions. The gap persists in spite of the

Agri-Agra Law that penalizes banks for not lending 25% of their loan portfolio to farmers and agrarian reform beneficiaries.⁵

The limited access to financing is part of the wicked problems in agriculture. ‘Wicked problems’ are systemic, interrelated, and multidimensional challenges that resist definition and solution. Wicked problems, in turn, create “institutional voids” or the lack of institutions that can facilitate market transactions (Khanna and Palepu 1997).

In spite of institutional voids, the smallholders who are part of the value chain models that were analyzed in this paper were able to obtain production financing and their organizations were able to borrow working capital. The Jollibee Group Foundation’s (JGF) Farmer Entrepreneurship Program (FEP) and the SKK Rice Processing Center (SKK RPC) used interlinked transactions where the smallholders sourced their production loans from cooperatives or microfinance institutions with the understanding that they will repay the loans by delivering around 60% of their harvest to the off-takers (i.e. SKK RPC) or to their cooperatives (i.e. Lamac Multipurpose Cooperative and Kalasag Farmers Producers Cooperative). The products were then delivered to major buyers (e.g. Jollibee Foods Corporation, supermarkets, and rice wholesalers). The interlinked or bundled contracts performed the function of collateral substitutes in screening borrowers and enforcing repayment.

EMIT C4C conducted an action research on the FEP and the SKK RPC value chains in partnership with JGF and PinoyME Foundation. An action research is a cycle of gathering data, deciding on a course of action, reflecting on the results, and

⁵ The Agri-Agra Reform Credit Act of 2009 or Republic Act 10000 mandates the allocation of 25% of financial institutions’ total loanable funds for agriculture and agrarian reform credit. Of the 25%, at least 10% should be available for agrarian reform beneficiaries or ARBs.

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acting on concrete recommendations, while documenting the process.⁶ Data gathering and analysis involved undertaking key informant interviews and focus group discussions with various stakeholders: farmers, heads of companies and corporate foundations, civil society organizations, financial institutions, and government agencies.

EMIT C4C's research covered two FEP cases: (a) the Kalasag Farmers Producers Cooperative that delivers onions to Jollibee Foods Corporation and other buyers, and (b) the Lamac Multipurpose Cooperative that delivers assorted vegetables to more than 20 Chowking stores, hotels, supermarkets, and other buyers in Cebu. EMIT C4C also covered the SKK Rice Processing Center, which is located in Libmanan, Camarines Sur.⁷

The next part of this paper discusses the wicked problems in smallholder agriculture in the Philippines. The third part reviews the relevant literature and policies in agriculture financing while the fourth part discusses interlinked transactions based on the FEP and SKK RPC models. The fifth part addresses how interlinked transactions were improved by formal and informal mechanisms. The last part concludes the discussion, gives key recommendations for commercial banks, government agencies, and other value chain stakeholders, and provides areas for further action research.

⁶ Action research is a scientific method of inquiry that involves reflection, planning, action, and documentation and then doing the same process until desired outcomes are reached. Action research adopts a multi-loop, iterative, and collaborative approach that aims for an ambitious degree of depth and coverage.

⁷ Field-based interviews were undertaken in San Jose City, Nueva Ecija, Sudlon, and Dalaguete in Cebu, and Libmanan, Camarines Sur from June to August 2017.

The context: Wicked problems in smallholder agriculture in the Philippines

Agriculture in the Philippines could be considered a wicked problem. It is the main source of income and employment for most people, but it contributes the least to the country's economy and poverty is largely confined in rural areas. There are numerous reasons for the poor performance of agriculture.

First, the small land size in the country removed economies of scale by fragmenting farm management (Fabella 2014; Fabella 2018). The Philippine Statistics Authority's 2012 Census of Agriculture and Fisheries notes that around 89% of total farms have a land size of 2.999 hectares and below. Small land sizes, not just accruing to the government's agrarian reform program but also to the continuous cutting of land size for family members, pose a challenge for the delivery of services to smallholders and for organized farm management.

Second, while smallholders own land, they continue to be confronted by land tenure issues that make them invest less in farming, thereby hampering their productivity. These include having collective agrarian land titles that require collective decisions for engaging in agricultural enterprises (Eleazar et al. 2016; FAO 2016; Quizon and Pagsanghan 2014). Collective land titles also limit farmers' access to financing.

Third, many smallholders have inadequate access to support services from the government. The uneven delivery of agriculture technology and extension services hampers the smallholders' agricultural productivity. Their limited access to farm machines, equipment, and storage facilities contributes to production inefficiencies. The low and uncoordinated provision of public goods like rural infrastructure is also a major concern.

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And fourth, smallholders have limited access to formal agriculture credit. They find it difficult to borrow from financial service providers for a number of reasons. Financial institutions have a limited understanding of the conditions under which smallholders can become and stay competitive as well as the conditions under which inclusive value chains become resilient. Many financial institutions are also unaware that there is a business case (or an earnings model) in lending, not to the smallholders per se, but to value chains (or to the whole system). Moreover, financial institutions have a limited understanding of the purchasing philosophy of lead companies in inclusive value chains. Often, lead firms want to create shared value, which means engaging in efforts that improve both their income and their social bottomlines. Thus, financial institutions have difficulty in assessing and mitigating risks at various levels of value chains.

Because of these challenges, many companies would rather purchase products from consolidators, traders, and other intermediaries than from smallholders. The literature validates these experiences in the Philippines. Weak institutional arrangements prevent poor stakeholders (e.g. smallholders) from participating in market activities (Mair and Marti 2009). The difficulties of directly linking smallholders to companies are systemic in nature.

One of the keys to directly link smallholders with companies and other offtakers is by providing them access to production capital. If farmers have resources to purchase sufficient inputs, tap farm labor, and bring their harvests to buyers, a big part of the wicked problems in agriculture is addressed. However, financial institutions perceive that lending to smallholders is risky and would incur high transaction costs. Among the problems for banks include the smallholders' lack of credit history and acceptable

collateral and their own lack of infrastructure for loan assessment, disbursement, and collection.

Possible solutions?: Review of relevant literature and policies on agriculture credit

Throughout many decades, efforts were made to solve the problem of smallholders having limited access to formal credit. From the 1970s until the early 1990s, directed credit programs were implemented by the Philippine government. Directed and subsidized credit schemes, for instance, were included in productivity programs like Masagana 99 and Masaganang Maisan. “The sense that markets were not well-behaved prompted governments to allocate credit directly and establish the terms of lending” (Buttari 1995, chap. 3).⁸

Eventually, the directed credit approach was discredited. Around the world, government lending programs were challenged because of their failure to reach smallholders and their benefits were short-lived. Credit programs were removed from government agencies and there were deliberate attempts to shift to market-based financing models. In the literature, the work of McKinnon (1973) and Shaw (1973) argued for the elimination of financial repression or the control of interest rates and the extension of subsidies to financial institutions. In the Philippines, the policies shifted from direct credit provision to market-based

⁸ Llanto (2000) notes that from the 1970s, the Philippine government implemented supply-led or directed credit policies and programs that were usually commodity-specific and were implemented to meet self-sufficiency objectives particularly on the staples: rice and corn. Special time deposits at below market rates were available to banks that lend to rice and corn farmers. The Central Bank had a special rediscounting window providing low-cost funds to encourage lending to smallholders.

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policies including the passage of the Agriculture and Fisheries Modernization Act and the National Strategy for Microfinance.⁹

Despite the policy shift, banks, particularly commercial banks, still find it difficult to lend to smallholders and comply with the Agri-Agra Law requirements. The market-based approach looked into the demand and supply sides of credit and studies have shown that barriers prevail on both sides resulting in a mismatch between the two.

The demand side refers to the ability and willingness of smallholders to access and utilize financial services, while the supply side pertains to the entry and willingness of financial institutions to offer the needed products or services. In this framework, the government's role is not to give direct credit services but to provide an enabling environment for the matching of the demand and supply of financial services. This framework also does not espouse total free market of credit since the matching of demand and supply also needs some (limited) form of government intervention, including the establishment of loan guarantees.

Geron et al. (2016) note that there is effective demand for agriculture-related credit when smallholders meet the following conditions: (a) they are aware of the presence of financial institutions (in their area) and know about their programs and services; (b) they can have access to banks and other formal

⁹ Llanto (2000) identifies the key policies and programs during this period to include the deregulation of interest rates and the gradual removal of subsidies. The Central Bank, as a policy, adopted market-based interest rates and their mechanism for preferential credit allocation was closed. The different funds for commodity-specific agricultural lending were consolidated into the Comprehensive Agricultural Loan Fund (CALF). Moreover, since many rural banks suffered defaults and repayment losses during the 1970s and 1980s from the commodity-specific programs, the Central Bank issued Circulars meant to rehabilitate rural banks through fresh capital infusion and rescheduling of past due obligations with the Central Bank.

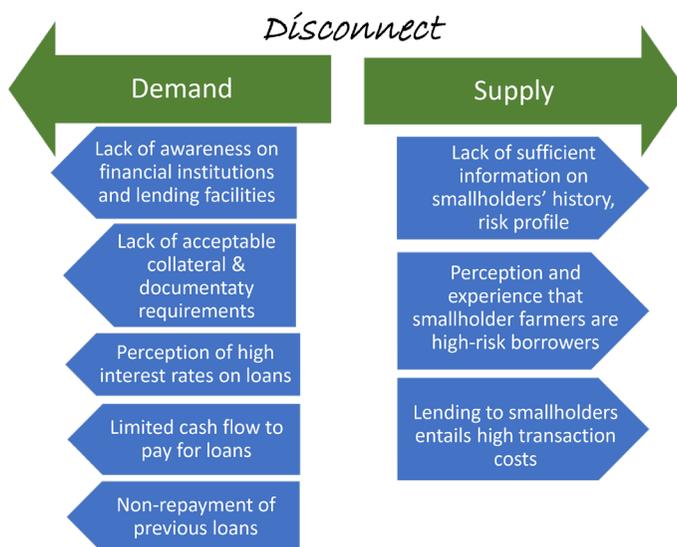


Figure 1. Demand and supply mismatch in smallholder agriculture credit

financial institutions; (c) they have the needed collateral; (d) they are able to comply with the documentary requirements; (e) they have sufficient cash to pay for their loans; and (f) they are offered with products that match their needs (and cash flow). There is effective supply for agriculture-related credit when formal financial institutions meet the following conditions: (a) the risks connected to agriculture are minimized or covered; (b) the costs associated with lending to far-flung areas and dispersed farmers are reduced; (c) there is knowledge or understanding of the financing needs of smallholders, and there are products that would respond to these needs; and (d) the regulatory environment encourages lending to smallholders. Clearly, there is a mismatch between the demand and supply of agricultural credit.

The literature on partnerships (e.g., cross-sector partnerships, public-private-partnerships) offers an approach for inclusive

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agriculture financing. In this body of work, the partnership (or the value chain stakeholders working together) enables the flow of financing to smallholders and other stakeholders in value chains.

The Dutch-funded program, “Toward Sustainable Clusters in Agribusiness through Learning in Entrepreneurship” or 2SCALE manages a portfolio of cross-sector partnerships across nine focus countries in Africa. 2SCALE offers lessons on agriculture financing from partnership experiences in the African region. Like other farmers, 2SCALE farmers needed financing for various purposes including purchase of inputs, buying and consolidation of agricultural products, processing, and acquisition of equipment and other assets. Likewise, the private sector requires resources for some of their needs. Despite the demand, “the financial sector strongly lacks the knowledge, incentives, and skills to target and service the agriculture sector, leading to severe financing constraints” (Magaja and Agai n.d., 2). Many loan products demonstrate a mismatch between the repayment schedule and cash inflow of smallholders and the small and medium enterprises in the agriculture and food sector. Most of the banks have a rigid repayment schedule.

The 2SCALE program gathered the partners across value chains and asked key questions aimed at improving the availability and effective use of financial services for smallholders and small and medium enterprises. In a 2SCALE initiative in Benin, farmers’ organizations developed a business plan incorporating their production activities and financial needs. Sales contracts committing the selling and buying of farm products were crafted and agreed upon by the farmers and the lead company. The contracts allowed farmers to access inputs from input dealers to be paid by the financial institutions. Upon receipt of inputs, individual farmers sign a credit contract with their farmers’ organization. The farmers’ groups submit the credit contract and acknowledgement receipt to the financial service provider to

trigger payment to the input supplier. During harvest time, the farmers' groups deliver their products to the lead company and the latter pays for the delivered harvest through the financial service provider. The financial institution deducts the input credit and interest and remits the balance to the bank account of the farmers' groups.¹⁰

The study of Jimena et al. (2016) of the University of the Philippines Los Baños examined cases of agro-enterprise development (AED) initiatives in the Philippines with regard to the roles of players in value chains. They observed that AED is partnership-oriented and the projects are implemented through multiple or extended partnerships with more than two entities from different sectors working together to pool their unique expertise and resources.

The Philippine experience: Interlinked transactions

Based on EMIT C4C's action research on value chain models covering different crops (onions, vegetables, and rice), areas (San Jose City in Nueva Ecija, Cebu, and Libmanan in Camarines Sur), and stakeholders (e.g. smallholders, buyers, corporate foundations, civil society groups), the partners in value chains use interlinked transactions: smallholders source their production loans from their farmers' cooperatives or from microfinance institutions with the understanding that they will repay the loans by delivering a majority of their harvest to the buyers (i.e. SKK RPC) or to their cooperatives (i.e. Lamac Multipurpose Cooperative and Kalasag Farmers Producers Cooperative). Esguerra (1993) defines an

¹⁰ Aside from the 2SCALE model, other multistakeholder models that involve farmers, lead companies, financial service providers, and other value chain partners include the Mercy Corps and PISAgro initiative in Indonesia (see PinoyME Foundation's IAVCC Conference Report 2016; PISAgro and Grow Asia's Corn Working Group Journey 2016; and Nyamanhindi 2013).



Figure 2. Onion peeling at the Kalasag Farmers Producers Cooperative (Photo by Noel San Andres for EMIT C4C)

interlinked transaction as one in which two parties trade in at least two markets on the condition that the terms of all such trades are jointly determined. An interlinked transaction guarantees the delivery of harvested products and the repayment of loans. According to Fabella (1992), the smallholders' incentive to repay their loans in-kind is higher compared to cash-for-cash transaction when the price of products is uncertain. He also notes that farmers are often risk-averse.

Interlinked transactions are used by informal lenders, particularly trader-lenders, in ensuring their supply of products during harvest time. In the literature on informal credit markets, interlinked transactions perform the function of *collateral substitutes* in screening borrowers and enforcing repayment (Esguerra 1993). In terms of screening borrowers, the farmer's decision to borrow and their repeated involvement in interlinked

JGF FEP's interlinked transaction

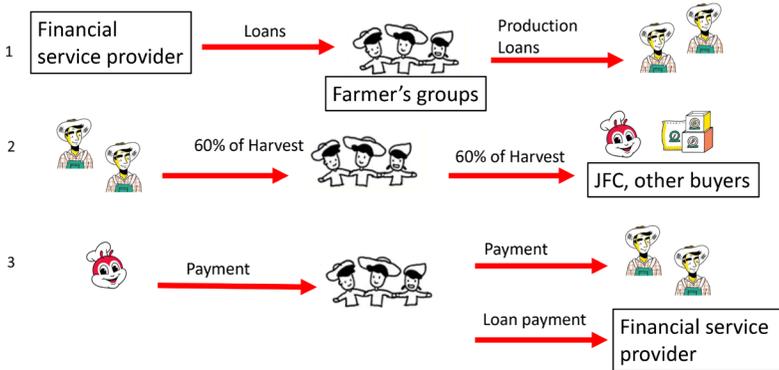


Figure 3. Interlinked transaction of Jollibee Group Foundation (JGF)'s Farmer Entrepreneurship Program (FEP)

contracts are a means for determining their willingness and capacity to engage in bundled agreements. An interlinked transaction is also an enforcement mechanism in which trader-lenders who act as medium for the sale of farmers' harvested products have the first claim on the proceeds of the sale. They are in a position to directly collect the loan payment.

In the context of imperfect markets due to asymmetric information, mechanisms like interlinked contracts provide incentives to minimize representation and induce honest behavior. Esguerra (1993) found that trader-lenders or interlockers are foremost interested in non-credit markets (e.g., securing grains). Thus, compared to pure moneylenders who do not have the flexibility to lessen their interest rates because their main source of income is moneylending, trader-lenders have lower interest rates.

Informal interlinked contracts also have disadvantages, including high monitoring cost and the high cost of keeping

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farmer-borrowers in the contract. This is why trader-lenders also provide other loan (and grant) services, particularly during shocks (e.g., death in the family) and celebrations.

In the value chain model of the FEP, particularly in the case of the Kalasag Farmers Producers Cooperative and Lamac Multipurpose Cooperative, production financing is loaned through a combined in-cash and in-kind loans to individual farmers. During harvest, the loans are paid through the farmers' delivery of around 60% of their harvest to the Kalasag Farmers Producers Cooperative and Lamac Multipurpose Cooperative. This transaction creates a relationship where smallholders borrow from and sell to their cooperative.

Aside from making agriculture financing available, the FEP also provides other non-financial services to the farmers, including capacity building along the agro-enterprise development approach, agricultural extension services, organizing of farmers, and linkage to buyers like the Jollibee Foods Corporation.¹¹ The farmers describe the interventions as the provision of a “complete recipe” that encouraged them to participate in the FEP.

A few years ago, the SKK Farmers Corporation engaged in interlinked contracts with rice farmers. Based on the assessment of the SKK Farmers Corporation, the rice processing center needed to lend production financing to farmers since this will tie-in the marketing of harvest. Part of the motivation for undertaking production lending was the need to defend the reputation of farmers as borrowers.¹² For the priests of the Caritas Diocese of

¹¹ This transaction also allows smallholders/cooperative members to receive patronage refund and yearly dividends.

¹² For Fr. Mike Dela Rosa, current chairman of the SKK Farmers Corporation, there was a need to improve the negative reputation of smallholders (“*basang-basa ang kanilang papel*”).

Libmanan who used to manage the rice processing center, this was consistent with the SKK RPC's objective of helping the poor in Basic Ecclesial Communities not just in terms of income increase but improvement in their dignity. However, the farmers' repayment rate was dismal. Some of the farmers noted that weather conditions were not good at that time and they still needed to borrow from trader-lenders to augment their one-time loan from the SKK RPC. During harvest, they delivered their *palay* to the informal trader-lenders or the *compradas* because with the *compradas*, they could borrow several times before the harvest.

Except for one parish where there was 100 percent repayment, the SKK RPC experienced poor repayment rates. The stakeholders assessed that this was due to the lack of readiness and capacity of the SKK Farmers Corporation to engage in production financing. Back then, there was also no incentive of a higher *palay* buying price, which is now being offered by the SKK RPC. Currently, Simbag sa Pag-asenso (SEDP), a microfinance partner of the SKK Farmers Corporation, lends directly to smallholders. This model is being iterated. An interlinked transaction might work at present, given the incentive of higher buying prices and the lessons on production financing.

“Interlinked inclusive financing”: Formal and informal mechanisms improve interlinked transactions

The interlinked transactions in the value chain models made available and accessible formal production financing (to individual farmers) and working capital (to farmers' groups). While the models adopt the basics of trader-lender arrangements, the FEP improved the interlinked contracts through formal and informal mechanisms that enhanced the inclusiveness of value chains.

Particular to the model involving the Kalasag Farmers, which was part of the pilot batch of FEP in 2008, Alalay sa Kaunlaran, Inc.

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(ASKI) initially hesitated lending to the smallholders.¹³ The farmers had no track record and no acceptable collateral. Also, in the records of ASKI, some farmers from the barangays where the FEP will be piloted defaulted on their loans. There were also other serious risks, including rains during a critical period in onion production.¹⁴ ASKI knew there were no acceptable and viable crop insurance programs.

The pre-commitment of JFC to purchase onions from the Kalasag farmers incentivized ASKI to lend to the newly-formed Kalasag Farmers Producers Cooperative. This commitment was reinforced by formal agreements among partners to implement the FEP (e.g. a memorandum of agreement among JGF, Catholic Relief Services, and National Livelihood and Development Corporation and formal agreements between JGF and local implementing partners). The agreements were concretized by the various partners' contributions to social investment costs or expenses for improving the human capital of smallholders and local stakeholders. ASKI also appreciated the bridging role of JGF in linking the Kalasag farmers to the different units of JFC (e.g. Purchasing, Research and Development) and to other companies. For ASKI, the presence and commitment of various partners signaled the seriousness of the FEP.

In regard to informal mechanisms, polyvalent ties (Evans 1995) or various important relationships within the FEP clusters and within the Kalasag Farmers Producers Cooperative (i.e. farmer-members are also related as family, relatives, neighbors, friends, and classmates) are important mechanisms for sharing information and knowledge. These ties also help enforce social norms and customs like fulfilling promises and repaying debts.

¹³ The ASKI is a microfinance institution (MFI).

¹⁴ Light to moderate rains during the onions' bulbing stage can seriously damage the crop. The available crop insurance only covers calamities.



Figure 4. The SKK Rice Processing Center in Libmanan, Camarines Sur (Photo by Noel San Andres for EMIT C4C)

The formal and informal mechanisms included rewards (for compliance) and sanctions (for non-compliance). The rewards include higher allocation in the next cropping season, while sanctions over agreement breaches (e.g. not planting and harvesting at the cooperative's agreed-upon time and not selling around 60% of harvest to the cooperative) include lesser allocation of loanable inputs in the next planting season. Since the farmers intend to repeat their interlinked agreements in the future, they wish to protect their reputation. Contract enforcement mechanisms are effective when people face the prospect of beneficial exchange, when contract breach is observable, and when future rewards and threats of sanctions are credible (Greif 2005).

An innovation in the interlinked contracts of the FEP model (and SKK RPC) is the provision that smallholders only need to supply around 60% of their farm produce to the cooperative although

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they are not barred to deliver up to 100%. This provision diversifies the market exchanges of the farmers and guards against lock-ins or being trapped in certain value chains.¹⁵ This flexibility also allows smallholders to take advantage of higher spot prices without reneging on long-term contractual obligations. This also recognizes that smallholders have market relations with other buyers.

The importance of long-term relationships needs to be underscored. FEP partners were committed to the program despite “faults” and in spite of a few cases of repayment defaults. The Kalasag farmers note that in their nine years of delivering to JFC, there were few instances when the buying price of local buyers and traders were higher. During the first few years, some Kalasag farmers regret the occasional lower buying price and considered not delivering their 60% commitment to the cooperative. Over time, however, they realized that the price of JFC is higher and more stable. They also realized that JFC and JGF are committed to the FEP and deduced that their partnership is reliable.

At present, the SEDP and the SKK Farmers Corporation are iterating their model. If the SKK Farmers Corporation re-engages in interlinked contracts, their current interventions could improve the chances of farmers’ repayment through (a) the offer of a higher palay buying price compared to the other buyers in Libmanan, (b) farmers’ majority ownership of shares in the SKK Farmers Corporation, (c) farmers’ occasional receipt of farm implements through the SKK Farmers Corporation, and (d) the values formation offered by the Caritas Diocese of Libmanan. Like the FEP model, the SKK rice processing center also does not impose the delivery of

¹⁵ The interlinked contracts are only meant for the crops that are covered by the exchange with the lead firms (onions, vegetables, other high value crops). The other crops being produced by the farmers are not included in the interlinked agreement.



Figure 5. FEP farmers from Cebu (Photo by Noel San Andres for EMIT C4C)

100% of harvested *palay*, a sharp contrast from the *compradas* or the trader-lenders in Libmanan.

The incentive of higher buying price was not present when the SKK RPC provided production loans to farmers. This, along with other incentives and the presence of the CDL and the priests, could serve as contract enforcement mechanisms if interlinked financing is again pursued.

Social investment costs

A key element of the interlinked transactions is the shouldering of social investment costs to improve the human capital of partners, particularly the smallholders. Social investment costs (commonly known as ‘subsidies’) were expensive but critical to the program particularly during the ‘institution building’ phase when formal and

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informal rules of FEP and the SKK RPC were being made. Over time, the costs tapered off.

In the FEP, the social investment costs include the following:

- The cost of JGF, Catholic Relief Services, and the National Livelihood Development Corporation in developing the FEP;
- The continuing investment of JGF in the program and in their partners;
- Various contributions of local implementing partners like the Local Government of San Jose City and the Lamac Multipurpose Cooperative; and
- Investments of smallholders in other farmers, in their clusters and cooperatives, and in the FEP.

These were used for different purposes:

- Capacity building of the smallholders on agriculture extension, marketing, financing, and cluster/cooperative management;
- Farmers' organizing to enable the leaders to manage their groups particularly in addressing trying situations and tipping points;
- Linkage to purchasing and other units of JFC and to other buyers and partners; and
- Capacity building of local stakeholders (e.g. local governments, cooperatives) to be able to assist the smallholders.

In the case of the SKK RPC, aside from social investments in terms of improving the capacity of smallholders, there were also grants and loans that were poured in to the SKK RPC to enable it to run effectively and efficiently. PinoyME Foundation, Peace and Equity Foundation, and Pondo ng Pinoy were among the partners

that provided grants and loans. PinoyME Foundation also provides business development advice to the SKK Farmers' Corporation.

Conclusions and recommendations:

Antecedents of interlinked inclusive financing models

The success of the agriculture value chain models that were explored in this study depend on the recognition of stakeholders that there is a “business case” or an earnings model for interlinked inclusive financing. The models show that financial institutions can earn from inclusive and competitive value chains. Costs can be shared and risks can be jointly managed by partners.

Inclusiveness and resilience (competitiveness) of value chains are served by filling the financing gap in general and improving the smallholders' access to finance in particular. However, implementing this insight is not an easy process as showed earlier. The ‘wicked’ Philippine context creates numerous challenges, but at the same time, also presents some opportunities. In this paper, the value chain models delineated the first general contours of an *interlinked inclusive financing model* that can be applied to challenges faced by agriculture and agrarian sectors in different crops and commodities in the Philippines.

General lessons learned

In the value chain model of the FEP, interlinked transactions and the formal and informal mechanisms contributed to the financial inclusion of smallholders and to making value chains inclusive. There are at least two lessons that can be concluded from this model and from the continuing iterations of the SKK RPC model.

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First, the models are based on partnerships and relationships in value chains. This could be captured by Amirkhanyan, Kim, and Lambright's (2012) description of contracts as "closer than arms-length" and involving trust and reputation. Stakeholders relate as partners that make short-term sacrifices particularly at the beginning of the partnership because they recognize that it is in their long-term interest to sustain the relationship. In the models, the various partners intervened to improve the program, contributed to social investment costs, and made efforts to enable the farmers to address challenges or hurdle tipping points. The smallholders themselves, particularly the farmer leaders, internalized key problems. In the partnership literature, these are referred to as "relational" rather than "transactional" agreements. Pfisterer and Van Tulder (forthcoming) describe these contracts as collaboration rather than control mechanisms.

Second, the models show that financing was made available not to the smallholders per se but to the value chains. What was financed was the relationship of partners, particularly the interlinked contracts of smallholders, their organizations, the major buyers, and other partners. Financing the value chain incentivized the financial institutions because of managed risks and reduced costs.

Key recommendations

Based on the preliminary findings of the action research, key recommendations are offered. These are meant for three sectors: (a) lenders, particularly commercial banks; (b) the government; and (c) other stakeholders in value chains.

For commercial banks

Commercial banks find it difficult to lend to smallholders, including agrarian reform beneficiaries. Danilo Songco of PinoyME

Foundation analyzed different tiers of farmers. These tiers are used for nuanced suggestions.

The first tier is composed of farmers' groups that have already grown and have become bankable. They could be funded by commercial banks through direct lending. The second tier is composed of groups like those studied in this paper. They have already hurdled initial financing requirements (e.g. production and working capital), have major buyers, and have proven that they could meet their contractual commitments in terms of crop quality, quantity, and timing of delivery. Those in this tier, like the Kalasag Farmers that need a bigger cold storage, or the SKK Farmer's Corporation that need a bigger rice processing center, require expansion financing. Commercial banks can fund their requirements either through direct lending or through financial intermediaries. The third tier is composed of farmer's groups that are unbanked. It is understandable that commercial banks hesitate lending to this tier. However, if the farmers have buyers and other partners, commercial banks could consider lending through intermediaries. In lending to smallholders, it is important for commercial banks to analyze the partnerships and relationships in the value chains that they are involved in.

Commercial banks can undertake inclusive value chain financing by piloting select models. They can:

1. Align their lending and corporate social responsibility (CSR) programs toward shared value creation. The CSR program can improve the bankability of smallholders and contribute to social investment costs.
2. Reconsider their requirements on acceptable collateral. Interlinked inclusive financing contracts can serve as collateral substitutes.

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3. Work with other banks to be able to share the cost of developing value chain financing products and services. The rollout can be designed so that banks are lending to different models, groups, or areas.¹⁶

It is likewise important for banks to consider the cash flow of the households of these smallholders. In the models, the smallholders have other requirements and use their savings or borrow from their cooperatives (and other lenders) during shocks or emergencies.

For the government

National and local governments are enablers of inclusive value chains. The following are concrete suggestions for the public sector:

1. The government should provide complementary and non-financial support services to smallholders (e.g. agriculture extension, business development services) since these will improve their bankability. Rural infrastructure like roads and telecommunication facilities will improve the marketability of their products, and in turn, marketing contracts can give smallholders higher chances of accessing loans.
2. The unmet demand for viable and acceptable crop insurance particularly for onions and other high-value crops is a serious concern. In the models, the smallholders have varying degrees of resilience. Providing risk mitigation measures is an important role for the government.

¹⁶ The Land Bank of the Philippines (LANDBANK), which has a long and varied experience in agriculture and agrarian lending, is encouraged to join the product development effort, share its lessons, and contribute to the cost. LANDBANK can also benefit from the development of new, more efficient, and more effective models.

3. Gathering information about borrowers, crops, commodities, and value chains and making these available will improve the banks' screening of borrowers and assessment of risks. It is important for the government to expedite data collection and analysis by providing support to key offices like the Credit Information Corporation and the Philippine Statistics Authority.
4. The fragmentation of government mandates and functions needs to be addressed.¹⁷ One practical recommendation is for government agencies to converge in inclusive value chains or inclusive agri-enterprises. The programs of the national and local governments could be synched to improve the chances of success. This can increase the possibilities of a positive spillover to other areas.
5. Finally, the government needs to seriously reconsider two concerns. The first is its penchant to ban informal lenders who fill the credit gap or the requirements that are not being provided by formal service providers. The second is the suggestion to reconsider directed lending. The failure of directed credit programs in the past provides sufficient and costly lessons to not repeat similar programs.¹⁸

¹⁷ Former Department of Agriculture Secretary Senen Bacani observes that despite agriculture credit appearing to be a market failure, no government official below the Philippine President is in charge of the problem, thus no one is directly accountable.

¹⁸ The lessons from directed agricultural credit include the following (Meyer and Nagarajan 2003; Roumasset 2004; Geron et al. 2016): (a) agricultural credit should be provided as a result of financial intermediation (and not as a direct input in production); (b) credit is fungible and in the face of farmers' multiple needs, it is difficult and costly for lending institutions to ensure that the loans were used for their intended purpose (e.g., purchase of inputs); (c) lenders need to totally cover their costs and sustain their operations so they should be allowed to charge market-determined interest rates; and (d) directed credit is prone to political pressures, making it susceptible to biases.

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For other stakeholders in value chains

Major buyers must consider the entire value chain in entering into agreements with smallholders. This requires having a long-term perspective, being prepared to partner with other stakeholders, and contributing to social investment costs. Intervening only in the marketing of farm products might not work given wicked problems in agriculture.

Diversification of buyers, products, and partners is highly encouraged. In the models, the smallholders do not have to bring 100% of their produce to the major buyers and this allows them to honor agreements with other buyers and to benefit from price spikes from spot markets. The models also encourage diversification of crops to address farm seasonality, gestation, and household cash flow. The models also have different partnership portfolios depending on local contexts.

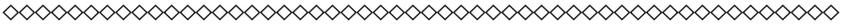
Finally, interlinked inclusive financing models in inclusive and competitive value chains could be expanded to include input providers and other partners. The experiences of 2SCALE in Benin show that including input providers in interlinked transactions ensures the availability of and access to the needed inputs. This addresses a lending risk and widens the scope and scale of financing.

Areas for further action research

At least three points can be pursued by future researches on interlinked inclusive financing in agricultural value chains:

1. Document other inclusive and competitive value chain models;

2. Extract from various cases thematic lessons; and
3. Analyze other financing models including interlinked contracts in non-rice and non-vegetable crops, as well as Islamic financing in agricultural areas in Mindanao.



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The **Program on Escaping the Middle-Income Trap: Chains for Change (EMIT:C4C)** focuses on the key realization that the overall problem of the Philippines' lack of competitiveness (especially vis-à-vis the closest ASEAN competitors) is the low and stagnant agricultural productivity and the dysfunctional supply chains in the sector. Key to the analysis is the fundamental interconnection between this competitiveness challenge and the lack of inclusiveness in the agricultural sector. Addressing the marginalization of smallholder farmers and producers is therefore not only a primary societal goal in order to restore their human dignity, but is also an economic (competitiveness) imperative in order to transition towards sustainable growth.

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