



APRACA FinServAccess Programme

Value Chain Financing in Agriculture: Initiatives, Strategies, Practices, Innovations and Trends in the Philippines



An APRACA FinServAccess Publication with the Special Sponsorship of the International Fund for Agricultural Development (IFAD)

APRACA FinServAccess Publication: 2013/3d

**Value Chain Financing in Agriculture:
Initiatives, Strategies, Practices,
Innovations and Trends in
the Philippines**

**Rita T. Dela Cruz
Miko Jasmine J. Mojica
Liza G. Battad
Marlowe U. Aquino**

An APRACA FinServAccess Publication with the Special Sponsorship of
the International Fund for Agricultural Development (IFAD)

Published by: Asia-Pacific Rural and Agricultural Credit Association (APRACA)

Distribution: For copies, write to:

The Secretary General
Asia-Pacific Rural and Agricultural Credit Association (APRACA)
Room A303, Bank for Agriculture and Agricultural Cooperatives (BAAC)
469 Nakhonsawan Road, Dusit, Bangkok 10300, Thailand
Tel: (+662) 280-0195
Fax: (+662) 280-1524
E-mail: apraca@apraca.org
Website: www.apraca.org

Secretary General: Won-Sik Noh

Project Manager: Marlowe U. Aquino

Circulation: Sofia Champanand

E-copy: The report in PDF can also be downloaded from the APRACA website.

ISBN 978-616-394-217-3

This report is published by APRACA under the auspices of the IFAD-supported APRACA FinServAccess Project.

Opinions expressed by the experts and documenters do not necessarily represent the official views of APRACA or of IFAD.

This report is published during the incumbencies of Mr. Kim Vada (APRACA Chairman), Mr. Shitangshu Kumar Sur Chowdhury (APRACA Vice-Chairman), Mr. Won-Sik Noh (APRACA Secretary General) and Dr. Marlowe U. Aquino (FinServAccess Project Manager).

Preface

The enormous challenges to reducing poverty in Asia have now evolved and are not just confined to the problem of low wages and food shortage, to name a few, but is now made more difficult to overcome due to the threats of climate change. These combined challenges can inadvertently impact food security and affect the role of agriculture in securing the future of continuously growing populations in poverty-prone countries.

One such country is the Philippines, which, over the years, has to face the increasing risks in agricultural production mainly due to erratic and unpredictable weather patterns and the difficult task of connecting the markets of this archipelagic country.

However, the swift action and collaboration among government agencies and other institutions in the regulation of microfinance, agricultural loans, and investments in infrastructure and technology have made inroads in prioritizing agricultural value chain finance.

This renewed interest in linking various actors in the value chain proved to be beneficial and more significant in upholding agricultural production and emphasizing the role of small farmers and fishers.

In this document, the innovations of the Philippines in developing the agricultural value chain are presented. The cases cited reflect the best practices and lessons learned from implementing these innovations at the grassroots and the booming agribusiness enterprises in the country propelled through microfinancing.

May you find these Philippine innovations and best financial practices useful and may this document serve as instrument in crafting and improving financial products and services as it features specific strategies and approaches.

Furthermore, may we all, APRACA members and partners gain full access in enhancing and strengthening our efforts towards a more relevant and appropriate financial knowledge partnerships together with other financial institutions, countries, and the whole region.

Acknowledgment

One of the challenges faced by APRACA today is the exchange of financial innovations and practices that aid in improving the operation of banks and financial institutions involved in rural and agricultural development.

The documentation of best practices in the Philippines' banking and financial sector is an inspiration to those countries in the Asia-Pacific region that need a little push in making the sector productive, profitable, and sustainable to a higher level. Learning from the lessons and experiences from these institutions will serve as added interventions to enhance and strengthen financial capacity and development among stakeholders.

The contents of this document were mainly curated from thorough research of the trends and developments of agricultural value chain financing in the Philippines in the recent years. Sources include government agencies including the Bangko Sentral ng Pilipinas, Land Bank of the Philippines, Development Bank of the Philippines, Department of Agriculture and its attached agencies and corporations such as the Agricultural Credit Policy Council, Bureau of Agricultural Statistics, among others.

Also, instrumental in coming up with this document are the reports and analysis and past studies made by various organizations and researchers involved in prospering the agriculture and fisheries sectors in the country such as the Philippine Institute for Development Studies, Center for Research and Communication, Asian Development Bank, and World Bank Philippine Office. Online news and articles were also cited as references at the end of this document.

We thank APRACA and its management for their trust to do this documentation research of the Philippine Value Chain Finance Condition. To the IFAD-FinServAccess Project especially Dr. Marlowe U. Aquino, who provided the guidance in writing the document and being a part of this undertaking, our team certainly made a wonderful contribution in the rural finance sector in agricultural development in the country, region and the world.

We want to thank the institutions and individuals who assisted in providing valuable inputs and experiences in rural and agricultural development especially those working in rural finance. We also would like to thank several agencies that provided the pertinent documents for the research team to review, integrate, analyze and synthesize to come up with a well-documented output highlighting new directions, strategies, process and practices including challenges and lessons learned relevant to dynamic and sustainable financial management in the country.

Finally, we thank the intended users of this document especially the key players and stakeholders of the Philippine rural finance particularly those engaged in value chain finance in agriculture and the APRACA members and its partners who will benefit and acquire latest updates of this worthy knowledge product.

Executive Summary

Agriculture is vital in the economic progress of every nation. A progressive agricultural sector is manifested both in the social and economic conditions of its people. For country such as the Philippines, agriculture is the lifeblood of its economy and is crucial in addressing both productivity and food security.

In the course of improving this sector, various trends in agricultural development have emerged to give rise to new initiatives and strategies as well as technologies and innovations towards the improvement of the value chain food production.

Given the rapid changing time, increasing demand to produce more, dynamic market needs coupled with shifting government policies, agricultural value chain have become more integrated, concentrated, interdependent, complex, and global. Product and market standards can change in abrupt requiring various key players in the chain to innovate and respond to meet the requirements. Crucial to this change is agricultural financing which is an important support service to value chain.

Over time, financing strategies have been restructured to meet the changing demand.

According to the Asian Productivity Organization (2007) standards have changed and have become more stringent in terms of quality and food safety. More recently, emphasis is given on marketing rather than production, product distinctness, and niche marketing.

Credit facilities and loan services must complement with the changing market demand to intensify productivity and profitability particularly in the rural areas.

This document lays down the current initiatives and efforts in agriculture and rural finance and identifies some innovations, strategies and best practices in the field of agriculture value chain in the Philippine context.

Specifically, the paper aims to: 1) identify and document the current set-up, initiatives, policy and regulatory environment related to agriculture value chain finance in the Philippines; 2) undertake table reviews related to the latest studies on value chain finance including strategies and innovations; and 3) describe case studies and best practices as well as challenges and lessons learned in agricultural value chain.

The paper also tried to look into the accessibility of the various government programs on value chain finance vis-à-vis their viability given the shifting policies and regulations.

With the identification of these innovations and best practices, it is hoped that the paper will provide a better understanding on how value chain finance system in the Philippines works and supports initiatives on financial institutions in enhancing rural agricultural development.

Table of Contents

	<i>Page</i>
Preface	iii
Acknowledgement	iv
Executive Summary	v
List of Tables	viii
List of Figures	ix
 Chapter 1 INTRODUCTION	 1
1.1 Renewed Global Interest in Value Chain Finance	1
1.2 State of Financing in Agriculture Value Chain in the Regions	2
1.3 Rural and Agricultural Finance in the Philippines	4
1.4 Policies and Regulations in Agricultural Finance	7
1.5 Institutions and Organizations in Rural and Agriculture Finance	9
 Chapter 2 AGRICULTURAL VALUE CHAIN FINANCE IN THE PHILIPPINES	 13
2.1 Public-Private Partnership in Agriculture Value Chain Finance	14
2.2 Programs Specific to Value Chain Finance	15
2.3 Microfinance in Support to Value Chain Finance	18
 Chapter 3 INNOVATIONS	 25
3.1 Value Chain Innovations	25
3.2 Policy and Financial Innovations	26
3.3 Technological Innovations	28
3.4 Infrastructural Innovations	30
 Chapter 4 CASE STUDIES AND BEST PRACTICES	 34
 Chapter 5 CHALLENGES AND LESSONS LEARNED	 38
References	40

List of Tables

	<i>Page</i>
Table 1. Loans Granted to AFF by Type of Bank, 2005-2010 (in Php million)	5
Table 2. Agricultural Production Loans by Commodity and Sources, Philippines	7
Table 3. Philippines Microfinance Institutions and Regulatory Framework	20
Table 4. CARD-MRI and PRBC outreach in relation to total PCFC outreach	24

List of Figures

	<i>Page</i>
Figure 1. Philippines Agricultural Production Loans by Year and Item, 2000-2012	6
Figure 2. Philippine Vegetable Value Chain	14
Figure 3. Geographic location of Supply Food Chain Project	16
Figure 4. Key actors in PCFC Linkage	23

CHAPTER 1

Introduction

1.1 Renewed Global Interest in Value Chain Finance

Agriculture is, and will remain, a major global building block in achieving the *Millennium Development Goals (MDG)*. After more than a decade of low recognition, the issue of agricultural finance is back – and frequently tops the international development agenda. International donors, politicians, and specifically the G20 (group of finance ministers and central bank governors from 20 major economies) are placing renewed focus on this long neglected topic (Hollinger, 2011).

In the preface of Hollinger's (2011) paper on "Agricultural Finance Trends, Issues, and Challenges," it was discussed how the past few years have proven that neither commercial banks nor the emerging microfinance industry alone can meet the key financial needs that arise along agricultural value chains. Despite the presence of lending institutions and informal credit, many farmers are still left unserved.

Moreover the seminal work of Miller and Jones (2011) on Agricultural Value Chain Finance (AVCF) emphasized how AVCF offers an opportunity to reduce cost and risk in financing, and reach out to smallholder farmers. The authors defined value chains in agriculture as comprising a set of actors who conduct a linked sequence of value-adding activities involved in bringing a product from its raw material stage to the final consumer.

As confirmed by various authors and experts in this field, value chain finance is not new but is older than many forms of finance, especially in agriculture. What is new are the numerous new ways of providing such financing as well as the convergence and inter-linking of agri-business and finance (Ghai, 2012).

Miller and Jones (2011) supported this observation, stating that what is new and noteworthy is the extent to which value chain finance is being utilized by financial institutions, agri-businesses, and farmers. Innovations in value chain finance are manifested through the emergence of integrated value chains as a widespread global model and combination of financial mechanisms from a wide range of organizations.

Fortunately, this renewed focus on rural and agricultural finance is emerging in a more enabling environment. Partner countries and donors are concentrating on developing appropriate financial products and services, such as value chain finance and weather insurance schemes, and on innovative delivery channels, such as mobile financial services, to increase outreach to the rural poor (Hollinger, 2011).

The attention value chain finance in agriculture receives today, according to Ghai (2012), is due to the realization of business leaders in both finance and agriculture that there is a wealth of new opportunities for them to profitably work together. This became more apparent with new innovations affecting the development of agriculture such as communication technology, information management, etc.

Indeed, value chain finance is considered a "hotspot" or key area in rural finance as an important delivery mechanism. Ghai (2012) explained that value chain finance should be looked at as an interdisciplinary approach where the combination of financial and agricultural sector skills and institutions creates synergies and reduces overall risks and transaction costs in order to bring about a substantial expansion

of agricultural finance. To attain this, however, he said, the presence of core principles of fairness and transparency, and long-term vision of stakeholders based on common interests must be present.

1.2 State of Financing in Agriculture Value Chain in the Regions

While value chain finance in agriculture is not limited to financing from formal lending institutions, it still plays a significant impact on the provision of financial services including in the rural areas. The following global review is provided from the work of Ghai (2012):

During the 1990s, the Financial Systems Approach was officially adopted by all donors and International Financial Institutions and by the majority of developing and transition countries. However, the fruits of financial market liberalization have been slow to materialize in rural areas. Government withdrawal from financial service provision and the closure of agricultural banks led to a contraction of formal financial services in rural areas.

The entry and expansion of private financial institutions have been slow and uneven and largely confined to a few high-potential areas and non-agricultural rural activities. Commercial banks have rarely entered rural areas due to safer and more profitable business opportunities elsewhere.

Microfinance has proliferated mainly in urban or densely populated rural areas focusing on non-agricultural activities in the trade and services sector. Hence, especially more remote rural areas and the agricultural sector continue to be heavily underserved by financial institutions. This has even been the case in countries which implemented far-reaching financial sector reforms more than a decade ago and have followed sound macro economic and financial sector policies for many years.

These trends do not apply to all regions equally, but the following provides a brief overview of some key regional features:

East and South Asia

- Characterized by higher degrees of government intervention in rural financial markets compared to other regions.
- Instruments vary between countries and include lending quotas for commercial banks to priority sectors, refinance facilities from second-tier institutions and direct lending through publicly owned banks. The performance of public banks is highly variable, but some of them have been successfully reformed and are now achieving impressive outreach in rural areas combined with high levels of efficiency and financial sustainability. Rural banks and savings and credit cooperatives play an important role in some countries (e.g. the Philippines, Indonesia and Nepal).
- South Asia hosts some of the pioneers and flagship organizations in microfinance (e.g. Grameen Bank and BRAC in Bangladesh). Experiences show that sustainable rural microfinance is greatly facilitated by high population densities and therefore their approaches might not easily be replicable elsewhere. In South-East Asia, there are several public agricultural banks, which have been successfully reformed (e.g. BRI in Indonesia, BAAC in Thailand) or have made important progress in achieving sustainable outreach (e.g. VBARD in Viet Nam, the Land Bank of the Philippines).
- Linkage models between formal and informal financial institutions are being implemented in several countries, including Indonesia, India, Mongolia and Nepal. Linkages between banks and Self-Help Groups (SHGs) have achieved huge outreach in some countries, especially in India.

Middle East and North Africa

- Little progress has been made in reforming rural financial markets, which are still characterized by high levels of state intervention including interest rate caps and subsidized credit.
- This is partly attributable to government priorities to stimulate food production and curb rural out-migration in the face of adverse climatic conditions and limited water resources, which severely constrain agriculture and rural development. Therefore, publicly owned agricultural banks continue to be the main formal financial service providers in rural areas.
- Their financial performance is generally poor and their financial products and lending requirements exclude significant parts of the rural poor. Only a few banks have initiated reform processes and the National Agricultural Bank of Tunisia is arguably the only successful reform case in the region so far.

Eastern Europe and the New Independent States

- Have witnessed the most radical change of their financial infrastructure over the past 20 years: more than in other regions, state banks were either closed or restructured and privatised following transition.
- Many countries, especially in the former Soviet Union, have maintained a highly dualistic agrarian structure characterized by an emerging class of large corporate farms and vertically integrated holdings on one end and myriad small and micro-holdings on the other.
- Medium-sized farms and SMEs engaged in agri-related upstream and downstream activities are only slowly emerging in parts of the region. Moreover, the rural non-farm economy is less developed than in other regions.
- Smaller farms, rural households and micro-enterprises mainly have to rely on self-finance and remittances, especially in the smaller and less developed ECA countries. Financial NGOs and credit unions have some outreach in rural areas although most of them are still small. Only a few financial NGOs have been transformed into Non-Bank Financial Institutions (NBFIs). Overall, commercial banks play a limited role in rural SME finance. However, commercial banks in Georgia and Azerbaijan have started introducing agricultural lending as part of their downscaling activities.
- A few other notable success cases of unsubsidized rural and agricultural finance exist in the region: The Agricultural Cooperative Bank of Armenia (ACBA), Kyrgyz Agricultural Finance Corporation (KAFC) in Kyrgyzstan and the Agricultural Bank of Mongolia have achieved considerable rural outreach and financial sustainability.

Sub-Saharan Africa

- Over the past two decades, many African countries have undertaken serious efforts to reform and strengthen their financial sectors. Reforms included the modernization of banking laws, strengthening of regulation and supervision, privatization of state-owned banks and increased entry of foreign banks. However, the expected results of these reforms have been slow to materialize in rural areas and the outreach and quality of rural financial services is still very low.
- More than in other regions, banks have to grapple with high levels of informality of clients and business transactions, limited availability of loan collateral, poor enforceability of contracts, limited scale in small markets and high transaction costs due to poor infrastructure and low population densities. Moreover, the liberalization of agricultural input and output markets, despite its positive impact on farm gate prices, has also increased risks and uncertainties in the sector.
- Despite the overall bleak picture of rural finance in Africa, there are promising examples of innovative banks and microfinance institutions venturing into rural and agricultural lending,

especially in the more advanced countries. Moreover, new technologies such as mobile phone banking help to cut transaction costs especially for payment and deposit services.

- Contract farming has helped to overcome the lack of inputs and support services (including finance) in some areas. Moreover, some agri-business companies are providing seasonal credit under contract farming arrangements and there are some promising approaches of value chain finance in subsectors such as dairy, sunflower, maize, tea, coffee, cotton and others.
- In view of the low outreach of the formal financial system, informal and semi-formal financial institutions continue to play very important roles in rural Africa. There is a wealth of member-owned financial institutions, starting from informal institutions such as Rotating and Accumulating Savings and Credit Associations (ROSCAs and ASCAS) to more structured and formalized institutions such as savings and credit cooperatives, village banks, financial services associations and others. Despite their institutional weaknesses, these grassroots financial institutions are often the only providers of financial services in rural areas.

Latin America and the Caribbean

- Many agricultural development banks were closed down during the 1980s and 1990s leading to a marked credit contraction in rural areas and for the agricultural sector. Since the 1990s, donor support has mainly focused on financial NGOs, which have grown considerably in some countries. Several large financial NGOs have been transformed into regulated financial institutions. Although microfinance institutions have proliferated mainly in urban areas, some have diversified into rural areas as well and introduced agricultural loans.
- Overall, the number of these MFIs has remained limited and largely confined to a few countries (notably Bolivia, El Salvador, Nicaragua, Paraguay and Peru). Member-based financial institutions such as village banks play a larger role in more remote rural areas and among the rural poor.
- The growth of microfinance has been most notable in the smaller and poorer countries (e.g. Bolivia, Nicaragua) while remaining relatively insignificant in larger and more developed countries like Brazil, Mexico and Chile. In most countries, savings and credit cooperatives and banks (including development banks) continue to be the main providers of rural financial services.
- Overall, public banks still play a more important role in rural finance and agricultural lending than commonly believed. Several countries have restructured or re-established agricultural banks including first and second-tier institutions (e.g. Peru, Colombia, Guatemala, Mexico) or are in the process of doing so (Bolivia, Nicaragua). Brazil recently made notable advances in the use of branchless banking, expanding access to financial services to remote, previously unbanked areas.

1.3 Rural and Agricultural Finance in the Philippines

The agriculture sector plays an important role in shaping the Philippines' overall economic growth and development. It continues to be one of the most economically significant and promising industries in terms of its vast potential and opportunities for expansion and growth.

Majority of the country's labor force (around 33 percent) depends on agriculture for their income and livelihood. It contributes 13.04 percent to the gross domestic product (GDP) of the country (World Bank Report, 2012).

It is ironic however that while the agriculture sector contributes this much to the economy, farming is still considered as a "poor man's sector" (Cayabyab, 2013). Official poverty statistics (from 1985 to the most recently released figures in 2009) showed that the concentration of the poor has been in the entire agriculture sector (Albert, 2013) and 70 percent of them reside in rural areas in the Philippines.

In 2013, the Bureau of Agricultural Statistics (BAS) reported a 1.15 percent growth in all the subsectors of agriculture, relatively gaining an increase in output gains from previous year (livestock 1.75 percent, poultry 4.20 percent, and fisheries 1.23 percent). The crops subsector, although also registered output gains, it was minimal (0.09 percent). Crops that registered higher outputs came from onion, mango, and cassava while lower output levels were noted from coconut, sugarcane, banana, coffee, peanut, and calamansi.

Given the archipelagic nature of the country, it is often struck by natural calamities (typhoon, drought) making crop production vulnerable and is always at the mercy of the weather. This in return affects livelihood and the agricultural economy as a whole. Production is further burden with climate change causing unpredictable disturbances in various provinces that mainly depend on agriculture for food and income.

Agricultural lending in the Philippines has always been perceived to be unprofitable and of high risk. The high transaction and supervisory costs involved in agricultural lending make formal lenders cautious of providing financing to small farmers, since they have little or no collateral to offer. (Casuga, et al., 2008)

Access of poor farmers and rural households to affordable financial services is a key factor for agricultural development. However, given the vulnerability of the agriculture sector, production wise, credit facility becomes difficult to access.

This resulted to small farmers relying on informal credit for their agricultural production. The distribution of agricultural loans from the formal sector is concentrated on large borrowers mainly because they can provide acceptable collaterals. In fact, according to PinoyME (2013), nearly two-thirds of rural folks in the Philippines borrow from exorbitant, informal sources.

Loans Granted to Agriculture, Fishery, and Forestry

Majority of bank loans for the agriculture, fishery, and forestry (AFF) sector has consistently been low relative to other sectors of the economy.

Table 1. Loans Granted to AFF by Type of Bank, 2005-2010 (in Php million)

Financial Institution	2005	2006P	2007	2008P	2009P	2010P
Government Banks	29,124.6	22,199.1	36,616.0	69,184.3	65,355.6	67,571.8
DBP	13,437.3	5,037.8	18,426.7	42,732.5	26,878.0	27,386.0
LBP	15,687.3	17,161.3	18,189.3	26,451.8	38,477.6	40,185.8
Private Banks	447,020.0	279,963.1	349,453.9	393,980.5	540,254.7	556,969.8
PKBs	393,471.3	217,432.3	239,259.6	264,769.2	405,182.8	415,133.4
TBs	15,141.0	23,217.0	62,186.0	77,183.2	81,015.1	85,042.5
PDBs	892.0	1,082.0	4,366.0	4,701.5	5,052.0	5,428.5
SMBs	12,285.0	20,596.0	52,217.0	65,709.1	68,979.5	72,412.7
SSLAs	1,964.0	1,539.0	5,603.0	6,772.6	6,983.6	7,201.2
RBs	38,407.7	39,313.9	48,008.3	52,028.1	54,056.8	56,793.9
All Banks:						
Total Loans Granted to Agri, Fishery, Forestry, AFF	476,144.6	302,162.2	386,069.8	463,164.8	605,610.3	624,541.6
Total Loans Granted	11,935,642.3	-	17,459,079.7	21,038,347.3	24,727,476.2	25,080,523.9
Ratio of Loans to AFF to Tot Loans Granted, %	3.99	#DIV/0!	2.21	2.20	2.45	2.49

P: Preliminary. Amounts were forecasted due to non-availability of actual data.

Source of data: BSP-DER/SRSO/Statistical Bulletin, RB System annual reports, LBP and DBP.

Updated: January 6, 2011

Note: Data of LBP and DBP updated May 7, 2009

Total loans granted to the AFF sector showed very modest improvements in 2005-2010. The ratio of loans to AFF from the total loans granted averaged to 2.66 percent. While loans to AFF among government banks varied in the course of such period, loans provided by private banks steadily increased except in 2006 (Table 1). Majority of the loans granted to this sector comes from private banks while financing support from government financial institutions has been minimal.

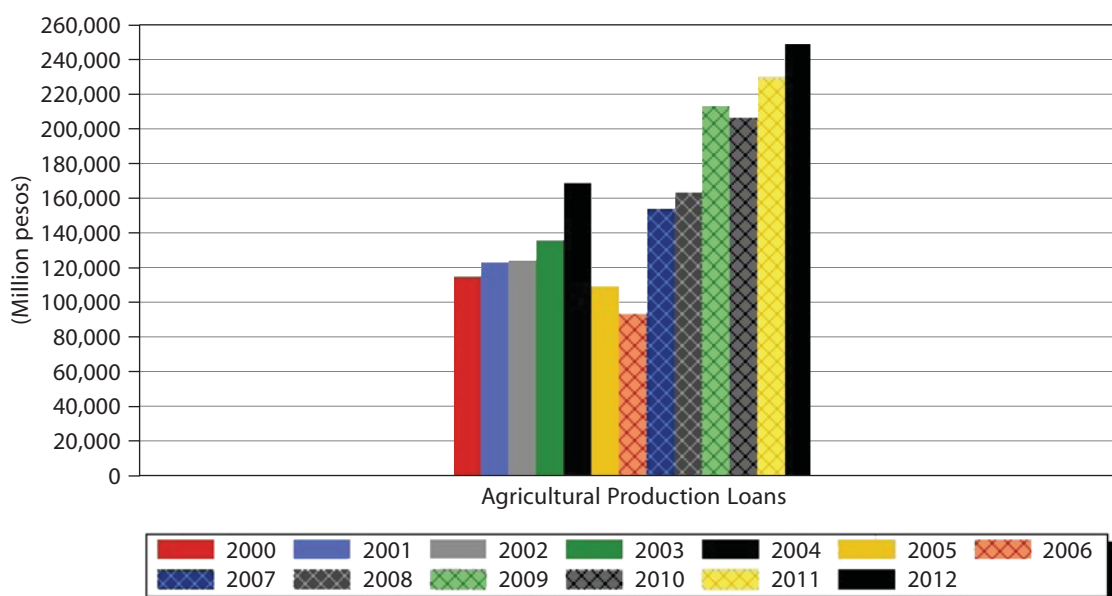
In a survey conducted by Agricultural Credit Policy Council (2002), majority of farmer-borrowers continue to depend on informal lenders for their production financing. Private banks have not provided financing for long-gestating crops. They are more comfortable financing short-term, high value crops, livestock and poultry.

Agricultural Production Loans

For the period of 2000-2012, loans granted for agricultural production has steadily increased with the exception in 2005-2006, before picking up again in 2007 (Figure 1).

Commodity-wise, majority of the agricultural production loan goes to food including cereals; fruits, vegetables, rootcrops; livestock and poultry; and fisheries. Production on cereals (*palay*, corn, and other grains) shares majority of the loans followed by livestock and poultry. Meanwhile, loan for export and commercial commodities are given mostly for the production of coconut and sugarcane (Table 2).

Figure 1. Philippines Agricultural Production Loans by Year and Item, 2000-2012



Bureau of Agricultural Statistics

Table 2. Agricultural Production Loans by Commodity and Sources, Philippines

Item	2008	2009	2010	2011P	2012P
Loans Granted by Commodity (million pesos)					
Food Commodities	71,177.1	94,299.1	76,844.3	87,434.2	95,973.5
Cereals	28,817.1	34,945.8	34,982.3	40,855.0	45,506.5
Palay	27,095.5	32,948.4	32,771.4	36,547.5	40,392.3
Corn	1,671.0	1,961.6	2,137.4	4,288.1	5,049.5
Sorghum	18.0	24.8	8.4	39.3	55.8
Soybeans and Feedgrains	32.6	11.0	65.1	10.0	8.9
Fruits, Vegetables and Rootcrops	12,937.7	24,235.9	7,785.6	8,743.0	9,591.8
Livestock and Poultry	23,813.2	28,548.8	28,928.3	32,590.0	35,054.8
Fisheries	5,609.1	6,568.6	5,148.2	5,216.2	5,520.3
Export and Commercial Commodities	14,426.5	18,056.7	17,399.0	16,701.8	20,496.8
Abaca and Other Fibers	186.8	82.6	81.3	127.4	136.3
Coconut	5,933.4	9,056.7	6,257.8	6,391.9	6,600.8
Coffee & Cacao	1,224.4	788.3	771.7	472.0	468.6
Rubber	87.2	189.2	36.3	84.7	85.7
Sugarcane	6,534.1	7,234.3	8,867.4	7,983.1	11,421.3
Tobacco	460.6	705.6	1,384.6	1,642.7	1,784.1
Forestry	155.7	197.3	314.8	315.5	331.6
Others	30,112.8	26,558.9	34,721.8	43,036.5	45,448.6
Sub-Total	115,872.1	139,111.9	129,279.8	147,488.0	161,950.5
Other Loans Sourced from					
SSLA	14,473.0	20,821.0	17,620.0	18,336.5	19,082.1
SMB	16,174.0	38,617.0	37,293.0	40,509.1	44,002.5
PDB	16,310.0	14,150.0	21,311.0	21,782.1	22,263.7
Grand Total	162,829.1	212,699.9	205,503.8	228,115.7	247,298.8

Source: ACPC

1.4 Policies and Regulations in Agricultural Finance

The Philippine Government has adopted various policy measures that would increase the flow of credit to rural areas and enhance the access to credit of small farmers and fisherfolk. In the last three decades, it has embarked on various agricultural credit programs from a supply-led policy and subsidized interest rates to a credit policy that is demand-driven.

In the 1970s, rural finance in the Philippines was supply-led. Policies were aimed at increasing the supply or volume of bank loans to the agriculture and fisheries sector. It was believed that increasing credit supply would lead to increased productivity among farmers and fisherfolk.

Examples of government programs (commodity-specific) that provided subsidized interest rates included *Masagana 99* (for rice), *Masaganang Maisan* (for corn), *Bakahang Barangay* (for livestock), and *Gulayan sa Kalusugan* (for vegetables).

Lessons learned from this type of policy according to Corpuz (2005) showed that interest rate subsidies intended for small farmers have not been effective. While credit subsidies are intended for the small farmers, loans at subsidized interest rates attract the big, wealthy borrowers as well. A bank faced with both types of borrowers is more likely to lend, or lend more to bigger borrowers whom it considers less risky. Moreover, this policy also pushed farmers and farmers' groups, including cooperatives, to borrow for the wrong reason, that is, to avail themselves of cheap loans even without a viable project.

With the arising problems and inefficiencies in implementing credit programs at subsidized interest rates and fast-track the flow of credit to the rural sector, the government allowed its line agencies such as the Department of Agriculture (DA) to lend directly to small farmers. These line agencies performed banking functions including the screening and selection of loan applicants to the collection of loan payments. This type of set-up diverted the role of non-financial agencies into performing credit-related functions wherein they had little competence.

This policy was later found inefficient mostly because repayment performance was low. Also, this paved way for the “patron-client relationships” on credit allocation wherein some government employees performing credit-related functions tend to approve loans in exchange for personal favors.

Compelling banks to set aside certain portion of their loan portfolios for agricultural and agrarian reform credit has also become an approach by the government to increase the supply of credit to agriculture and agrarian reform beneficiaries.

This strategy was strengthened Presidential Decree 717 or the “Agri-Agra Law” (Presidential Decree 717) which was enacted in 1975 to compel banks to set aside 25 percent of their loan portfolios for agricultural and agrarian reform credit. From the 25 percent, 15 percent goes to the “agri component” which includes loans and advances for activities that cover production, processing, marketing, storage, and distribution. The remaining 10 percent composes the “agra component” which includes tillers, tenant-farmers, settlers, agricultural lessees, amortizing owners, owner-cultivators, farmers’ cooperatives, and contract farmers as the agrarian reform beneficiaries.

Recently, the “Agri-Agra Law” was amended into the “Agri-Agra Reform Credit Act of 2009,” (Republic Act 10000) which eliminated several alternative forms of compliance to the rule mandating banks to lend 25 percent of their funds to the agriculture sector—in particular, 15 percent for agriculture-related projects and 10 percent for agrarian reform beneficiaries. Under the latest version of the law, banks that fail to allocate at least 25 percent of their loanable funds to the agriculture sector will be penalized. Banks that fail to comply face a penalty of 0.5 percent of the amount of involved. Under the law’s guidelines, one alternative form of compliance is lending to accredited rural financial institutions (RFIs), which are expected to use the borrowed funds for relending to borrowers from the agriculture sector (Remo, 2012).

Given the failure of the supply-led strategy in agricultural credit, the government in the mid-80s moved towards financial liberalization that included the deregulation of the interest rates and the consequent elimination of subsidies. Emphasis was placed on deposit mobilization to encourage banks to generate their own funds for lending and to reduce their dependence on the government for ‘cheap’ funds (Corpuz, 2005).

With this shift in policy, the Comprehensive Agricultural Loan Fund (CALF) was implemented by the Agricultural Credit Policy Council (ACPC) through Executive Order 113 issued in December 1986. CALF was used as a loan guarantee fund intended to encourage private banks to lend to agriculture by reducing the risks and the transaction and monitoring costs they faced in lending to agriculture. The loan guarantee programs as much as 85 percent of the credit risks of financial institutions that provided loans to small agricultural borrowers and small and medium enterprises. Among the guarantee programs supported by CALF included Guarantee Fund for Small and Medium Enterprises (GFSME), Philippine Crop Insurance Corporation, and the “Bagong Pagkain ng Bayan” for the rural based projects of LGUs. Later, CALF was used for special credit programs and crop insurance, innovative financing schemes, and institution building activities.

To pave the way for the recovery of the rural banking system in the country, the Countryside Financial Institutions Enhancement Program (CFIEP) in 1991 and the Rural Banks Act (R.A. 7353) passed in April 1992 were implemented. The CFIEP gave banks more leeway to bounce back through counterpart

capital infusion by Land Bank to match private capital infusion, the exemption of common stockholders from the 20 percent ownership ceiling and the waiving of penalties and other charges on arrears covered by the program. Meanwhile, the Rural Banks Act allowed the conversion of arrears of rural banks with BSP into government-preferred stocks in the bank and owners were required to infuse an equal amount of capital over 15 years (Corpuz, 2005).

There was a resurgence of directed credit programs and government agencies once more implemented directed credit programs.

With the implementation of the Social Reform Agenda, poverty alleviation programs including the provision of credit to poor households were implemented. Thus, only about two years after the creation of the CALF, a new government credit program directed to the poor households of the agriculture sector emerged, the number of which reached almost 80 – more than three times the number of directed credit programs before the policy change in 1986.

And then came AFMA or the Agriculture and Fisheries Modernization Act (or R.A. 8435) the mid-90s. It aims to transform agriculture into a productive and competitive sector to enable farmers and fisherfolk meet the challenge of globalization. The Law covers the many elements critical to agriculture modernization including credit, among others.

The realization of this credit facility was made through ACPC's Agro-Industry Modernization Credit and Financing Program (AMCFP) which is designed to make credit more accessible to small farmers by including rural banks, cooperative rural banks, cooperatives, self-help groups, farmers' associations and non-government organizations as retailers of the AMCFP fund. It adopts the policy of market-determined interest rates as provided for in the AFMA.

1.5 Institutions and Organizations in Rural and Agriculture Finance

As the rural economy continues to progress, opportunities for investments in agriculture enterprise arises essentially requiring complementary investments and demands for capital. Financial resources, through rural agricultural loans, are important to fast-track increase production and profit that comes along with the adoption of technologies.

Providing access to financial resources in the rural areas is one of the important elements for rural development. Ideally, financial resources for rural development are mobilized by relying on financial institutions to mobilize resources from the fund surplus sectors and to allocate these resources to the fund-deficit sectors (Geron, 2012).

In as much as agricultural financing is important, and so are the institutions and organizations (financing institutions, policy councils, government owned and controlled corporations) in the sector that make these programs feasible and implementable.

Bangko Sentral ng Pilipinas (BSP)

BSP is the central bank of the Republic of the Philippines. Established in 1993 pursuant to the provisions of the 1987 Philippine Constitution and the New Central Bank Act of 1993, it took over from the Central Bank of Philippines, which was established in 1949. As the country's central monetary authority, BSP functions with fiscal and administrative autonomy from the National Government in the pursuit of its mandated responsibilities.

One of its main functions is financial supervision which includes supervising banks and exercising regulatory powers over non-bank institutions performing quasi-banking functions.

The BSP is deeply involved in various projects and activities aimed towards alleviating poverty through its flagship program on microfinance. Launched in 2000, BSP's program played a key role in the development of sustainable microfinance in the country. Its initiatives focused on the policy and regulatory environment, training and capacity building as well as on promotion and advocacy. Through its microfinance program, financial services such as deposits, loans, payment services, money transfers and insurance products to the poor and low-income households and their micro-enterprises are provided. The clients of microfinance are the economically-active, entrepreneurial poor (e-poor). If provided on a sustainable basis, microfinance can help increase income, build viable businesses, reduce vulnerability to external shocks, empower the client, and improve the quality of their lives.

Land Bank of the Philippines (LBP)

LBP is a government financial institution that plays a unique role of promoting countryside development while remaining financially viable. The profits derived from its commercial banking operations are used to finance the Bank's developmental programs and initiatives. LBP has grown into the largest formal credit institution in the rural areas and today offers a full range of banking services.

One of the major roles of LBP is to provide credit assistance to small farmers and fisherfolk and ARBs. Its loan portfolio has expanded over the years to favor its priority sectors: the farmers and fisherfolk, small and medium enterprises and micro-enterprises, livelihood loans and agri-business, agri-infrastructure and other agri- and environment-related projects, socialized housing, schools and hospitals.

Today, LBP is by far the largest formal credit institution in the rural areas. Its credit delivery system is able to penetrate a substantial percentage of the country's total number of municipalities. It also ranks among the top five commercial banks in the country in terms of deposits, assets, loans and capital.

Development Bank of the Philippines (DBP)

DBP is a government-owned development bank in the Philippines that plays a pivotal role in the quest for sustainable growth and development. It is the seventh-largest bank in the Philippines in terms of assets, and is the second-largest government-owned bank, next only to Land Bank. It is also one of the largest government-owned and/or controlled corporations (GOCCs) in the Philippines.

The DBP is classified as a development bank and may perform all other functions of a thrift bank. Its primary objective is to provide banking services principally to cater to the medium and long-term needs of agricultural and industrial enterprises with emphasis on small and medium-scale industries.

One of its programs in terms of agricultural financing is the Sustainable Entrepreneurship Enhancement and Development Program (SEED) which is DBP's umbrella program for micro, small and medium enterprises (MSMEs). The program aims to enhance the access of MSMEs to credit facilities and fast-track the credit process; bring SMEs to the mainstream of banking by implementing alternative ways of securing MSME loans; and maximize the bank's lending reach and help create employment and income opportunities.

National Credit Council (NCC)

NCC is a credit policy-making body of the government under the Department of Finance (DOF). It was created by Administrative Order No. 86 on October 8, 1993, mainly to rationalize and optimize government credit policy. It has been amended by Administrative Order No. 250.

It's main mandate involves the implementation of directed credit programs and identifying alternative delivery mechanisms for the effective and efficient provision of financial services to the poor. It comprised of representatives from both the government and the private sector.

Agricultural Credit Policy Council (ACPC)

ACPC is a credit policy-making body of the government under the Department of Agriculture (DA). It was created in 1986 by virtue of Executive Order 113 to assist DA in synchronizing all credit policies and programs in support to its priority programs and to review and evaluate the economic soundness of all on-going and proposed agricultural credit programs, whether for domestic or foreign funding, prior to approval. ACPC is also tasked to undertake measures to increase its funds base and adopt other liquidity interest stabilization and risk cover mechanisms for its various financing programs.

With its on-going involvement in policy/action research and institution-building, ACPC continues to help government develop and implement strategies and policies that increase and sustain the flow of credit to agriculture and fisheries, improve the viability of farmers and fisherfolk, and support agriculture modernization, food security and poverty alleviation.

National Livelihood Development Corporation (NLDC)

NLDC is a government-owned and controlled corporation (GOCC) mandated under Executive Order 681 to undertake the promotion, generation and development of livelihood and community-based enterprises primarily in agri-business, including those in the Agrarian Reform Communities (ARC) that will cater to the low-income bracket.

NLDC remains the sole and primary provider of microfinance to ARC and private sector and to provide microfinance and other support services to the NLDC target beneficiaries. The primary objective of the NLDC is to extend rural (especially agricultural) finance in to unserved, scarcely populated areas by improving social performance measurement and monitoring, and influencing and advocating the expansion of services of microfinance institutions and partner conduits to the beneficiaries.

NLDC develops and adopts programs and projects to support and enhance the initiatives of microfinance entrepreneurs of MFI-Conduits and other partners and encourages private sector participation, especially corporate supply chains, in consolidating ARBs and other small farmers to engage in value-adding activities to comply with the volume and quality demands of new market channels.

Since it is not dependent on government appropriations/budgetary support, the NLDC continues to ensure efficiency in the use of resources, productivity, profitability and viability. Today, NLDC actively pursues a package of livelihood and enterprise development programs and interventions to hasten socio-economic growth in the countryside especially in the hard-to-reach agrarian reform communities (ARC). The NLDC serves sectors at the bottom rung of the economic ladder by making financing available to them and also by engaging them in capability-building programs.

Cooperative Development Authority (CDA)

CDA is a government agency created by virtue of Republic Act No. 6939 in compliance with the provisions of Section 15, Article XII of the Philippine Constitution of 1987 which mandates Congress to create an agency to promote the viability and growth of cooperatives as instruments for equity, social justice and economic development.

The CDA serves as a proactive and responsive lead agency in advancing and sustaining the growth of the cooperative sector by pursuing a holistic development approach, establishing support systems and structures, and building strong linkages with stakeholders, thereby optimizing benefits to cooperatives in particular and to society in general.

Quedan Guarantee Fund Corporation

QUEDANCOR is a government government-owned and controlled corporation mandated to accelerate the flow of investments and credit resources in rural areas so as to trigger the vigorous growth and development of rural productivity, employment and enterprises to generate more livelihood and income opportunities through the various quedan credit and guarantee programs.

It introduced its agri-credit and guarantee programs and services on a national level, through the creation of Regional Offices located in strategic locations across the Philippines.

Philippine Crop Insurance Corporation (PCIC)

PCIC is a government-owned and controlled corporation (GOCC) as the implementing agency of the government's agricultural insurance program. It is an attached agency of DA with the principal mandate of providing insurance protection to farmers against losses arising from natural calamities, plant diseases and pest infestations of their palay and corn crops as well as other crops. It also provides protection against damage to/loss of non-crop agricultural assets including but not limited to machineries, equipment, transport facilities and other related infrastructures due to peril/s insured against.

Apart from protecting farmers from financial losses, crop insurance was also considered as an instrument that can be offered as "surrogate" collateral to banks and other financial institutions to influence and encourage them to continue participating and supporting government credit programs.

CHAPTER 2

Agriculture Value Chain Finance in the Philippines

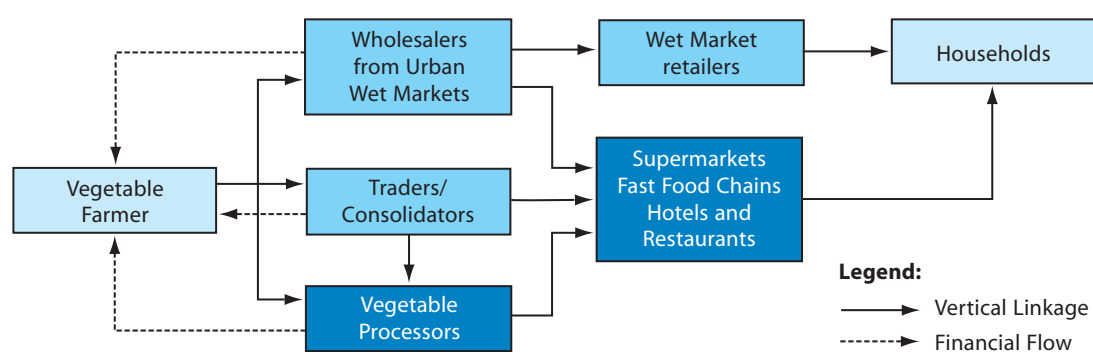
Financing the agricultural value chain provides an opportunity to reduce cost and risk in financing and a means to reach out to smallholder farmers. According to Meyer (2010), for financial institutions, value chain finance creates the impetus to look beyond the direct recipient of finance to better understand the competitiveness and risks in the sector as a whole and to craft products that best fit the needs of the businesses in the chain.

Value chain is defined as the sequence of value-adding activities, from production to consumption, through processing and commercialization. Each segment of a chain has one or more backward and forward linkages. The flows of funds and internal and external financial arrangements among the various links in the chain comprise what is known as value chain finance. This can be internal financing directly from one value chain actor to another or external from a financial institution or investor based upon the borrower's value chain relations and activities (Meyer, 2010).

In order to have a competitive advantage, the final product must be delivered to the market efficiently, with a higher quality and at a lower cost to penetrate not only the local market but the global market as well. As such, financing is important in every aspect of the value chain. Without agricultural financing, producers would not have access to better farm inputs and technology resulting in low quantity and quality of produce. In addition, lack of credit for agricultural producers and agri-processors create problems in hiring labor for production, storage, processing, transportation and accessing markets. The right finance at the right time is necessary to have greater efficiency, improved product quality and increased income (Casuga, et al., 2008).

The agricultural value chain in the Philippines follows the traditional supply chain, though it focuses more on how value is being added to the product as well as product innovation, development and marketing. Some activities add more value and some chain participants have more powers than the others.

One example is the value chain in vegetable wherein the commodity flow starts from the rural areas to the urban centers. According to Casuga (2008), Vegetable growers source their farm inputs from the suppliers either by pick-up or delivery. Farmers sell their produce through agents who facilitate the transaction with the traders. The agents act as the collector of the products from the farm and sometimes monitor the farm fields. The traders or consolidators then purchase and transport the vegetables to the market where it is sold to wholesalers, retailers, supermarkets and other institutional buyers. These vegetable traders and consolidators also sell the vegetables to the bagsakan centers around Metro Manila. Only a small percentage of the vegetable farmers supplies directly to vegetable processors and institutional markets. The traditional wet market continues to play a significant role as primary retailers for the consumers as well as the institutional markets. Performing value adding activities in the vegetable supply chain like cleaning, sorting and packaging increases the prices of vegetables (*Figure 2*).

Figure 2. Philippine Vegetable Value Chain

From: Digal and Concepcion (2004).

Agricultural finance in the Philippines is mostly provided by the participants within the value chain or what is known to be the direct value finance. The predominant suppliers of credit for rice and vegetable farmers are the traders, millers and/or input suppliers. The close relationship that the farmer develops with other players within the chain reduces the problem on information impartiality, giving the informal lenders an advantage of knowing the borrower's information compared to the formal financial institutions.

However, due to the limited resources of informal lenders, they can only provide short-term loans. On the other hand, very few formal financial institutions are actively involved in financing the agricultural value chain because of the high risk involved. The challenge now lies on how to encourage the banking industry to finance the agricultural value chain.

The limited investment of farmers in their farm operation resulted in low productivity and quality, making them less competitive in the market. Improving the quality and quantity of production of farmers as well as their market linkages will help in the reduction of risk in agricultural credit. Increased harvest and good quality of products farmers can command a better price, resulting in income increase and, consequently, an increase in their capacity to repay the loans.

Financial intervention from outside the chain like bank financing must complement the existing informal credit. Innovations in the provision of credit to chain participants are important to have a successful value chain. Innovative financing approach can be improved by designing a suitable financial package that responds to the credit needs of the chain participants (Casuga, 2008).

2.1 Public-Private Partnership in Agriculture Value Chain Finance

Public Private Partnership (PPP) as an approach has emerged as a key vehicle for agricultural development. It addresses key financing challenges particularly on investments and role partaking.

PPP is a collaborative approach wherein public organizations and private entities share resources, knowledge, and risks to achieve efficient production and delivery of agricultural products and services.

One value chain approach involving public-private partnerships (PPPs) is applied to a project, "Bridging Small Farmers to the Jollibee Supply Chain Program" that aims to bridge small farmers to an agri-food private company through a financial conduit that will provide not only the financing but the capacity building to the farmers.

This is an initiative of the National Livelihood Development Corporation (NLDC), in cooperation with the Catholic Relief Services (CRS) and the Jollibee Foods Corporation (JFC) to help farmers apply effective farming technologies and methods and ensure reliable delivery and market of their produce.

The underlying assumption is that a business relationship between modern agri-food companies like JFC and small farmers is mutually beneficial. A group of organized small farmers with the number and geographical spread could provide JFC with a stable, diversified source of supply while meeting the required quality standards. JFC, with 1,600 stores nationwide representing various brands, can provide a stable and long-term market for the farmers' produce.

Each organization put up a counterpart contribution of development resources. The approach was not that simple although the positive effects have been wide ranging.

In selecting the sites, NLDC and CRS have to look at the following criteria: 1) Presence of a local entity (municipal government unit, NGO or PO); 2) Agrarian Reform Community (ARC) where credit is available from an affiliated MFI of NLDC; 3) product grown in the area that JFC would need in considerable volume so the farmers' production will be market-opportunity driven.

In 2008, the Program started to assist 300 small farmers in Luzon and Mindanao. CRS and NLDC organized working groups in each site consisting of LGUs, the farmers' cooperatives, microfinance institutions and research agencies to facilitate value-adding and logistic concerns. Each site working group is led by the Mayor who also sets aside budget for the training of farmers or provision of basic infrastructure. The JFC, for its part, works closely with JFC Purchasing to understand the requirements needed by JFC in terms of products and address concerns in dealing directly with farmers' clusters.

Currently, there are 700 small farmers participating in the program and is focusing on 3 products – onion, bell pepper and salad tomato – that are delivered to JFC. There are trial deliveries of milled rice coming from Nueva Ecija and Bukidnon and yearlong delivery of vegetables from Luzon and Mindanao, alternating depending on the season (PPM, 2014).

The viability of the partnership project is strengthened because of the presence of a financing system that adopted to the situation. Although at first, the mechanics for value chain finance was not that established yet, the NLDC-accredited MFI was able to devise an appropriate financing package as it went on (Valenciano, 2013).

2.2 Programs Specific to Value Chain Finance

Supporting the national thrust of the government on promoting food security, various collaborative and synergistic programs specific to agricultural value chain have been developed and established. The main objective is to increase farmers' income by providing financial and technical support along the value-added chain of a commodity or industry.

The idea is to address financing throughout the whole value chain from farm production to processing to marketing. With the market-driven approach to production farmers are assured that their products will be bought.

Food Supply Chain Program

One program that specifically addresses agricultural productivity and financing is the "Food Supply Chain Program" launched during the last quarter of 2010 by Land Bank of the Philippines in synergy with two government agencies, the Department of Agriculture and the Department of Finance. Responding to the challenges of food security and agricultural productivity, this program particularly supports the financial requirements for crop, livestock and fishery production, working capital and acquisition of processing and other fixed assets.

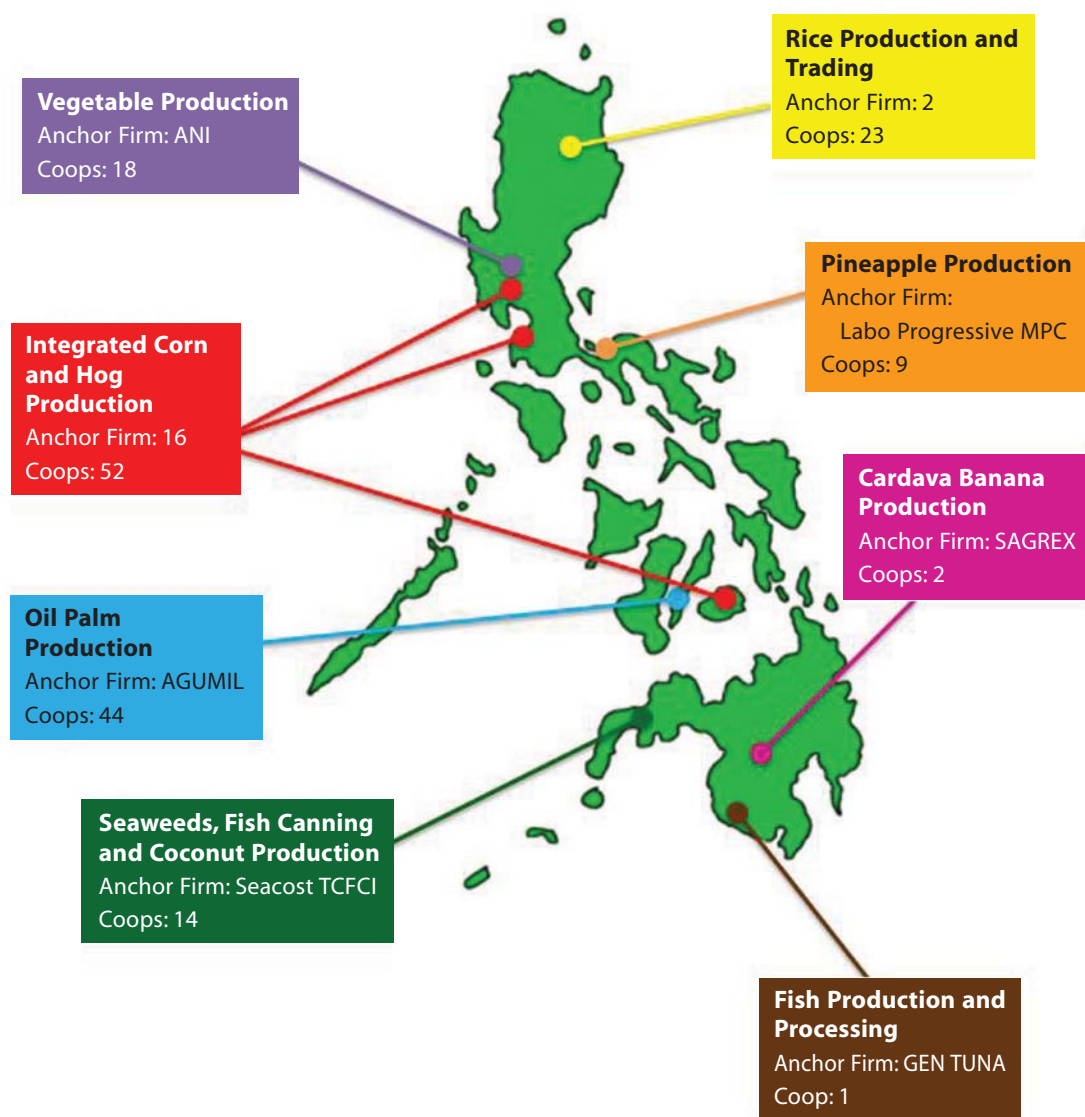
The program has three main components: 1) Financial assistance to support the requirements for production, and securing working capital for the acquisition of fixed assets; 2) Market linkages among

cooperative producers and anchor firms; and 3) Technical assistance to cooperatives to ensure meeting market requirement for volume and product quality.

As a scheme, it covers activities for financing from the input and production to processing, marketing and others. LBP provides financing to all the players along the value chain system, consisting of a full range of activities that are undertaken in turning a particular product into a form that is sold and consumed. A cooperative and a processor will establish production, technical, and marketing contracts. The cooperative, through its farmer members, commits to supply the processor with their produce based on the latter's product requirement. The processor, on the other hand, commits to buy the produce of the cooperatives at a competitive price; and may also commit to provide the necessary inputs and technical assistance if only to ensure product quality and standards. The processor then makes use of the produce to convert it into a product that will again be an input to another activity.

In extending financial assistance to all the key players (i.e. agricultural producers, consolidators, processors and market players) in the food system, capacity building is also strengthened in support to farmers' organizations for them to meet market requirements in terms of quantity and quality.

Figure 3. Geographic location of Supply Food Chain Project



Source: Geron L.S. (2011)/LBP

Specifically, the program provides the following assistance: 1) agricultural production and production support facilities loans for crops, livestock fisheries; 2) loans for commodity processing and manufacturing to be used as working capital for acquisition of transport facilities and processing equipment or construction of processing and development plant, cold storage facilities and warehouses; 3) loans for marketing and trading operations to be used as working capital for construction of warehouse or storages; 4) capacity building programs for farmers organizations in the areas of organizational strength, development, product packaging and marketing; and 5) technical assistance for improving productivity and product quality.

The program is implemented throughout the country with specific emphasis on geographic locations which already have established agricultural productions including firms and cooperatives (*Figure 3*).

Through this program, it was able to improve financial assistance and special financing facility reach to small farmers and fisherfolk through cooperatives and other conduits. There is also effective collaboration and synergistic relationship between and among the partner government agencies and the private sector.

Direct Market Linkage Development Program

ACPC has been implementing the Agro-Industry Modernization Credit and Financing Program (AMCFP) which is mandated to serve as the main vehicle of the DAR for credit delivery to the agrifisheries sector. The program is tasked to help mitigate the risks in agricultural lending and facilitate soft credit to the sector by generating loans totalling 1.5 billion pesos.

Currently, there are different lending programs being implemented by the ACPC under the umbrella of the AMCFP one of them is "Direct Market Linkage (DML) Development Program" and the more recent, "Agri-Microfinance Program (AMP) for Small Farmers and Fisherfolk and their Households".

The DMLDP is a collaborative program between ACPC and the DA-Agricultural Marketing Assistance Service (AMAS), which funds the program. The DMLDP provides financing assistance and ICB to selected farmer associations, cooperatives, POs, trading groups and operators of food terminals engaged in production, marketing, and/or processing of agricultural commodities that sell and deliver their produce to institutional buyers. Moreover, other farmers who avail of the services of participating cooperatives and organizations also indirectly benefit from the program.

In 2010, almost P63 million in loans were provided to 15 farmer and fisherfolk cooperatives and organizations, POs and other MFIs, benefiting more than 4,000 farmers and fisherfolk. Projects financed include agriculture production, fruits and vegetable trading, duck raising, contract growing of organic vegetables and establishment of a processing plant.

Agri-Microfinance Program

The AMP for Small Farmers and Fisherfolk and their Households is a joint lending program of ACPC with the People's Credit and Finance Corporation (PCFC), the lead government entity specifically tasked to mobilize resources for microfinance services for the exclusive use of the poor. The program provides credit to qualified borrower organizations for re-lending to small farmers and fisherfolk households and groups/organizations. The program aims to reduce poverty and improve the quality of life of marginalized farmers and fisherfolk by financing agricultural projects and activities that will increase their productivity and incomes.

Under the AMP, PCFC administers the provision of credit to eligible borrowing organizations. MFIs (cooperative/rural banks, cooperatives, NGOs, and POs) are eligible borrowers with specific financing facilities for agri-fishery and value chain financing.

Another aspect of the AMP is that it provides credit to farmers and fisherfolk affected by calamities associated with climate change. The objective of this window is to help mitigate the adverse impact of climate change in the agricultural sector, especially on the lives of small farmers and fisherfolk, who suffer the most in times of natural and man-made calamities. The program will prioritize areas identified by the Department of Agriculture (DA).

2.3 Microfinance in Support to Value Chain Finance

The Philippines has a wide range of formal, semi-formal, and informal institutions providing microfinance services to the urban and rural poor and underserved sectors of the economy (Gallardo, 2001). The author of the policy research paper published by the World Bank focused on the key issues in the legal system and judicial processes, as well as on the regulatory and supervisory environment for microfinance which are being addressed by the governments and microfinance stakeholders in the Philippines. The other country assessed was Ghana. A portion of the author's assessment on the microfinance sector is summarized below.

Assessment of Philippine Regulatory Framework for Microfinance

Financial intermediation and credit activities in the Philippines are under the regulatory jurisdiction of the Bangko Sentral ng Pilipinas (BSP). The regulatory framework under the General Banking Law of 2000 (which repealed the General Banking Act of 1949) and a number of parallel laws governing specialized banks and NBFIs have made room for a tiered structure of licensed financial intermediaries and of financial regulation.

The formal sector institutions directly and indirectly providing microfinance services consist of Commercial Banks, Thrift Banks (Savings and Mortgage Banks, Private Development Banks, Stock Savings and Loan Associations), Non-Stock Savings and Loan Associations, Rural Banks, Cooperative Banks, Finance Companies, Private Lending Investors and Pawnshops. Credit Unions and Savings and Credit Cooperatives (including savings and credit units of multipurpose cooperatives) are included in the formal sector, even though these types of institutions are outside the coverage of the General Banking Law and the jurisdiction of the BSP. Commercial Banks, Thrift Banks, Non-Stock Savings and Loan Associations, Rural Banks, Finance Companies, Private Lending Investors and Pawnshops are owned by private individual investors, and are registered and licensed by the BSP under the provisions of the General Banking Law or other institution-specific laws.

Philippines Microfinance Institutions and Regulatory Framework

The minimum capitalization requirements at entry for Private Development Banks, Rural Banks, Cooperative Banks, Finance Companies, Private Lending Investors and Pawnshops are significantly lower than the levels set for Commercial Banks. The operations of Rural Banks and Cooperative Banks are limited to a clearly-defined geographical area, e.g., municipality, province or administrative region, and are permitted to offer banking services limited to savings and time deposits and loans (*Table 3*).

Many NGOs, organized by private parties as trust entities or charitable institutions under the Law on Trusts and Charitable Institutions, provide both microloans and nonfinancial services. Their credit activities are not regulated or supervised by external government agencies. A significant number of NGOs and MFIs belong to an umbrella organization — the Microfinance Council of the Philippines, which disseminate best practice guidelines and standards for governance, operations and performance efficiency.

As there is a lack of clarity about the legitimacy of credit operations of NGOs, a number of them have sought to obtain legitimacy by registering themselves with the SEC under the authorization category of Private Lending Investor. Private Lending Investors and Pawnshops are formally organized entities, in

the sense that they are entities registered with the SEC, which is the central registry agency. Pawnshops are required to be authorized and licensed by the BSP.

Challenges in Philippine Microfinance

Engaging in credit business already entail risks. Microfinance institutions (MFIs) especially microfinance institutions providing credit to small farmers in the Philippines face a multitude of challenges. These are associated with microfinance in general, such as lack of collateral and insufficient information about creditworthiness. However, three hurdles unique to agricultural lending include: 1. crop failure resulting from bad weather or pests, 2. low yield and poor quality produce due to underinvestment in inputs, and 3. reduced harvest income caused by market failures in the sale of produce (Chowdhury, 2007).

Llanto (2004) noted that other important risks of agricultural lending that causes good reasons for defaults on loan are family illness and poor health. Microfinance institutions (MFIs) clients are generally rice farmers working on very small plots with low borrowing capacity and greater likelihood of default. The limited range of agricultural lending – even in a country like the Philippines, with a highly developed microfinance sector – is likely related to these unique challenges and risks in agriculture. Expanding the reach of agricultural microfinance will require a deeper understanding of the current barriers and the development of new products and procedures tailored to address them.

The sector still faces many challenges that have to be dealt with these include:

1. Credit pollution. Major issue among MFIs is the spread of credit pollution. This is when borrowers take loans from multiple MFIs. Often farmer-clients receive loans from one MFI to pay off another loan. This credit pollution causes MFIs loan collection problems. This also happen because of lack of credit investigation.
2. Lowering cost of operation. The MFIs average cost of operation was noted at 38.8 percent according to the Microfinance Council of the Philippines (2010). Performance standard for MFIs states that standard operating expense ratio should be 20 percent or less. Asian MFIs operating expense ratio was recorded at 18.2 percent. Thus, efforts must be exerted to reduce costs through more efficient ways of delivering MFI services in the Philippines by way of observing financial discipline and governance that will establish their credibility in the financial market.

Latest innovation on communication technology was recently adapted by MFIs to enhance cost-effective operations and improve monitoring efficiency. This include loan tracking system that allows daily monitoring of the status of loan disbursement, collections and arrears, and any restructuring or refinancing should be engaged.

3. Enlarging non-financial products. While resources loaned to clients indeed used to generate income, these endeavors were not collectively sustained in the long term. It did not make “entrepreneurs” out of the client-borrowers, nor did the microfinance loan fund “growth projects”. MFI programs are alleviating poverty but (are) not encouraging policy goal of economic growth. This can be attributed to the over reliance on credit as the sole method for promoting entrepreneurship. The common practice of giving bigger loans to “successful” repeat clients is a clear area for reckon. Credit alone cannot jump start development; it has to be combined with larger, holistic initiatives within service communities.

Some MFIs addressed this concern by restructuring loan products and included health, life and crop insurance. Some adapted loan size progression for clients that moved up the poverty ladder from being very poor to moderately poor to non-poor. However, non-financial product services that will allow clients’ transition towards high earning micro-enterprises such as business development to include variety of capability building training on project and financial management among others need to be more deliberately given to members with upscale potentials.

Table 3. Philippines Microfinance Institutions and Regulatory Framework

Type of MFI	Ownership	Legal Basis	Organized as	Fund Source	Authorized Activities	Agency Jurisdiction	Agency Supervision	Target Market
Comm'l Banks in Microfinance	Private or Gov't. shareholders	Gen. Banking Law; Law on Corporations	Limited Liability Company	Equity Capital, Comm'l Funds, Deposits	Full-service bank;	Central Bank; Deposit Insurance Co.	Central Bank; Deposit Insurance Co.	Bank/Non-Bank MFIs (RBs, CBs, NBFCS)
People's Credit & Finance Corp.	Land Bank Philippines	Finance Co. Act	Limited Liability Company	Capital/loan funds from Gov't & Int'l Agencies	Apex Organization	Central Bank; Land Bank	None	Coop Banks, NGO MFIs
Thrift Banks	Private Investors	Thrift Banks Act; Law on Corporations	Limited Liability Company	Equity capital, comm'l funds, deposits	Savings deposits and loans	Central Bank; Deposit Insurance Co.	Central Bank; Deposit Insurance Co.	Micro-enterprises/ small business; general public
Rural Banks	Private Investors	Rural Banks Act; Law on Corporations	Limited Liability Company	Equity capital, comm'l funds, deposits	Savings deposits and loans	Central Bank; Deposit Insurance Co.	Central Bank; Deposit Insurance Co.	Micro-enterprises/ small business; general public
Cooperative Banks	Cooperative Societies	Rural Banks Act; Cooperatives Code	Limited Liability Company	Equity capital, comm'l funds, deposits	Saving deposits and micro-loans	Central Bank; Deposit Insurance Co.	Central Bank; Deposit Insurance Co.	Micro-enterprises/ small business/ cooperatives
Non-Bank Finance Company	Private Investors	Gen. Banking Law; Law on Corporations	Limited Liability Company	Equity capital, comm'l funds	Wholesale deposits and microloans	Central Bank	Central Bank	Micro-enterprises/ small business
Pawnshops	Private Investors	Gen. Banking Law	Ltd. Liab Co; Sole Prop. Partnership	Equity capital, comm'l funds	Pawn loans	Central Bank; SEC	None	Individuals
2nd/3rd – Tier Federation of Credit Unions or Saving & Credit Cooperatives	Primary-level cooperative societies	Cooperatives Code	Cooperative Association	Members' equity capital, comm'l funds, deposits	Mgmt/finance services + liquidity facility to member coops	Cooperatives Development Authority	None	Savings & Credit Cooperatives; Credit Unions
Credit Unions and Savings & Credit Cooperative Assn.	Individual members (natural persons)	Cooperatives Code	Cooperative Association	Capital + deposits from members	Savings deposits from members and micro-loans to members	Cooperatives Development Authority	None	Individual members
NGO-MFIs	Private Trustees	Law on Trusts and Non-Profit Foundations	Non-profit Foundation/ Private Lending Investor	Grants, donations, comm'l loans	Microfinance loans to individuals and groups	Annual Reports to SEC and Central Bank	None	Individuals and groups
NGOs	Private parties	Law on Trusts and Non-Profit Foundations	Non-profit Foundation	Grants, donations, comm'l loans	Microfinance loans to individuals and groups	Annual Reports to SEC and BIR	None	Individuals and groups

4. Expanded outreach of MFIs Building the capacity of MFIs to lend to more clients can be due to “graduation failure” caused by field staff. This is the cross-over of client-borrower business to the next higher level growth stage. Field staff mostly failed to develop clients’ business to the level sufficient to take out bigger loan for lack of business confidence. More so, only pockets of poor communities are reached where there is existing road network and markets. MFIs limitations to deepen loan outreach to the bottom segment of the poor can further increase the cost of operation and service inefficiency.
5. Enhancing capability of field loan technicians. The business of microfinance is substantially different from commercial lending. Often times, repayment capacity information and tangible collateral among clients is lacking. With limited trained and experienced personnel, microfinance methodologies may not be implemented properly – thus, result to greater delinquency.

Emergence of People’s Credit and Finance Corporation

Quiñones (2007) wrote a case study research which is part of a multi-country review on successful innovations in improving access to financial services for poor populations in rural areas through linkages between the formal financial sector and informal financial institutions. The research examined the People’s Credit and Finance Corporation (PCFC) and its linkages with downstream intermediaries as a successful strategy for improving the flow of financial services in rural Philippines. According to the author, PCFC was selected because of its crucial role in mainstreaming microfinance in the country.

His article examined the factors that constrained the development of microfinance in the Philippines, identified drivers that contributed to overcoming the constraints (using PCFC as a case study), and evaluated how these drivers contributed to expanded access to financial services, as well as to the sustainability of microfinance institutions (MFIs). How PCFC established mutually beneficial linkages are further expounded by Quiñones (2007) below:

Financial Linkages Between PCFC and Microfinance Institutions (MFIs)

The enactment of key policy measures such as the Agriculture and Fisheries Modernization Act (AFMA) and other policy reforms which gave MFIs the means to deal effectively with small and medium enterprises (SMEs) paved the way for the development of financial linkages between PCFC and MFIs.

PCFC was established in September 1994, and later registered in 1995 as a finance company with the Securities and Exchange Commission (SEC). Its initial capitalization was US\$3.89 million, augmented by another US\$2.2 million in 1998, all from the National Livelihood Support Fund (NLSF), a poverty-oriented funding facility administered by the Land Bank of the Philippines. RMFP was a loan facility from the Asian Development Bank (ADB) and the International Fund for Agricultural Development (IFAD) intended for financing the enterprises of poor households using the Grameen lending methodology. PCFC’s intervention was deemed necessary since commercial banks were still reluctant to lend directly to micro-enterprises because of perceived costs.

From a slow start, PCFC operations picked up in the ensuing years. After 8 years of operation (1997–2004), PCFC has successfully introduced microfinance for the poor, via both formal and informal financial intermediaries in the Philippines. PCFC arrived at this juncture by developing several financial linkage models. At the start, PCFC developed linkages mainly with NGO Grameen replicators, but this changed with the adoption of a regulatory framework for microfinance standards of performance. Integration of these performance standards into the lending criteria of PCFC levelled off the playing field and gave all types of microfinance institutions (MFIs) equal opportunities to seek PCFC accreditation and access to its wholesale lending facility.

Using its institutional credit facility, PCFC extended capacity building support to eligible MFIs of any type to strengthen their organizational capabilities, develop their microfinance technologies, and upgrade the knowledge and skills of their staff. Consequently, PCFC succeeded in building linkages with rural banks, thrift banks, cooperatives, cooperative banks, and even lending investors.

Types of Financial Intermediaries in Microfinance

- (1) *Rural banks (RBs)*: private shareholding banks with minimum capitalization ranging from US\$58,309 in less developed municipalities to US\$5.83 million in the NCR. RBs were created by law primarily to meet the normal financial requirements of farmers, fishermen, as well as cooperatives, merchants, private and public employees. All capital stock of RBs must, by law, be fully owned by Filipino citizens.
- (2) *Thrift banks (TBs)*: private shareholding banks with minimum capitalization ranging from US\$1.17 million for those with head offices outside Metro Manila, and US\$7.29 million for those with head offices within Metro Manila. The functions of TBs are similar to those of the commercial banks only in smaller scale. At least 40 percent of the TB's voting stock (60 percent for KBs) is required by law to be owned by Filipino citizens.
- (3) *Cooperative banks (Coop banks)*: banks established by primary and secondary/tertiary cooperatives for the purpose of providing financial and credit services to cooperatives. Minimum capitalization amounts to US\$0.36 million for those established in Metro Manila, US\$0.18 million for Coop banks in other cities, and US\$3.64 million for national Coop banks. The capital stock of Coop banks should be 100 percent fully owned by Filipino citizens.
- (4) *Cooperatives (Coops)*: registered and supervised by the Cooperative Development Authority (CDA), the cooperative's primary objective is to provide goods and services to its members. The required minimum paid-up share capital amounts to US\$36 per cooperative; Coops are classified in the BSP Manual of Regulations as non-bank financial intermediaries (NBFIs) although they are registered and supervised by the CDA. A credit union or credit cooperative is a type of cooperative that specializes in providing financial services to its members.
- (5) *Lending investors (LI)*: lending investors are financing companies established by 20 or more lenders. LIs borrow money for the purpose of relending or purchasing receivables or other obligations. The LIs minimum capital accounts range from US\$0.91 million to US\$5.47 million for an investment house. At least 60 percent of the combined capital accounts should be owned by Filipino citizens (BSP, 2003).

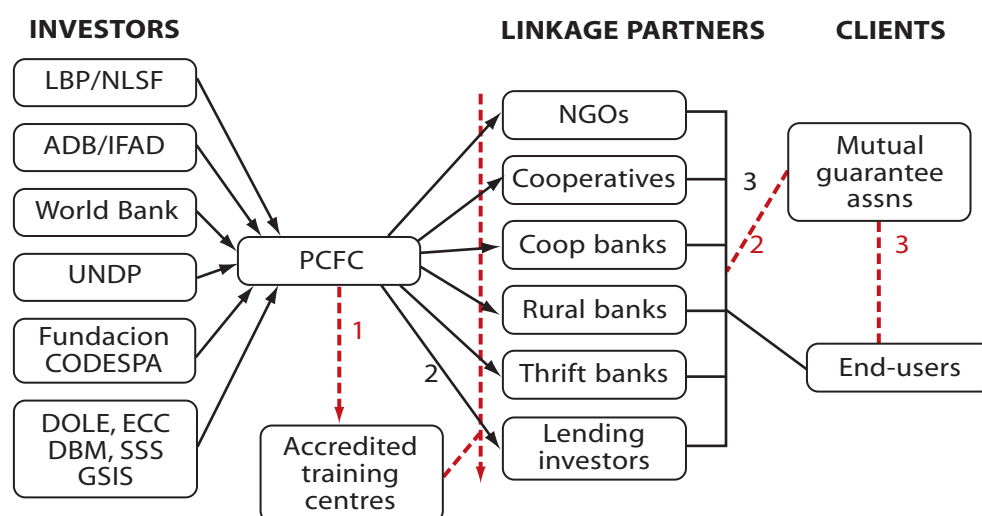
The PCFC Linkage Process

PCFC has two types of financial products that it can offer via MFIs:

- *Investment credit*: a credit line for microfinance services to the poor; and
- *Institutional credit*: a loan facility to finance capability building activities as well as for expenditures or asset acquisitions related to the lending program.

PCFC wholesales short-, medium-, and long-term loans to accredited MFIs. At present, these include the rural banks, cooperative banks, thrift banks, NGOs and cooperatives that implement credit programs using *any* proven microfinance lending methodology to finance livelihood projects that can augment the income of targeted poor clients.

Figure 4. Key actors in PCFC Linkage

**Abbreviations:**

LBP/NLSF: Land Bank of Philippines/National Livelihood Support Fund

ADB/IFAD: Asian Development Bank/International Fund for Agricultural Development

DOLE/ECC/DBM/SSS/GSIS: Dept. of Labor/Employees Compensation Committee/Dept. Budget Management/Social Security System/Government Service Insurance Fund



(Funds flow 1) Investors enter into partnership with PCFC to implement microfinance programme.

(Funds flow 2) PCFC wholesales investment and institutional funds to MFI Programme Partners on a credit line basis. The MFI repays the loan and avails of fresh loans.

(Funds flow 3) The MFI releases loans to members/clients (end-users). The latter repays the loans to the MFI and avails of fresh loans.



(Service flow 1) Training on GBA/microfinance technology is provided by accredited training centres with support from PCFC. PCFC itself conducts training courses, refresher courses, and Lakbay Aral.

(Service flow 2) The MFI forms and strengthens Mutual Guarantee Groups. Through the weekly meetings, the MFI undertakes continuous group training (CGT) and values formation.

(Service flow 3) Centre coordinates activities of groups and promotes cooperation in managing the group fund need and controlled by members.

Outreach and Impact

The number of active clients served by PCFC grew from 217,240 in 1999 to nearly 1.4 million in 2004, implying a compounded growth rate of 36.4 percent per annum. The key reasons for the growth include: the increase in the number of partner MFIs, from 143 in 1998 to 199 in 2004; and the outreach expansion of the partner MFIs. PCFC's loan portfolio ballooned from US\$19.64 million in 1999 to US\$51.35 million in 2004.

PCFC and its partner MFIs managed to penetrate more developed areas much faster than poorer areas. The main reason for this was the existing banking infrastructure and the fact that new MFIs tended to start operations in areas where microfinance was already visible.

As far as PCFC relationship with individual MFI's are concerned, the table below provides an overview of the outreach of two of PCFC's MFI clients, i.e. CARD-MRI (Centre for Agriculture and Rural Development-Mutually Reinforcing Institutions) and PRBC (Producers Rural Banking Corporation). Their outreach is presented in relation to the overall performance of all PCFC partner MFIs. As can be seen in the table, in 1998/1999, one-third of PCFC's total outreach was contributed by CARD-MRI (29.1 percent) and PRBC (4.6 percent), indicating the great weight carried by these MFIs in PCFC's overall performance (Table 4).

Table 4. CARD-MRI and PRBC outreach in relation to total PCFC outreach

Type	Number of MFIs %		Outreach (active clients)		Loan portfolio (php million)	
	No.	% total	No.	% total	Amt.	% total
Rural banks	83	41.7	468,672	33.5	1,358.96	47.2
Cooperatives	54	27.1	139,515	10.0	310.49	10.8
NGOs	34	17.2	624,499	44.7	795.32	27.6
Coop banks	24	12.0	138,455	9.9	329.33	11.4
Thrift banks	3	1.5	25,185	1.8	71.59	2.5
Lending investor	1	0.5	-	-	0	-
A. Total, 2004						
PCFC	199	100.0	1,396,326	100.0	2,877.75	100.0
CARD-MRI	2		112,174	8.0	678.3	23.6
PRBC	1		48,416	3.4	192.1	6.7
B. Total, past years						
PCFC, 1998	87	100.0	70,725	100.0	754.8	100.0
CARD-MRI, 1998	2		20,617	29.1	82.79	11.0
PRBC, 1999	1		2,919	4.6	7.45	1.0
C. Compounded annual growth rate %						
PCFC, 1998-2004			64.4		25.0	
CARD-MRI, 1998-2004			32.6		42.0	
PRBC, 1999-2004			59.7		91.5	

Sources: PCFC Annual Reports 2002, 2003 & 2004; CARD Annual Reports 2003 & 2004; PRBC Microfinance Unit

CHAPTER 3

Innovations

Innovations in value chain finance in agriculture cover not only financing approaches but also technologies and new applications of existing ones that support the value chain development. In the Philippines, there have been a lot of innovations towards strengthening enabling environments to support AVCF.

3.1 Value Chain Innovations

Although the development of value chain has its own process development, new knowledge and experiences has evolved along with the development of rural financial services. Agricultural value chain is not solely viewed as uni-directional process that simply starts from the producer (grower) and ends in the market rather it is a complex chain that is affected by several relationships within the chain including technology, services and the changing market demand. Innovation in value chain development is encompassing and wide in range.

One important value chain innovations in the agricultural sector that supports the financing of the chain is through buyer-driven models which is the essential in many value chain financing. Contract farming is the most common buyer-driven value chain model which involves farm-level or farmer association-level contracts but these contracts usually originate from one or more levels further along the value chain. The contracts can be formalized in the legal system or can be informal, but binding agreements.

Contract farming is a modality of chain coordination whereby transactions between producers and other chain stakeholders are governed by pre-established agreements that can be more or less formal. Indeed, some forms of contract farming can even be seen as outsourced production, often called *outgrower schemes*, typically by an estate, processor, exporter or other chain agent, to a pool of producers (Miller and Jones, 2010).

The Coffee Project in Alcoy, Cebu

A specific case is that of the Alcoy Coffee Project which involved a formal arrangement that channels funds from a bank through a processing firm to small-scale coffee farmers. The project aimed to develop a plantation of coffee and sell the products to Nestle Philippines.

It started with a vision of making Cebu the coffee corridor in Central Visayas. In 2005, an investment banker and real estate developer discovered a 200-hectare agricultural farm in the mountainous town of Alcoy, a two-hour drive south of Cebu City. Six years later, the same plantation has now become the Philippines' largest coffee farm, located 700 meters above sea level, the area enjoys adequate rainfall and has so far managed to avoid bad weather for the past 15 years.

The CHMI Agro-Forest Development Corporation, the plantation company fronted the investment and worked with farmers' cooperatives as joint venture partners on the production side. The joint venture company provided banks with the data on the borrowers and helped the bank collect the financing for the production that is extended to the farmers' cooperatives.

For this project, the company has to spend P66, 000 per hectare, or roughly 14 million for 2011 alone. Losses are expected until 2013 but forecast profits will come a year later. The plan is to cover 4,000 hectares in a five-year period through the help of the government (Department of Agriculture) and

banking sector and in partnership with Nestle as buyer. At present, 333 coffee trees were planted covering 200 hectares in Cebu within only five months since the project started. Additional 300 hectares are being prepared for more planting in response to the demand.

This is a value chain innovation that involved all the key players to have strategic commitment given the risks, which to some extent is still considered healthy. Key players involved have a healthy risk appetite and are prepared to support it with the required skill set and the infrastructure needed for its success.

3.2 Policy and Financial Innovations

The Philippines recognize the important role of rural banks in the improvement of formal borrowing among farmers and fisherfolk. The Department of Agriculture (DA) is targeting to improve the 52 percent borrowings in 2007 to 61 percent by 2016. This is in line with the Department's commitments in the Philippine Development Plan for 2011-2016 to give farmers and fisherfolk better access to credit and capital.

Under the Philippine's Agri-Agra Law, or Republic Act 10000, rural banks are mandated to allocate at least 25 percent of their loanable funds to the agriculture sector. The Bangko Sentral ng Pilipinas (central bank) has developed a system to monitor the compliance of banks under the law. Under the law's guidelines, one alternative form of compliance is lending to accredited rural financial institutions (RFIs), which are expected to use the borrowed funds for lending to borrowers from the agriculture sector. The RFIs will then act as direct conduits to the agriculture sector and agrarian reform beneficiaries, by channeling the funds specifically allotted by other banks for the program.

Agro-Industry Modernization Credit and Financing Program (AMCFP)

The Department of Agriculture (DA) invites greater participation from rural banks in a number of its financing programs. One of these is the Agro-Industry Modernization Credit and Financing Program (AMCFP) which was mandated under the Agriculture and Fisheries Modernization Act of 1997.

The AMCFP is the umbrella-financing program for agriculture and fisheries of the DA. It is designed to be a responsive and sustainable credit and financing program for small farmers and fisherfolk including those engaged in food and non-food production; processing and trading; cooperatives; farmers and fisherfolk organizations; and agri-related small and medium enterprises.

The Agricultural Credit Policy Council (ACPC), under DA, is the overseer of AMCFP.

The agency consolidates the government's various agricultural loan funds, with the aim to replace the fragmented implementation of various agricultural credit programs.

In fact, the DA has issued an administrative order requiring all its bureaus, attached agencies, and corporations to deposit the cash balances of their respective credit programs to the AMCFP fund. A joint circular among the DA, the Department of Finance (DOF) and the Department of Budget and Management (DBM) was likewise issued to direct the transfer of all agri-loan funds into the AMCFP.

In 2012, loan releases under the AMCFP increased by 146 percent year-on-year to P1.12 billion. In 2013, an additional \$22.39 million has been provided for the implementation in a new program under the AMCFP. Loans released under AMCFP surged by 151 percent in 2012 from a year ago because of the implementation of a mandatory deposit scheme.

Data from ACPC also showed that total loans made under the AMCFP reached \$25 million in 2012 from \$10 million in 2011. The agency exceeded its loan release target for 2012 by four percent from the original target of \$23 million.

Under the Agriculture and Fisheries Modernization Act, the AMCFP should be given a funding of \$45 million on the first year and \$38 million for the next six years. However, it will not be until 2012 that a budget has been appropriated for the program. In previous years, the AMCFP was funded solely through the collection and consolidation of funds from terminated agricultural directed credit programs.

The ACPC uses the funding for the implementation of programs for the benefit of farmers who are engaged in cultivating the priority commodities of the Department of Agriculture such rice, white corn and cassava. Other priority commodities are yellow corn, coconut, high value crops, livestock, poultry and fishery products.

Programs being implemented under AMCFP are the Cooperative Banks Agri-Lending Program (CBAP), the Agri-Microfinance Program (AMP), the Cooperatives Agri-Lending Program (CALP), and the DA Sikat Saka Program.

Agricultural Guarantee Fund Pool (AGFP)

The AGFP is a fund set up in 2008 requiring all Government Financial Institutions (GFIs) and Government Owned and Controlled Corporations (GOCCs) to contribute five percent of their respective net incomes for food productivity programs. The purpose of the fund is to help farmers and fisherfolk access bank loans more easily. Through an all-risk guarantee facility, the AGFP encourages private financial institutions to expand their unsecured lending to small farmers and fisherfolk.

AGFP provides guarantee coverage to unsecured loans of small farmers and fisherfolk extended by credit conduits such as rural, thrift and cooperative banks, small and medium enterprises and large corporations, irrigators' associations, and other farmers' organizations. The guarantee would encourage the lending conduits to extend more credit to small farmers who are normally deemed to be high-risk borrowers.

Rice millers and grains traders could also avail of the fund to guarantee loans of small farmers engaged in rice production. On the other hand, farmers tilling a maximum of five hectares each and who have not been able to obtain collateral-free credit from the formal banking sector can borrow from government or private financial institutions with up to 85 percent of their loans secured.

Landbank, the biggest GFI in the Philippines, acts as the institutional manager of the AGFP. The program was to be implemented initially for five years, subject to review for extension as agreed upon by the Department of Agriculture and Landbank.

Other participating GOCCs and GFIs include the following:

- Development Bank of the Philippines
- Philippine Amusement and Gaming Corporation
- National Power Corporation
- Philippine National Oil Company
- Metropolitan Waterworks and Sewerage System
- Local Water Utilities Administration
- Philippine Economic Zone Authority
- Philippine Charity Sweepstakes Office
- Trade and Investment Development Corporation
- National Electrification Administration

As of 2011, total contributions to the AGFP amounted to \$100 million. The AGFP is just starting to gain acceptance against a negative recollection of past supervised credit programs. Since 2008, approved guarantee coverage reached P4.89 billion, 85 percent of which or over \$100 million were used to cover rice production. As of 2011, 124,761 farmers have availed unsecured loans, of which, 94,886 farmers were rice producers.

Although it's the conduit or lending institution that is directly protected by the AGFP, the biggest beneficiaries are the borrowers who would not have been able to borrow without the guarantee.

3.3 Technological Innovations

According to Miller and Jones (2010), despite the global expansion of financial services, approximately two-thirds of the population in developing countries remains 'unbanked' or under-banked. Given the relatively high average cost of credit, there is a need for efficient use of application and adaptation of technological solutions, either through non-traditional and non-banking approaches including value chains or remittances.

Affordability and accessibility of finance services in agriculture value chain has become easy and rapid with the proliferation of technology, in particular the use of management information systems, development of networks and exchanges through the Internet access, and through mobile phones and mobile banking.

The e-Pinoy FARMS® for an Interactive Farming and Fishing Communities

The e-Pinoy FARMS® is a unified database program designed to support and improve the decision-making processes of the specific community-based activities in agriculture. It intends to enable farmers' organization, cooperatives, and agri-business enterprises to record their transactions and operations.

Out of a need to make use of the significant data generated from the fields through the implementation of the Community-based Participatory Action Research (CPAR) projects, the Department of Agriculture-Bureau of Agricultural Research (DA-BAR) partnered with a Optiserve Technologies, Inc., a private IT company, to develop and improve the system that would support and enhance the monitoring and evaluation (M&E) of the CPAR programs. CPAR is one of the banner programs of the BAR designed to improve the overall management system aim to increase farmers and fisherfolk production and income through the use of information.

Through this unified database program, the hassle in data collection was facilitated and simplified. Thus, a body of usable information that is readily available for project evaluators, researchers, extension workers, and even for fishers and farmers was created. These data are categorized and processed to come up with specific information necessary for the improvement of the CPAR project implementation.

Although intended mainly for CPAR programs, the system is fast becoming an important community resource. It is intended to insure appropriate and timely delivery of information and recently developed technologies available for the farmers and fishers and their communities to improve their production and income-generating activities. Likewise, through this database, farmers and fishers have empowered themselves with easy market linkage.

Given the unique characteristics of CPAR communities, different data sets were prepared along with data management for proper information to be generated to support the whole operation of community-based projects. The use of the same data management framework will unify all data across locations and with varying agro-climatic condition. The unified system is designed to streamline redundant procedures in data management and serve as repository of mission-critical information to support planning, decision-making, and policy formulation for agriculture and fisheries development.

Specifically, the operationalization of e-Pinoy FARMS® M&E aims to: 1) enable stakeholders to effectively monitor activities related to value-chain management, value adding and enhance agri-enterprise development and more diverse income opportunities for the households; 2) provide mechanism for process documentation of community-based initiatives; 3) strengthen linkages and networking with local government units, research institutions, and the private sector through participation and complementation; and 4) give access to information technologies for informed decision-making including possible market linkages to farmer/fisherfolk associations and cooperatives.

mBank Philippines: Platform for Mobile Microfinancing Service

One identified problem in value chain finance is the lack or no access to the formal banking system. In response, the TELECOM firm Smart Communications Inc, the largest mobile operator in the Philippines, launched mBank Philippines, a mobile microfinancing service provider that is meant to deliver savings and loan products exclusively on a mobile platform.

mBank Philippines distributes and services financial products leveraging the airtime distribution network of SMART and offers high scalability and low cost of operation, offering a 24 × 7 service and instant account opening for both savings and loans products.

By offering simple and effective financial services, mBank seeks to increase financial inclusion and ensure that people have enough money at any given moment.

Through this mobile platform, phone subscribers will be able to open a savings account with the help of mBank field agents deployed in their communities. Activated account holders can apply for a loan product, immediately get a response about their application and select a weekly repayment schedule—all via their mobile phone.

The process eliminates the need to travel far to deposit and withdraw money, apply for loans, and pay amortization. This is very convenient especially for those who cannot afford to be absent from work or leave their sari-sari stores.

Bank will operate a very advanced credit risk management capability delivered by Experian, a credit risk management automation firm.

Mobile Financial Services through Mobile Banking

Mobile phones and other handheld devices have been important for the adaptation of new opportunities in value chain financing.

Two of the main mobile financial service (MFS) providers in the Philippines are SMART Money and GCASH. While both have expanded the services they offer, their main service remains money transfers from family members living abroad (international remittances) and those living in Philippine cities sending money home to rural villages (domestic remittances).

SMART Money and GCASH both focus mainly on domestic remittances, airtime purchase and bill payments. GCASH has started a money transfer pilot with the Philippine Government in its conditional cash transfer program of benefits to the poorest, often in rural areas.

SMART Money was introduced in 2001. The product is a prepaid card, which enables access to cash using an ATM, a credit card terminal or a mobile phone. Meanwhile, GCASH was introduced in 2004. Transferring of money occurs through using a mobile phone and visiting a local GCASH agent in one of its many designated points all over the country.

Majority of GCASH customers tend to send money within and between more urban settings, as more than 60 percent of Filipinos live in urban areas. About half of SMART Money's users are in rural areas.

GCASH and SMART Money, both well known in the MFS sector, have evolved and improved their services over the years. However, there are still issues related to trust, lack of awareness and lack of available cash points, especially across such a vast country as the Philippines with several thousand islands.

3.4 Infrastructural Innovations

This innovation in agricultural value chain is manifested through physical infrastructure that enables easy access and transport of produce/goods. This innovation often addresses logistical constraints within the chain.

Ro-Ro Terminal System: “Strong Republic Nautical Highways”

The Philippine archipelago consists of more than 7,100 islands and islets. Thus, the accessibility of the islands as well as mobility within is the primary goal of infrastructure development.

One innovative example to address the logistical constraints in the Philippines is the Roll-On-Roll-Off Terminal System (Ro-Ro). It addresses the logistical needs of the distribution of goods and services within the context of the government's goals of global competitiveness, poverty alleviation and food sufficiency at the local, regional, and national levels. The goal is to establish an integrated national highway system consisting of both road and nautical networks. Having such a system facilitates seamless movement of people and goods from the different points of the country.

The RRTS System

The RRTS system is a major investment to address a critical bottleneck in chain development. Infrastructural development of roads, storage, ports and other requirements are often serious constraints to value chain development which are left unaddressed in large part because of the significant investment costs and the slow, long-term returns on capital.

In order to facilitate this infrastructural financing, value chain financing through instruments such as forfaiting, which are relatively innovative in the agricultural sector, can be considered. It is geared towards the development of progressive long-haul shipping to constitute the country's national backbone in the transport of bulk agricultural products and the development of a short-haul ferry system to link the islands to the growth centres of the country.

With the RRTS in place in strategic regions of the archipelago, fast and efficient movement of goods can enable farmers and traders to simply roll-on their vehicles to these 'floating bridges', and roll-off from the vessels to their respective destinations. The benefits include reduced transport cost, increased regional trade, enhanced tourism and agricultural productivity, growth in investments, and development in the countryside as well as poverty reduction.

The RRTS concept regards ferries as part of the road network. Thus, traveling along an RRTS sea route is similar to crossing a bridge. RRTS is not to be regarded as part of regular shipping. When crossing a bridge or using an expressway, one may have to pay a toll fee, but under no circumstances is one asked to declare what he or she carries in the vehicle. One just pays for the passage or, in other words, the use of that facility.

In practice, roll-on-roll-off (Ro-Ro) vessel operation and Ro-Ro terminal operation in the Philippines are often viewed as separate activities—the government through the Philippine Ports Authority (PPA) or the

local governments provide the port services and the private sector supplies the vessel services. However, in principle, for any defined route, the two are actually interdependent and complementary investments (one cannot operate without the other), and there is merit in “bundling” both into a single business if integration proves to be viable.

To date, the Strong Republic Nautical Highway (SRNH) consists of the Western, Eastern, and Central nautical networks as well as lateral Ro-Ro links that provide east-west connections. Specifically, the Ro-Ro policy highlights the following advantages:

- No cargo handling charges (since Ro-Ro shipping deals with rolling cargoes)
- No wharfage dues
- Freight based on lane meter
- Toll fee consisting of freight, berthing, terminal and passenger fees
- Simplified documentary requirements
- Waiver of port authorities’ share in port revenues (limited to annual registration/supervision fee)
- Privatization of public Ro-Ro ports
- Minimum permit requirements in port construction and operation
- Available financing from the Development Bank of the Philippines (DBP)

Reduction in Transport and Operations Cost

The reduction in cost coupled with efficiency caused the shift in the way shippers transport their goods throughout the country. For instance, Ro-Ro enabled Nestle Philippines, a leading food conglomerate, to close down 33 of its 36 distribution centers nationwide. With Ro-Ro, Nestle is able to make small, frequent and direct deliveries to its clients – thus minimizing the need for inventories.

Based on a study done by the Center for Research and Communication (CRC) in 2006, transporting goods via the Western Nautical Highway is cheaper compared to conventional shipping. For example, transporting fresh fish from Capiz, Iloilo and Estancia to Manila is now economical with Ro-Ro. Fish traders claim they are better off with the multi-trip schedules of Ro-Ro service compared with the limited daily schedules of big liners. Instead of shipping at the same time, fish traders can now schedule their shipments properly.

These transport savings from Ro-Ro emanates from service efficiency as well as the fact that Ro-Ro service is not saddled by costs embedded in conventional shipping such as cargo handling and wharfage. Compared with other modes of transport (air, traditional shipping), transport of people on the long haul (distance) remains to be competitive via Ro-Ro.

Increased Agricultural Productivity

The opening of SRNH, particularly the Western Nautical Highway, opened up new markets for farmers. In San Jose, Occidental Mindoro, for example, farmers who used to sell their produce (e.g., onions) in Manila reached new markets after the Western Nautical Highway was opened. Fruits from Davao (mangosteen and durian) also found new markets in Iloilo and Bacolod.

This development encouraged farmers to increase their production to take advantage of the opportunities for increasing their income. Interviews with trader-shippers indicate that some of the vegetable shipments to Caticlan and Iloilo originate from Baguio. Similarly, shipments to Manila of fishery products from Estancia, dubbed as the “Alaska of the Philippines”, have also increased from once a week (using traditional shipping) to daily shipments via Ro-Ro.

Just last year, the Department of Transportation and Communications (DOTC) is looking at pursuing a project that would boost the contribution of the existing Ro-Ro ferry services in the country to help sustain economic activities nationwide.

The Department has given Woodfields Consultants Inc. four months to complete the feasibility study for the central “spine” Ro-Ro project that would provide the Philippines with an efficient “spine” to facilitate the seamless, safe, expeditious, effective and economical movement of passengers, vehicles, and goods between the Luzon Island-Panay-Negros-Cebu-Bohol-Mindanao.

The areas – considered as the spine of the Philippines – would be connected through a combination of quality superhighway systems as well as modern, fast and safe Ro-Ro ferry services with matching port or terminal facilities.

The DOTC said the expected output of the study would be the identification of road or ferry route options that would link the entire Philippines, and the existing Ro-Ro system to the proposed or future Central Spine Ro-Ro.

The National Cold Chain Program

High-value vegetable crops suffer considerable losses due to lack of cold storage facilities, improper handling, and poor transport conditions. About 40-60 percent of post-harvest losses occur during the movement of the product from the farm to the consumer. The short shelf life of fruits and vegetables and poor post-harvest handling practices negate the gains achieved in production. These are aggravated by the long distance between production areas and poor roads. Tramline and cold chain systems are logical solutions to these perennial problems.

National Cold Chain Program Takes Off

The Philippine National Cold Chain Program took off in 2004 which aims to have uninterrupted refrigerated handling operation of high-value crops from the farm to the market. With the system, the required temperature level is attained and therefore keeping the quality of perishable crops and meat products at every chain.

The facilities in a cold chain are composed of pre-coolers, packing houses and cold storage rooms and trucks for transport. Pre-coolers are used to remove field heat rapidly right after harvest to acquire desired conditions. Packing houses are essential to prepare the vegetables prior to releasing it to the market such as trimming and cleaning, sorting defective products, among others. Cold storages maintain the required storage temperature of the vegetables for a high quality-produced. Refrigerated trucks/container vans collect the fresh produce from the cooler room/packing houses and transport them.

Four main pilot sites served as traditional or alternative routes for marine, poultry, meat and tropical and temperate high value crops, from their production areas to high end markets mainly Metro Manila, Cebu City, and Davao City. Others include: 1) Mt. Province – Benguet – Manila Line; 2) Cagayan – Manila Line; 3) Visayas Inter-island Connections, and 4) Mindanao-Cebu-Manila Line.

Three cold chain facilities have been established in three major vegetable producing areas in the country: Benguet, Cebu, and Bukidnon. The additional facilities include: 1) La Trinidad Fruit and Vegetable Minimal Processing and Packaging Plant in La Trinidad, Benguet, 2) Cold Storage facilities stationed at the Capaz Food Terminal and Live Animal Auction Center in Capaz, Tarlac, and 3) additional cold storage warehouse for KASAMNE in Palayan City, Nueva Ecija. These additional facilities are all located in northern Philippines.

However, just this year, the Department of Agriculture (DA) forged a memorandum of understanding (MOU) with the Development Bank of the Philippines (DBP) and the Cold Chain Association of the Philippines (CCAP) to hasten the implementation of a national cold chain program that entails the establishment of semi-processing and cold storage facilities in major crop and fishery production areas and food trading centers, and provision of refrigerated vehicles to enable farmers' groups and entrepreneurs transport their products to markets.

With the cold chain system in place, farmers and fishers will add more value and thus earn more profit from their products, and at the same provide consumers with fresh, quality and affordable vegetables, fruits, meat, dairy and fishery products. Under the tripartite agreement, the DA will identify priority cold chain program areas, the CCAP will extend technical expertise and agri-business support, while the DBP will provide credit to finance the establishment and acquisition of cold chain system facilities and refrigerated vehicles.

Cold Chain Project Renewed

This year, the latest organization to partner with the Philippine government is the United States Department of Agriculture (USDA) through its Foreign Agricultural Service's (FAS). It recently launched the Philippines Cold Chain Project (PCCP) to be implemented in the Caraga Region. The region is composed of five provinces, comprising six cities, 67 municipalities and 1,308 villages.

The project was launched at the US Embassy in Manila with its implementing partner Winrock International, and five provincial governors of the Caraga Region of Mindanao. Over the course of the four-year project, PCCP is expected to impact 979,000 people directly.

Winrock International considers Caraga Region and its five provinces as the future breadbasket for the Philippines, specifically because of their ability to supply urban centers like Manila or Cebu. The region is blessed with abundant resources, fertile lands, and diverse and attractive ecotourism sites, yet Caraga remains one of the poorest regions in the country.

The project also aims to cover horticulture, meat, and fish sectors that can benefit from a cold chain, or temperature-controlled, supply system. Building effective cold chains makes it easier to produce safer food, and safer food means an increase in income for farmers and improved nutrition for families. Higher-quality, higher-value agricultural products will be able to compete in new markets as businesses and consumers demand products meeting international-quality standards. Educating producers about clean, well-preserved food, moreover, means families will not be debilitated by preventable illness.

CHAPTER 4

Case Studies and Best Practices

Case Study #1: Benguet, the Salad Bowl of the Philippines

The Province of Benguet in Northern Philippines is dubbed as the Salad Bowl of the Philippines because of its vast production of highland semi-temperate vegetables. Farmers in this mountainous province produce high value crops with great potential of competing in the global market.

When the cold storage facility in Wangal, La Trinidad, Benguet was established, it aimed to develop the vegetable industry in the province by providing the competitive edge of catering to the demand for fresh vegetables in the high-end market.

Best Practice #1: Proper processing and packaging of fresh produce to sell at a premium price

The Benguet Cold Chain Project has six reefer trucks (two forward, two 16 footer, one 10 footer, and one 14 footer refrigerated trucks), two chambers of modular cold storage type, and plastic crates.

To start its operation, the Bureau of Post harvest Research and Extension or BPRE (now known as the Philippine Center for Post harvest Development and Mechanization or PhilMech) provided plastic crates, one unit 10-footer, two units of 16 footer and one unit of 20-footer refrigerated trucks. Meanwhile, the Provincial Government of Benguet provided the land and its improvement, the facilities which they are using in the office, one unit of forward and the annual operating budget as its counterpart in the project.

With the help of the cold chain facilities, middlemen transactions were reduced. The mayor of Benguet even cited a case of a private businessman who bought lettuce at the Trading Post in La Trinidad, Benguet at P10. When he processed and packaged the lettuce, he was able to sell it at P90.

Best Practice #2: Public-private partnership to maintain a market-driven approach

Another project in Benguet Province aimed at increasing the income of the farmers through the provision of modern post harvest facilities is the La Trinidad Fruit and Vegetable Minimal Processing Plant located near the trading post in La Trinidad.

The local government unit (LGU) of La Trinidad and Dole-Philippines entered into an agreement on the operation of the facility. Under the contract, the LGU will construct, operate and maintain the processing plant with the assistance of the Department of Agriculture.

The processing plant serves as the facility for washing, cleaning, and packing of fruits and vegetables which complies with international good manufacturing practice (GMP) standards.

The vegetables currently processed at the facility include cabbage, potato, lettuce, carrots, and broccoli. These are delivered to high-end markets in Metro Manila.

Case #2: Tomato Production and Processing in Northern Luzon

This Project started in 2007 to finance the loan requirements of tomato farmers under the Tomato Production and Paste Processing System Project of the Northern Foods Corporation (NFC). It is a contract growing scheme wherein AMCFP provides credit assistance to the tomato growers in Ilocos Norte and Locos Sur, while NFC procures their produce, and provides training and technical assistance.

In 2010, P31 million was released to finance tomato production of 2,126 farmers. There was a slight drop in the amount of loans and number of borrowers granted with loans in 2010 compared to 2009. Since the start of its implementation in 2007, a total of P103 million was released to finance 5,700 loans of tomato farmers. Loan repayment from tomato farmer borrowers to NFC based on latest available data was recorded at 95 percent.

Best Practice #1: Incorporate small-scale farmers into value chains through contractual arrangements

NFC serves as an industrial link for small farmers who are contracted to produce tomatoes to be processed into tomato paste. The supply chain involves a Production Supply and Marketing Agreement between the NFC and tomato farmers, which guarantees NFC a continuous and adequate supply of fresh tomato for processing.

Best Practice #2: Provide market-focused technical assistance to minimize investment risks

To ensure quality of produce, the company provides input supplies and gives technical support to the farmers in accordance with Contract Growing Agreement. The tomatoes produced are then processed in compliance with Good Marketing Practices (GMP) and eventually distributed to various end users such as fish canners, processed sauce and ketchup manufacturers and major burger chains.

The implementation of this initiative brought out several benefits among the stakeholders within the value chain: 1) eliminated layers in the value chain since farmers are directly linked to the buyer/processors; 2) provided farmers with updated technical assistance, input supplies and protected floor prices; 3) reduced post harvest spoilage since products are immediately forwarded to the buyers/processors; 4) assured supply of raw materials for processing; and 5) minimized dependency on imported tomato paste.

Case Study #3: Onion Production in Nueva Ecija

Nueva Ecija is one of the top producers of agricultural products in the country. Its principal crop, aside from rice and corn, is onion which is produced in large quantity particularly in the town of Bongabon hence, it's called the "onion capital of the country". Bongabon has a total of 3,000 hectares concentrated to onion cultivation, more than half of the total land areas were concentrated to the crop in the province. Nueva Ecija province accounted for 72.7 million kilos of onion produced in the year 2009, 57 percent of the national yield of 127 million kilos of the same year. During off-season onion prices fetch higher around P100.00 per kilo for the hybrid onion and P60.00 per kilo for the traditional varieties of red creole and yellow granex (Phil News, 2011).

Through a project called, "Bridging Small Farmers to the JFC Supply Chain" a group of farmers called the Kalasag (Brgys. Kaliwanagan and San Agustin) Onion Farmers Producers Cooperative, was able to link up with Jollibee Foods Corporation, the largest Philippine fast food chain, to directly sell their produce.

Initiated in 2008, the project has allowed small farmers to sell their onions directly to Jollibee, resulting to increased profit and opportunities for expansion. Through the project the members of the Cooperative are now benefitting from the value chain system project. In a span of three years, the coop doubled their incomes.

Best Practice #1: Capacity building should be an integral part of every credit program that aims to increase agricultural productivity and to increase farmers' incomes.

Capacity building must be supported with their time, money, talent, and intelligence to transfer skills to farmers. Aside from connecting the farmers with established corporations like Jollibee, providing training on technical know-how on production is also important to ensure farmers' productivity, skills in enterprise management, and improve their access to credit.

The implementation strategies entailed a lot of time and costs. There is a need to change the mindset of the individual farmers who are into the traditional farming practices into an entrepreneurial mindset.

ASKI worked on the capacity building side of the project for six months. It released P6.2 million for the project and gathered 40 individual farmers. All farmers had a 100 percent repayment rate to ASKI and saved around P300,000 as capital build-up. The farmers are now supplying 400 metric tons of onions to Jollibee for their Central Luzon food chains.

Now the same cooperative is teaching other onion farmers outside Nueva Ecija to plant onions as well.

Best Practice #2: Ensure immediate institutional market for farmer-producers to ensure access to credit.

It was NLDC that knocked on the doors of Jollibee so that it will no longer import the onions they use for their foods. An important lesson is that never produce a crop without a sure market. Farmers have been known to produce without assurance that they will have a market to sell their products.

Having a direct market for the harvest is an advantage on the part of the coop because farmers are assured that there will be no wastage and they can get good income because produce are sold at a reasonable price.

In 2010, the coop earned P251,000. This is aside from the individual earnings of their members. The coop is not only supplying their produce to institutional market like JFC, they also deliver certain volume for traditional markets like Divisoria.

Best Practice #3: Establish an effective management-set up involving specific delineation of tasks of all partners

Embedded in the project is a management setup delineating the specific roles of the different stakeholders, particularly the agencies involved in the partnerships: JFC, NLDC, CRS, and ASKI. Each organization put up a counterpart contribution of development resources.

NLDC and CRS selected the sites with major consideration on the presence and involvement of the local government unit and people's organizations. The assistance from the microfinance industry as well as government financial institutions is very crucial in the Kalasag-Jollibee linkage. ASKI served as a conduit of NLDC to extend its financial assistance to the coop which provided their initial operating capital.

Government support was also crucial in providing sustainability into the project, particularly in ensuring that the required produce are delivered. The Department of Agriculture through the Philippine Center

for Post harvest Development and Mechanization (DA PhilMech) provided the coop a refrigerated truck, cold storage facility and plastic crates to maintain the freshness of their harvests. The DA-Regional Field Unit 3 (DA-RFU 3), on one hand, provided multi-tilling machine, motorized sprayer, screen house and shredder. The shredder is being used to produce organic fertilizer for their farm. However, these facilities were not enough to accommodate the volume of the farmers produce. This is why the Coop and DA-RFU 3 acquired additional 40-footer refrigerated truck with tractor head to accommodate more of their deliveries to JFC.

Case Study #4: Milkfish Processing in Masao, Butuan

Milkfish is an important food fish among Filipinos not only because it is the national fish of the country but mostly because it belongs to the very top of their diet, regardless of one's social status. But there is more to milkfish than simply selling them straight from the sea. Part of the value chain of bangus production is processing them by deboning.

A case in point is in Region 13 (CARAGA), particularly in Masao, Butuan, although not a leading producer, the community heavily relies on bangus production. The area has both mariculture park and fishponds. Hoping to provide additional source of income for the families living near mariculture parks and fishponds in Masao, Butuan City, a project was initiated in 2011.

Bangus is mainly sold as fresh fish in the market as it will be an added cost for them to have it processed or deboned because there is no nearby processing plant in the area. Aside from the livelihood that will be generated with the establishment of a bangus processing plant in the community, the project will encourage more fishermen to go into bangus production. Moreover, operators with idle fishponds will return to bangus production once the demand increases.

Best Practice #1: Value-adding processing technology to sell produce at a higher price.

Among the various processed bangus, deboned bangus is undoubtedly the most popular value-added milkfish product. It is sold fresh-chilled, smoked, marinated and chilled, or individually packed and frozen, enjoying a good market both locally and abroad. The Food and Agriculture Organization (FAO) reported that the Philippines is the only country in the world that produces boneless milkfish to date.

The production of boneless bangus also paves the way to the rise of other value-added products as processors find ways to use the trimmings and bits of flesh that are invariably removed with the bones. These new milkfish products include fishballs, milkfish lumpia, quekiam, embutido, and chicharon from the skins.

Deboning makes milkfish more acceptable to a wider range of consumers so it is one way of value-adding. From the deboned bangus, it can be further processed into various smoked and frozen products to prolong its shelf-life and further widen its market.

Best Practice #2: Instill a sense of community ownership to maintain sustainability

Currently, the direct beneficiary of the project is the Bangus Processing Association, a group of 27 housewives in Masao. The association was formed and established in March 2013 after they completed their trainings on bangus processing technologies which is also a component of the project.

The project is being implemented as a community enterprise, to create livelihood opportunities, particularly for the housewives, on bangus processing. One of the components of the project is the construction of a bangus processing plant which will serve as the center for bangus deboning for the fishing community of Masao.

The site was strategically located near the fishpond areas and has easy access to transportation.

CHAPTER 5

Challenges and Lessons Learned

Challenge #1: Hesitance of lending institutions and other organizations to participate in the government guarantee program

AGFP started slowly due to initial hesitance of many lending institutions with negative experiences with unsecured small farmer lending, and untested implementing policies and guidelines. Likewise, climate change is seen as a threat to the viability of AGFP.

Lesson Learned: Make policy enhancements to better respond to the concerns of its partners

On February 2011, three years after the AGFP's implementation, the Bangko Sentral ng Pilipinas (central bank) has issued a regulation relaxing capital-cover requirement for some loans extended by banks to farmers and fisherfolk engaged in food production.

Under the regulation, loans guaranteed through the program shall carry a risk weight of only 20 percent, much lower than the 100 percent applied on other loans. Risk weight is one of the variables used in computing the necessary capital that banks must put up to cover risks. A collectible that has a higher risk weight thus requires a higher capital cover.

The issuance of the regulation was done amid concerns unfavorable weather conditions in the months ahead may cause disruption in food supply, and thus accelerate increase in food prices.

Moreover, Landbank, which is the institutional manager of AGFP, listened to feedback from its partners and made the following policy enhancements:

1. Adjusted the time requirement to accept guarantee cover to 60 days (from 45 days) from date of loan disbursement.
2. Adjusted the time requirement to accept request for guarantee claims to 60 days (from 30 working days).

Thus, the Department of Agriculture noted the increasing participation of rural banks in the AGFP. As of 2013, 125 rural banks have participated in the program, or over 20 percent of the entire membership of Rural Bank Association of the Philippines (RBAP).

As of September 2013, AGFP have achieved the following with its partner rural banks:

- Guaranteed almost P1 billion in agricultural production loans to more than 16, 500 small farmers and fisherfolk.
- Paid claims amounting to P92 million or 50 percent of the total claims in five years. This reflects the increasing risks in agricultural lending.
- Claims ratio this year is at 9 percent of loans disbursed. Again, this is reflective of increasing risks.

Challenge #2: High risk acceptance on the part of the stakeholders with no insurance for the cost of premiums of produce

ASKI, a non-stock, non-profit foundation that promotes and develops microfinance services has engaged in a partnership with CRS, NLDC to bridge the farmers to the Jollibee supply chain. It served as a conduit

of NLDC to extend its financial assistance to the Kalasag Onion Farmers Cooperative which provided their initial operating capital. ASKI invested the 6.2 million on the project without any collateral or insurance. All relied on the hope that the onion farmers will deliver the crops the produce to Jollibee at the right time and the right size. The onions were not also insured at PCIC due to the high cost of the premium which the cooperative could not afford.

ASKI entered into financing agreement with the farmers with the market assurance already. Support to market linkages therefore, functions like a risk mitigating measure that worries the funders a lot aside from the misfortunes brought about by natural calamities.

Lesson Learned: Make policy enhancements to better respond to the concerns of its partners

Challenge #3: High cost of capital for crop production loans

Collaborations should not end with just the MOA signing. The benefits of the projects must reach the farmers. That they be fulfilled and empowered with their farming. And in so doing, they help the community they are in.

Lesson Learned: Transform traditional production loan to other equally important activities within the value chain

Small farmers were able to access credit without relying too much on the traders or middlemen. The traditional production loan was transformed to other equally important activities in the value chain such as the warehousing and delivery of the produce.

The link up among the coop, MFI, and private enterprise not only helped the farmer-producers but the community as a whole. Housewives and out-of-school youths were also helped by the project. They were tasked to peel the onions for Jollibee and were paid a total of P300,000 by the cooperative. Eventually, a farmer's wives organization known as the KABİYAK (Kaagapay Sa Biyaya ng Kabukiran) was organized which helped more members of the community.

References

1. Agricultural and Fisheries Credit Strategic Plan 2011-2016. Department of Agriculture, Agricultural Credit Policy Council. <http://www.acpc.da.gov.ph/ACPC%20Paper/StrategicPlan2011-2016.pdf>
2. Albert, J.R.G. (2013) "How important is agriculture in the economy?" May 12, 2013. Beyond the Numbers. Philippine Statistics Authority, National Statistical Coordination Board.
3. Agcaoili, Lawrence. DOTC pushes dev't of linkages between Ro-Ro ports, highways. The Philippine Star. Updated March 5, 2013. <http://www.philstar.com/business/2013/03/05/915769/dotc-pushes-devt-linkages-between-ro-ro-ports-highways>
4. AGFP. <http://agfp.webs.com/>
5. Basilio, Enrico L. (2008). Linking the Philippine Islands Through the Highways of the Sea. Center for Research and Communication, Pasig City, Philippines. <http://asiafoundation.org/resources/pdfs/RoRobookcomplete.pdf>
6. Bangko Sentral ng Pilipinas. BSP Manual of Regulations for Non-bank Financial Intermediaries. (revised as of) December 2003.
7. Bureau of Agricultural Statistics. (2013). Performance of Philippine Agriculture.
8. Bureau of Agricultural Statistics. (2013) Selected Statistics on Agriculture 2013. Department of Agriculture, Bureau of Agricultural Statistics. http://bas.gov.ph/?ids=publications_view&id=45
9. *Business Diary*. (2012). *Agri-Microfinance Program (AMP) for Small Farmers and Fisherfolk and their Households*. May 28, 2012. <http://businessdiary.com.ph/3072/agri-microfinance-program-amp-for-small-farmers-and-fisherfolk-and-their-households/>
10. Casuga, M.S. et al. (2008). Financial Access and Inclusion in the Agricultural Value Chain. APRACA FinPower Publication: 2008/1. Asia-Pacific Rural and Agricultural Credit Association, Bangkok, Thailand.
11. Catencio, Joel (2010). "Filipino farmers affected by climate change can now lend money from government". Aug 24, 2010. Allvoices.com. <http://www.allvoices.com/contributed-news/6595024-filipino-farmers-affected-by-climate-change-can-now-lend-money-from-government>
12. Cayabyab, M.J. "Agriculture: The decline of the poor man's sector" May 1, 2013. GMA News Online. <http://www.gmanetwork.com/news/story/306370/economy/agricultureandmining/agriculture-the-decline-of-the-poor-man-s-sector>
13. Chowdhury, Md. Shafiqul Haque. March 2007. Problems of Agricultural Microfinance. Paper Presentation at the Regional Experts' Consultation Meeting. Manila
14. Corpuz, JM and Kraft NWS. 2005. Policy Options in Agricultural and Rural Finance. Paper presented during the Asia-Pacific Rural and Agricultural Credit Association (APRACA) Planning Workshop on Integrating Training Interventions with other APRACA Development Initiatives, Manila, Philippines, September 27-29, 2005.
15. Cuaresma, Bianca. "Agri-Agra lending law losing relevance; needs review." Business Mirror. Nov 13, 2013. <http://www.abs-cbnnews.com/business/11/13/13/agri-agra-lending-law-losing-relevance-needs-review>
16. DA Website. (2012) DA, DBP, CCAP to Hasten Cold Chain Program Implementation. <https://www.da.gov.ph/index.php/2012-03-27-12-04-15/photo-releases/photo-releases-achieve/1431-da-dbp-ccap-to-hasten-cold-chain-program-implementation>

17. Digal, L. and Concepcion, S. (2004). *Regoverning Markets Securing Small Producers Participation in Restructured National and Regional Agri-Food System. The Case of the Philippines*. Manila: International Institute for Environment and Development.
18. Embuscado, Erwin S. (2010) *Benguet Cold Chain: Preserving the freshness of the farmers' harvests*. July 30, 2010. <http://www.philmech.gov.ph/?page=news&action=details&code01=FB10070003>
19. Espenilla, Nestor A. (2009) "Mobile Phone Banking and Financial Inclusion in the Philippines", Jr. <http://www.adbi.org/files/2009.03.31.cpp.sess3.espenilla.mobile.phone.banking.philippines.pdf>
20. Estigoy, R.P. (2009) *Improving Quality of Philippine Vegetables Through Agricultural Trampoline and Cold Chain Systems: Status, Prospects and Technology Transfer Initiatives*. http://www.actahort.org/members/showpdf?booknr=699_18
21. Gallardo, Joselito (2001). *A Framework for Regulating Microfinance Institutions: The Experience in Ghana and the Philippines*. World Bank. <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-2755>
22. Geron L.S. and M.S. Casuga. (2012) "Credit Subsidy in Philippine Agriculture" Philippine Institute for Development Studies Discussion Paper Series 2012-28.
23. Geron L.S. (2011) "Experiences, Challenges and Opportunities in Value-Chain Financing: The Food Supply Chain Program" Landbank of the Philippines.
24. Ghai, Sachin (2012). *Value Chain Financing: Strategy Towards Augmenting Growth in Agriculture Sector in India*. Journal of Economics and Sustainable Development.
25. Hollinger, Frank (2011). *Agricultural Finance —Trends, Issues, and Challenges*. GIZ, Germany.
26. Landbank Encourages Credit Conduits to Expand Assistance to Palay Farmers Through AGFP. <https://www.landbank.com/newsdetails.asp?id=294>
27. Llanto, Gilberto M. *Microfinance in the Philippines: Status, Issues, and Challenges*, Policy Notes No. 200410, Philippine Institute for Development Studies, November 2004
28. Lopez, Virgil. "Efforts brewing to perk up Philippine Coffee Industry". Sun Star Manila. March 12, 2011. <http://www.sunstar.com.ph/manila/local-news/2011/03/12/efforts-brewing-perk-philippine-coffee-industry-144564>
29. mBank Philippines. <http://www.mbank.ph/en/>
30. Miller, Calvin and Linda Jones (2010). *Agricultural Value Chain Finance, Tools and Lessons*. Food and Agriculture Organization of the United Nations and Practical Action Publishing, United Kingdom.
31. National program on cold chain systems for high-value crops outlined. http://www.pcaarrd.dost.gov.ph/home/ssentinel/index.php?option=com_content&view=article&id=1067&Itemid=41
32. Official Gazette Online. (2012) *Additional P1B for government agri-credit to benefit 97,000 more farmers, fisherfolk*. November 8, 2012. <http://www.gov.ph/2012/11/08/additional-p1b-for-government-agri-credit-to-benefit-97000-more-farmers-fisherfolk/>
33. *Onion Farmers Get Assured Market*. ASKI. <http://www.aski.com.ph/client.php?name=kalasag>
34. *Onion Farmers in Nueva Ecija Earn Millions in Just One Cropping*. Feb. 18, 2011. *Philippine News*. <http://philnews.ph/2011/02/18/onion-farmers-in-nueva-ecija-earn-millions-in-just-one-cropping/>
35. People Powered Markets (PPM). "Bridging Farmers to the Jollibee Supply Chain. <http://peoplepoweredmarkets.ph/media/jollibee-case-study.pdf>"

36. PinoyME and Microfinance Council of the Philippines. (2012). Value Chain Financing for Agriculture and Rural Microenterprises. Manila, Philippines.
37. Quiñones, Benjamin R. Jr. (2007). Financial Linkages in the Philippines: Constraints and Success Factors. http://www.ruralfinance.org/fileadmin/templates/rflc/documents/1189083089381_PCFC_Philippines.pdf
38. Remo, Amy R. Agri loan fund gets P2.5B — Yap. (Philippine Daily Inquirer) December 02, 2008. http://services.inquirer.net/mobile/08/12/02/html_output/xmlhtml/20081202-175712-xml.html
39. Remo, Michelle. BSP eases capital requirements for agri loans. Philippine Daily Inquirer. February 20, 2011. http://services.inquirer.net/mobile/11/02/20/html_output/xmlhtml/20110220-321325-xml.html
40. Remo, Michelle V. Banks forced to comply with Agri-Agra law." Philippine Daily Inquirer. Feb 27, 2012. <http://business.inquirer.net/46541/banks-forced-to-comply-with-agri-agra-law#ixzz2uOBCLzcs>
41. Smart to launch microfinance bank. Business Mirror. Nov 11, 2012. <http://businessmirror.com.ph/index.php/en/business/banking-finance/2510-smart-to-launch-microfinance-bank>
42. Strengthened partnership of rural banks with DA. Manila Times. June 19, 2013 <http://manilatimes.net/strengthened-partnership-of-rural-banks-with-da/11327/>
43. USDA Cold Chain Project to boost Filipino farmers' income. February 8, 2014 <http://r06.pia.gov.ph/index.php?article=901391835191>
44. USDA launches Cold Chain project in CARAGA. February 9, 2014 http://manilatimes.net/breaking_news/usda-launches-cold-chain-project-in-caraga/
45. Valencia, Czeriza. Loan releases under AMCFP up 151% .The Philippine Star. April 1, 2013. <http://www.philstar.com/business/2013/04/01/925469/loan-releases-under-amcfp-151>
46. Valencia, Czeriza. Agri modernization plan gets P1-B fund. The Philippine Star. November 10, 2012 <http://www.philstar.com/business/2012/11/10/864856/agri-modernization-plan-gets-p1-b-fund>
47. Valenciano, D.I. and O.L. Cuyco (2013). The Value Chain Financing in the Philippines: A Farmers' Journey with Rural Finance Institutions (RFIs). APRACA, Bangkok, Thailand.

Photo Credit (Front/back cover):
Dr. Marlowe U. Aquino
IFAD-APRACA FinServAccess
Project Manager



Printed by

ASIA-PACIFIC RURAL AND AGRICULTURAL CREDIT ASSOCIATION (APRACA)

Room A303, Bank for Agriculture and Agricultural Cooperatives (BAAC)

469 Nakhonsawan Road, Dusit, Bangkok 10300, Thailand

Tel: (+662) 280-0195, 282-1365

Fax: (+662) 280-1524

E-mail: apraca@apraca.org

Website: www.apraca.org

ISBN 978-616-394-217-3