



Establishing Agro-Enterprises towards Inclusive Development: The Case of Nueva Segovia Consortium of Cooperatives in the Philippines

Clarice C. Pulumbarit^{a*}, Emilia S. Visco PhD^b, Carla Edith G. Jimena^c,
Nimfa Beatris D. Montes^d, Jewel Joanna S. Cabardo^e, Ma. Emilinda T.
Mendoza^f

*^aDepartment of Social Development Services, College of Human Ecology, University of the Philippines
Los Banos (UPLB), Laguna 4030, Philippines*

^{b,c,f}Department of Social Development Services, College of Human Ecology, UPLB, Laguna 4030, Philippines

*^{d,e}Department of Agribusiness Management and Entrepreneurship, College of Economics and Management,
UPLB, Laguna 4030, Philippines*

^aEmail: ccpulumbarit@up.edu.ph, ^bEmail: esvisco@up.edu.ph, ^cEmail: cgjimena@up.edu.ph

^dEmail: ndmontes@up.edu.ph, ^eEmail: jscabardo@up.edu.ph, ^fEmail: mtmendoza2@up.edu.ph

Abstract

This study analyzed the case of a local cooperative in the Philippines engaged in agro-enterprise development (AED). It aimed to gather microlevel insight on AED's contribution to inclusive development, in the context of inclusive agri-business. The researchers profiled the AED initiatives of the Nueva Segovia Consortium of Cooperatives (NSCC), determined the challenges in implementing these initiatives, and analyzed the perceived impacts of the initiatives on the beneficiaries in relation to inclusive development. Data were gathered through key informant interview, focus group discussion, and review of project documents. Based on NSCC's experience, key informants perceive that the AED initiatives have led to material, cognitive, perceptual, and relational change in its beneficiaries. These resulted from continuous capacity building and directly linking farmers to modern value chains through agro-enterprise development. The changes contribute to empowering the member farmers thereby promoting inclusive development at the local level.

* Corresponding author.

The key challenges faced by NSCC are related to production and the policy and institutional landscape for agro-enterprise development. Addressing these challenges, as well as capacitating the agro-enterprises to implement post-production value-adding activities, can maximize the gains towards inclusive development. In-depth studies on the impacts of agro-enterprises on beneficiaries are recommended to further substantiate the potential of agro-enterprise development to promote inclusiveness.

Keywords: agro-enterprise; agro-enterprise development; inclusive development.

1. Introduction

In developing countries where most of the population rely on agriculture-based livelihoods, poverty persists amid interventions focused on increasing production. Efforts thus shifted to inclusive development strategies that empower rural sectors and create equal opportunities. Inclusive development is generally articulated as development that incorporates social, economic and environmental dimensions [1]. It can be translated into three aspects of inclusiveness: social, ecological, and relational [2]. Inclusive development is promoted through improving the quality of employment opportunities (higher and more stable income), developing the agriculture sector for improved productivity, and empowering the poor to increase their participation in economic growth [1, 3, 4].

In agriculture, an agribusiness model can be deemed inclusive by enhancing farmers' ownership of assets and facilities and voice, and by promoting risk management (risk sharing, etc.) and rewards (benefits) of the farmers [5]. In addition, inclusiveness can also be enhanced by an enabling environment at the macro level (national and regional policies, infrastructure development, political environment), meso level (business norms, rules and regulation, investment and financial services, business linkages), and micro level (land tenure and property rights, agricultural technology and R&D transfer, capacity building and human resource development) [6].

The inclusion of farmers in activities from production to consumption through linking farmers to markets is key for increasing income and enhancing the livelihoods of smallholders in general [6, 7, 8, 9, 10]. Agro-enterprise development (AED) gears towards inclusive development in the agriculture sector by building farmers' skills, knowledge, and entrepreneurial capacity [11] to help increase their income. As a market-oriented approach, AED also helps enhance the ability of farmers to cope with globalization and the changing landscape for trade by building capacities of producers, local service providers, and markets [12, 13]. In the process, it is not only the entrepreneurial capacity of farmers that is developed but also other skills necessary for them to become effective entrepreneurs. By linking farmers directly to potential markets, especially to modern value chains, AED allows farmers to gain more value from their produce.

A developing country, the Philippines ranks 33rd among emerging economies and is considered slowly advancing based on the Inclusive Development Index 2018 of the World Economic Forum. Despite declining poverty in the past decade [3], poverty incidence in the Philippines is still among the highest in Asia at 21.6% in 2015 [14]. Growth has also been slower than many other East Asian countries and income inequality remains high [3]. Majority of the poor live in rural areas and rely on agriculture-based livelihoods. Fishermen, farmers

and children consistently posted the highest poverty incidence among the nine basic sectors [14].

AED initiatives to address poverty are already being promoted by different sectors in the country. A scoping study in 2016 revealed that AED initiatives have already been implemented in approximately 52 provinces of the three main islands of the Philippine archipelago [15]. These initiatives have been implemented or are being implemented by different sectors from the government to the business and civil society groups. The agro-enterprises produce a variety of commodities from staple crops (rice) to plantation crops (cacao, coffee, etc.) and vegetables (white onion, pepper, carrot, etc.) [15]. An example is the Philippine Rural Development Program (PRDP) of the Department of Agriculture (DA) which also promotes the development of agro-enterprises in its projects.

In the said context, this study documented and analyze a local agro-enterprise development initiative to provide insight on the implementation and the potential of AED to enhance inclusive development at the local level. It investigated the case of the Nueva Segovia Consortium of Cooperatives (NSCC), a consortium of cooperatives in the province of Ilocos Sur in the Philippines that adopted the AED approach in 2015. Specifically, the study 1) profiled the AED initiatives of NSCC; 2) determined the challenges faced by NSCC in implementing AED; and 3) analyzed the perceived impacts of AED initiatives on beneficiaries in relation to inclusive development.

2. Methodology

2.1. Study area

The province of Ilocos Sur is located along the western coast of Northern Luzon at latitudes 16°40' to 17°54'N and longitudes 120°20' to 120°56'E. It is bounded by provinces in the north, east, and south, and the China Sea to the west. The provincial capital is Vigan City, approximately 408 kilometers from Manila, the capital city of the Philippines. The province is composed of 32 municipalities, two cities, and 768 barangays with a total land area of 257,958 hectares (20.1% of total land area of Region I [16, 17]. It has an undulating to rolling topography with land use predominantly grasslands (738.10 sq.km.), shrublands (727.09 sq.km.), and croplands (613.15 sq.km.) [16].

Ilocos Sur has a population of 689,668 composed of 157,043 households, with majority residing in the rural areas [14]. Poverty incidence is high at 12.1% in 2015, with 86,612 living below the poverty line [14]. Around 58% of the population are engaged in agricultural activities. In addition, 77.5% of its 236,000 active labor force is in the rural areas [16]. Based on the Provincial Agriculture Office data in 2012, the top agricultural crops produced in the province are rice, corn, vegetables (tomato, cabbage, onions, etc.), and fruits (mango, avocado, jackfruit, etc.). Fishing is also a major industry with an estimated 8,557 fishermen in the province.

Ilocos Sur is part of Region I, a primarily agricultural region. Due to this nature, the Regional Development Plan (2017-2022) envisions being the agribusiness and tourism hub in Northern Philippines by 2022. The region is a top producer of tobacco, mango, garlic and milkfish which have potential for processing into higher value commodities [17]. Agriculture and agribusiness development are seen as important components in the region's economic development. The poor performance of the agriculture sector and lack of agri-based entrepreneurs in

the region, aside from natural disasters, were considered as among the factors why the region's accelerated growth from 2011 to 2013 was not sustained [17]. In particular, the agriculture, forestry, and fisheries (AFF) sector envisions transforming farmers and fisherfolks into "agri-based enterprises and active players in the market" [17].

2.2. Research design

This study utilized the exploratory case study approach. Case studies investigate the context of a single case or multiple cases in order to understand complex phenomena. Analyzing specific contexts through case studies contribute to an understanding of theoretical issues [18]. This study analyzed the case of the NSCC's AED initiatives. Key informant interview (KII) was validated through focus group discussion (FGD) and review of secondary data.

Primary data was collected through face-to-face key informant interview and an FGD. The NSSC Chief Executive Officer was interviewed regarding the a) profile of NSCC's AED initiatives, b) challenges in AED implementation; and, c) perceived impacts on members/beneficiaries of their AED initiatives. One FGD was also conducted with officers of the Caoayan Onion Growers Producers Cooperative (COGPC), one of the member cooperatives of NSCC to further understand the implementation of the AED initiatives and the impacts. Secondary data was also gathered through a review of project documents.

The AED initiatives were described in the context of the micro-environment as defined in the ILO framework [19] for sustainable enterprises. According to the ILO framework (2007), the four factors at the micro-environment that are important in achieving sustainable enterprises are: 1) Financial and physical infrastructure and services (financial self-sufficiency, sufficient infrastructure and physical capital, etc), 2) Human resources (education, skills, and health of beneficiaries: increasing competencies/human capital), 3) Market structure, value chains, and customer/supplier relationships (linking to modern value chains, etc.), and, 4) Social partners, support networks, and institutions (safety nets in place, flexibility and resiliency, etc.). It is assumed that an enabling micro-environment promotes sustainable enterprises.

Thematic analysis of data was utilized. AED's potential to promote inclusive development was analyzed by looking at the perceived impacts of the agro-enterprise on the farmers based on Chen's framework [20]. According to Chen, microenterprises lead to material change, cognitive change, perceptual change, and relational change. Material change are related to increased income, access to/control over/ownership of assets and improved access to basic services such as health and education while cognitive change refers to enhancement of skills, knowledge, and awareness [20]. Meanwhile, perceptual change refers to improved self-esteem, self-confidence, and vision of future while relational change refers to increased role in decision-making and representation (participation in local institutions, self-reliance, etc.) [20].

The perceived changes and impacts were analyzed vis-à-vis the 'enablers' of inclusive agribusiness in Southeast Asia [21]. According to Teng and Oliveros [21], inclusive agribusiness can be promoted through essential enablers (the most necessary conditions), immediate enablers (second-order to essential enablers), and useful

enablers (sufficient and complementary conditions). The enabling environment can also be viewed at different levels: at the macro level (national and regional policies, infrastructure development, political environment), meso level (business norms, rules and regulation, investment and financial services, business linkages), and micro level (land tenure and property rights, agricultural technology and R&D transfer, capacity building and human resource development) [21]. This case study focused on the micro-level since it profiled the micro-environment of the NSCC.

2.3. Limitations of the study

This case study focused only on the micro-level since it profiled the micro-environment of the NSCC. Data was validated through project documents and information from only one of the member cooperatives of the NSCC. Other farmer beneficiaries of the AED projects were not interviewed since the primary method used in gathering data was key informant interview.

3. Results and Discussion

3.1. Profile of NSCC

The Nueva Segovia Consortium of Cooperatives (NSCC) in Vigan City in Ilocos Sur is a consortium of cooperatives. It was founded through the efforts of the local Catholic church and registered at the Cooperative Development Authority in 1992. It was established generally to achieve holistic development of people Ilocos through diversified cooperative services [21]. NSCC envisions being a leader of cooperatives in the country. Thus, the nature of the cooperative is towards uplifting the lives of its members. NSCC started with only 18 church-based cooperatives as pioneer members, three staff, and a capital of P13,500. By 2015, it had expanded to more than a hundred cooperatives based not only in Ilocos Sur but also in neighboring areas like Ilocos Norte, Benguet, Pangasinan, Abra and Baguio City. The NSCC also expanded to more than 200 full-time staff.

With its financial capacity established, and the continuous expansion and diversification of programs and services, their credibility as a cooperative was propelled. The NSCC became the 1st billionaire secondary cooperative in Region I and garnered awards for its performance as a cooperative federation from national agencies such as the Cooperative Development Authority (CDA) and the National Livelihood Development Corporation (NLDC), a chartered government owned or controlled corporation (GOCC) providing financial services to the microfinance sector (NLDC was abolished in 2015). NSCC has 10 major programs focusing on lending, credit, savings, livelihood, capacity building, and infrastructure support. It also established and manages a business center, offers social services, and promotes advocacies such as gender equality and community involvement.

One of the cooperatives supported by NSCC is the COGPC. It started in 2012 in Caoayan, Ilocos Sur with 85 farmer-members, according to the officers of the cooperative.

3.2. NSCC's AED initiatives

NSCC ventured into agro-enterprise development in recognition of the importance of marketing their products to sustain the livelihoods of its members. It is part of two AED initiatives: Farmer Entrepreneurship Program (FEP) and Value Chain Program (VCP).

3.2.1. Farmer Entrepreneurship Program (FEP)

NSCC became part of the FEP in 2012. The FEP is a program of the Jollibee Group Foundation (JGF), the corporate social responsibility arm of the food service company Jollibee Foods Corporation (JFC) in the Philippines [22]. In 2008, the JGF launched the Bridging Farmers to the JFC Supply Chain Project, which was later called the Farmer Entrepreneurship Program (FEP), in partnership with an international NGO (Catholic Relief Services) and the NLDC [22]. The FEP generally aims to help smallholder farmers improve their incomes through capacity building on agro-enterprise development and expanding farmers' direct access to institutional markets such as JFC. Partners in the FEP also include local government units, microfinance institutions, and academic institutions. As of 2014, JGF has already partnered with farmers and local institutions from 28 cities and towns in the country [22].

According to Divine Quemi, Chief Executive Officer of NSCC and key informant of this study, FEP was established to professionalize farming, help ordinary farmers become more productive, and help the farmers link with the institutional buyers. In addition, the FEP also hopes to inspire farmers that farming is a sustainable business and to empower them by helping ease them from their debts. These can also help improve the morale in farmers and make them believe in themselves. The program includes capacity building in agro-enterprise development and partnership management such as farmer field school, market analysis, negotiation training, micro lending, post-harvest processing, and new storage and delivery practices.

Under the FEP, the Vigan City Onion Growers Cooperative (VCOGC) in Vigan City and the Caoayan Onion Growers Producers Cooperative (COGPC) in Caoayan produce onion while the Sinait Garlic Growers Cooperative in Sinait produces garlic which are directly bought by the JFC. As of 2015, 85 farmers have already directly benefitted from the program.

As an AED initiative, the FEP engages stakeholders from the public and private sector who take on specific roles (Table 2). The National Livelihood Development Corporation (NLDC), Jollibee Foods Corporation (JFC), and Catholic Relief Services (CRS) serve as the technical working group (TWG) while NSCC, local government units and the academe (University of Northern Philippines) serve as the site working group (SWG).

NSCC, as the lead implementing institution, facilitates the linking of the cooperatives, institutional buyers, LGUs, government agencies concerned such as the Department of Agriculture, and funding institutions. It deals directly with the farmers/cooperatives and assists them in preparing requirements needed for the Bureau of Internal Revenue (BIR), CDA, and others. This also includes improving access of farmers/cooperatives to credit services which are necessary in enterprise development.

Moreover, NSCC facilitates capacity building activities for the cooperatives. This is done in conjunction with the academe (i.e. University of Northern Philippines). Some of the trainings provided in 2012-2015 include

leadership training, financial management, ownership seminar, book keeping, values orientation, and others. Farmers were also given training on production practices.

The LGUs, on the other hand, provide financial capital for the cooperatives in the form of livelihood funds. The said funds are managed by the NSCC. For example, the LGU of Vigan City provided P1.2M coursed through the NSCC for the farmers in Caoayan and Sinait. The academe serves as NSCC’s partner in the capacity building of the farmers. In addition, the NLDC and the CRS also provides technical assistance especially in relation to AED.

JFC serves as the direct institutional buyer of the produce based on the quantity and quality requirements set before planting.

3.2.2. Value Chain Program (VCP)

Aside from being part of the FEP, NSCC also has its own AED program. The VCP aims to help the coffee growers and rice growers in the municipalities/city of Ilocos Sur. Through the program, marketing opportunities for rice and coffee produce of NSCC members are improved. This initiative is also in support of the provincial LGU and the DTI’s call to promote the coffee industry of Ilocos Sur.

Under the VCP, the key stakeholders are the NSCC, the farmers/cooperatives, and the buyers. NSCC provides farm inputs for farmer members of the cooperatives like seeds, fertilizer, pesticides and others. It will then buy the produce (rice) at a higher price compared to other traders. NSCC mills the rice and sells the milled rice directly to professional groups including their member cooperatives (to be sold at their branches) and other interested groups.

The program also assists coffee farmers. The coffee beans are bought by NSSC and are sold/consumed directly by the clients of the NSCC Hotel, NSCC Plaza, and a Bath and Coffee Shop established for the purpose. In addition, the farmers’/cooperatives’ produce are sold through the NSCC Multi-Purpose Cooperative (NSCC MPC) and trade fairs.

Table 1 shows the summary of the AED initiatives involving NSCC while Table 2 shows the stakeholders and their roles.

Table 1: Summary description of NSCC’s AED initiatives

Project	Beneficiaries	Produce
Farmer Entrepreneurship Program (FEP)	Caoayan Onion Growers Producers Cooperative (COGPC), Vigan City Onion Growers Cooperative (VCOGC), Sinait Garlic Growers Cooperative (SGGC)	Onion, garlic and rice
Value Chain Program (VCP)	Coffee growers and rice growers in Ilocos Sur	Coffee and rice

Table 2: Stakeholders of AED initiatives and their roles

Project	Stakeholders	Roles
Farmer Entrepreneurship Program (FEP)	Technical Working Group (Catholic Relief Services, National Livelihood Development Corporation, Jollibee Group Foundation)	CRS and NLDC provide technical assistance to the lead implementing organization and the farmers while JGF links farmers to JFC which serves as the institutional buyer
	Site Working Group (NSCC, LGU, academe/ University of Northern Philippines)	LGU provides financial capital while academe (UNP) assists in the conduct of training programs
	NSCC as lead implementing institution	Facilitates linking of farmers to the institutional buyer/s, LGUs, DA, and other funding institutions; implements capacity building activities; manages livelihood funds from LGUs, and assists/deals directly with cooperatives
Value Chain Program (VCP)	NSCC, farmers/cooperatives, buyers	NSCC provides farm inputs for the cooperatives; NSCC buys and mills rice from the farmers/cooperatives and sells to buyers; NSCC buys coffee from farmers for use and/or for selling at the NSCC Hotel, NSCC Plaza, and Bath and Coffee Shop

3.2.3. Analysis of NSCC’s Enterprise Micro-environment

In the context of ILO’s framework, the AED initiatives of the NSCC have led to the enhancement of the enterprise micro-environment. The NSCC provides infrastructure support (rice mill, etc.) and financial services such as lending which improves the member cooperatives’ financial and physical capital. In addition, the farmers through their cooperatives/enterprises are also capacitated in production and post-production-related (post-harvest processing, production practices, etc.) and entrepreneurship topics (micro-lending, market analysis, etc.).

In the other two aspects, the FEP and VCP link the farmers to new and modern value chains. Farmers have improved sales through NSCC’s hotel and shops and linking them directly to a local food chain (JFC). As a multi-stakeholder approach, AED also brings together the strengths and services of different sectors through partnerships. Each sector has its own role in supporting the agro-enterprises.

Partner local government units, for example, provided financial support for NSCC’s livelihood activities. These serve as support networks and safety nets during periods of stress (calamities, etc.) and contribute to flexibility and resiliency of the farmers.

3.3. Challenges in AED implementation

While the continuing growth of the NSCC serves as an initial indicator of success of the FEP and VCP, the key informant and FGD participants identified several challenges to the implementation of the AED initiatives. These can be categorized into four key themes: production-related factors, lack of physical capital, market-related factors, and commitment of member farmers/cooperatives (Table 3).

Table 3: Challenges faced by NSCC in implementing AED initiatives, its coping mechanisms, and recommended actions

Challenges	Coping Mechanisms	Recommendations
Production related factors: climate, poor soil condition, pests and diseases, low quality of produce, lack of capital, and post-harvest losses	Crop insurance, application of organic fertilizer, provision of loans with low interest rate, rent a post-harvest facility (PHF)	Government subsidy in case of calamity; on-time assistance from government agency and must provide post-harvest facility; public markets must be managed by cooperatives
Lack of physical capital leading to high cost/ problems in delivery	Rent delivery trucks; seek assistance from government offices for delivery truck	Link to government agencies who can provide delivery trucks
Market related factors: link to markets, access to market information	Mixed product outlet and tapping local and international buyers	Provide space in public market for farmers' cooperative
Commitment of member farmers/cooperatives	Implement penalties for erring members	Implement penalties for erring members

According to Quemi, one of the main challenges in their FEP are factors affecting production such as climate, poor soil condition, pests and diseases, low quality of produce, lack of capital, and post-harvest losses. These were also mentioned as challenges during the FGD with COGPC. To address these, NSCC implements crop insurance and provides loans to farmers with low interest rate. They also apply organic fertilizer to help improve the soil condition and rent a post-harvest facility to reduce losses. Aside from their on-going coping mechanisms, Quemi also recommends additional actions such as government subsidy during calamities and assistance from DA which should be on-time and should include provision of post-harvest facilities. In addition, she suggests an increasing role of cooperatives in marketing by allowing them to manage public markets.

Related to these is the lack of physical capital, particularly for the delivery of produce. At present, the cooperatives rent trucks to deliver their produce to markets outside the province. In particular, the cooperatives look for trucks that deliver goods from the National Capital Region (the country's political and business center) to Ilocos Sur and rent it to deliver their own produce to Manila. They also seek assistance from government offices that can provide (or even donate) a delivery truck for the Caoayan onion growers. The farmers, through the NSCC, hope that they be linked to government agencies who can provide delivery trucks.

Market-related factors, particularly links to markets and access to market information are also seen as challenges. Through AED, NSCC currently addresses this by tapping local buyers (i.e. JFC as institutional buyer) and international buyers, as well as selling produce at their mixed product outlet. Based on its experience, these efforts are still lacking. Thus, they recommend that space/s also be provided in public market/s for farmers cooperatives.

The last category of challenges deals with the commitment of member farmers/cooperatives in organizational activities. As in any organization, non-attendance of members to meetings and/or activities is also a challenge. Some members also resort to pole-vaulting when circumstances arise such as when members need money or are offered good prices earlier than the schedule for delivery to the institutional buyer. Penalties for erring members have already been set by the NSCC. Pole-vaulting members have been asked to resign from the cooperative. However, the key informant recommends implementing other penalties for erring members which are already

mandated but not yet being implemented (those who incur five absences will be dropped from the roll of active members).

Despite these challenges, Quemi believes that their FEP has the potential to be sustainable. Based on her assessment, NSCC's AED project is self-sufficient in terms of capital and has sufficient infrastructure (aside from the lack of delivery truck). In addition, their environment is not degraded. In terms of human resources, members of the cooperatives still continue to attend trainings to further enhance their competencies. NSCC has also been receiving support from the LGU and other sectors, providing an enabling environment for the cooperatives to grow. Thus, they perceive their cooperative to be resilient to shocks. A review of available documents shows that trainings are continuously being provided by NSCC to its member farmer cooperatives.

NSCC's plans to address these issues and ensure sustainability of their AED initiatives are: 1) Continuous capacity building of farmers; 2) Provision of post-harvest facility to farmers and delivery trucks; 3) Equitable fund allocation and distribution to farmers; and, 4) Ensuring good irrigation facilities.

3.4. Perceived impacts of AED initiatives on member farmers/cooperatives

The framework by Chen [20] identifies four pathways through which individuals can experience change as resulting from participation in microenterprises (in general). In Chen's framework, material change refers to "change in access to and control over material resources, in level of income, and in satisfaction of basic needs"; cognitive change refers to "change in level of knowledge, skills, and awareness of wider environment; perceptual change refers to "change in individual's perception of own individuality, interests, and value; and in the perceptions by others of individual's contributions and worth; and, relational change refers to "change in contractual agreements, in bargaining power, and in ability to resist exploitation. Chen and Mahmud [20] also hypothesize that there is a likely sequence of change from material to perceptual change.

In this study, the changes were considered as impacts on the member farmers and cooperatives. According to Quemi, the AED initiatives resulted in changes in the four aspects. Under material change, the farmers who are members of the cooperatives gain higher income thus improving the household economic situation and contributing to their ability to meet their basic needs. Quemi believes that the household economic situation of the members of the cooperatives "improved moderately." One indicator of the improvement in economic situation of the farmer members is the improvement of their loan payments improved since they participated in the project. In addition, through the AED initiatives, the cooperatives are able to access support from other sources aside from the projects.

Quemi believes that the farmers also gained changes in the cognitive, perceptual, and relational aspects. This was confirmed through the FGD by the members of the COGPC headed by their Chairman, Amado Rabaro and their Manager, Michael Regencia. They claimed that while they cannot say that their quality of their lives improved after joining their cooperative since they have yet to receive their dividends, they believed that they gained much more aside from material change. They said that they are now empowered to deal directly with JFC and other markets of their produce. With the many trainings they attended, they are also capacitated in

cooperative management. Most importantly, they are very positive about the future of their cooperative. From 15 members in 2012, they are now 25 and they are also actively collaborating with other members of the other cooperatives in relation to their volume of production. As Regencia said, in Ilocano (the local language), “*Kastoy pang laeng ti pag meetingan tayo maam, ngem into no agsubli kayo ket sementado ton ken adda to pay 2nd floor nan. Mamati kami nga dumakkel ken agbayag daytoy kooperatiba mi ket pumintas to ti biag ti maysan maysa kadakami*” (At present, our meeting area is so simple, but next time you come and visit us, we will have a concrete building with a second floor since we strongly believe that our cooperative will become successful and sustainable and our lives will become better). Another officer of COGPC also expressed the importance of capacity development including perceptual change to the sustainability of their cooperative and the improvement of their lives.

3.5. Analysis of impacts towards inclusive development

The different activities and services provided by NSCC in its AED initiatives have led to changes and impacts among farmer member of its partner cooperatives. These impacts are aligned towards the enablers of agribusiness inclusiveness at the micro up to meso level [6].

At the micro level, the AED initiatives serve as a venue for the transfer of agricultural technology. To meet the quality and quantity standards required by modern markets such as JFC, farmers receive training on good agricultural practices. Some infrastructure support is also provided to augment what farmers own (e.g. assistance in providing delivery trucks, etc.). Moreover, NSCC provides continuous capacity building for the members/farmers engaged in AED from production-related to market-related and entrepreneurial management skills.

These are also related to the four basic criteria of inclusiveness and fairness of agribusiness by IIED and FAO [5] which includes 1) ownership of assets and facilities (production assets such as land, processing facilities, etc.), 2) voice (representation, bargaining power, etc.), 3) risk (risk sharing), and, 4) reward (benefits). Based on the FEP and VCP of NSCC, while there is still no evidence of increased ownership of assets (e.g. land) by the farmers due to AED, they have increased access to assets and facilities which are owned by the consortium. In addition, the presence of an organized farmer’s group in the form of the cooperative (in this case, the COGPC) contributes to increased representation and bargaining power (voice) of farmers. By dealing directly with institutional buyers, farmers will not be at the mercy of the traders who have control over the prices of their produce. In a study of agribusiness models by Pagliettie and Sabrie in 2013 [23], membership to organizations provides avenue for collective action, thereby increasing the bargaining power of farmers with traders and input dealers. Membership to the consortium also offers farmers a wider range of options and social capital for risk management. In the case of the NSCC, the benefits of farmers include increased income due to direct linking to a modern market allowing them to gain more value for their produce. In addition, the consortium also links the farmer cooperatives directly to businesses such as JGF and also opened new opportunities for marketing through its own business. As an example, experience of the JFC in its FEP shows that peeled onions fetched a higher price; this led them to encourage farmers deliver peeled onions to them instead of unpeeled ones. Eventually, farmers can look for other forms of processing to add more value to their produce.

Although this case study focused on the micro-level, there are also evidences of benefits of farmers members of the AED initiatives toward the meso level. This is in the form of financial services (lending and credit, etc.) offered by the NSCC to support the agricultural and entrepreneurial activities of its member cooperatives. One way of doing this is by loaning inputs to farmers at a very low interest. As such, farmers no longer borrow farm inputs from traders that give high interest rates. The key informant, however, noted that lending is not enough. Thus, she sees AED as the best approach to empower the farmers and recommends that AED be institutionalized at the country level by the Department of Agriculture.

4. Conclusion

The AED initiatives of NSCC, in the form of FEP and VCP, enhanced the capacities of the member cooperatives and the farmer members who were part of the program. It also helped improve access of farmers to financial and physical infrastructure contributing to enhanced livelihoods.

Moreover, through the FEP, the engagement of multiple stakeholders is maximized to meet the resources needed for the agro-enterprise to function. Literature shows that in particular, multi-stakeholder partnerships within and outside supply chains are recommended for firms be able to compete and survive in the changing global landscape of agri-food systems [7, 24]. What stands out in the NSCC AED programs is the participation of the LGUs by providing the seed fund for the cooperative and letting the NSCC manage the funds for their farmers. This makes the program less like a dole-out. NSCC plays a crucial role in this program since the LGUs trust them to manage the funds and the farmers believe in the goals of the NSCC. They were also able to convince the business sectors (producers of farm inputs) to deal directly with them, thereby reducing the layers of traders in the transaction. It is a win-win situation for all the actors concerned.

5. Recommendations

An analysis of the nature and the perceived impacts of the agro-enterprise initiatives on the member farmers show the contribution of AED towards inclusive development. However, the NSCC still needs to address several challenges that affect the quantity and quality of produce, which must be maintained based on the requirements of their institutional buyer. This includes not only production-related aspects but also organizational development to ensure commitment of farmers to the agro-enterprise. Some recommended actions include increasing the role of agro-enterprises in public markets and further assistance from government and other sources to improve access to (and ownership of) financial and physical capital.

More case studies are recommended to learn from the dynamics, challenges, and impacts of AED toward inclusive development. Further studies should focus on analyzing the impacts on the farmer beneficiaries and other stakeholders of AED initiatives as well as documenting practices that work to serve as a reference for those who wish to utilize AED as an approach to inclusive development.

Acknowledgements

The researchers would like to acknowledge the generous support of the PinoyMe Foundation, UP School of

Economics, the Erasmus Universiteit Rotterdam, the Netherlands Organisation for Scientific Research, and UPLB Foundation, Inc.

References

- [1] G. Rauniyar and R. Kanbur. (2009, December). Inclusive Growth and Inclusive Development: A Review and Synthesis of Asian Development Bank Literature. Metro Manila, Philippines: Asian Development Bank. [On-line]. Available: <https://www.adb.org/sites/default/files/evaluation-document/35885/files/op8-inclusive-growth-development.pdf>. [October 10, 2016].
- [2] J. Gupta and C. Vegelin. (2016, June). "Sustainable development goals and inclusive development. International Environmental Agreements: Politics, Law, and Economics. [On-line]. 16 (3), pp. 433-448. Available: <https://link.springer.com/article/10.1007%2Fs10784-016-9323-z> [September 1, 2017].
- [3] WB, 2018
- [4] K. Schwab. (2009). The Global Competitiveness Report 2018. Geneva, Switzerland: World Economic Forum. [On-line]. Available: <http://www3.weforum.org/docs/GCR2018/05FullReport/TheGlobalCompetitivenessReport2018.pdf> [October 1, 2018]
- [5] L. Cotula and R. Leonard (eds). Alternatives to Land Acquisitions: Agricultural Investment and Collaborative Business Models. London: IIED; Berne: SDC; Rome: IFAD; Maputo, Mozambique: Centro Terra Viva (CTV), 2010, 133pp.
- [6] P. S. Teng and J. A.P. Oliveros. 2016. The enabling environment for inclusive agribusiness in Southeast Asia. Asian Journal of Agriculture and Development. [On-line]. 13 (2), pp. 1-19. Available: https://www.researchgate.net/publication/314283201_Paul_S_Teng_Jurise_AP_Oliveros_2016_The_enabling_environment_for_inclusive_agribusiness_in_Southeast_Asia_Asian_Journal_of_Agriculture_and_Development_1321-20 [October 15, 2017]
- [7] M. Rankin, E.G. Nogales, P. Santacoloma, N. Mhlanga, & C. Rizzo. Public-Private Partnerships for Agribusiness Development – A Review of International Experiences. Rome, Italy: FAO. [On-line]. Available: <http://www.fao.org/3/a-i5699e.pdf> [October 5, 2017]
- [8] S. Ferris, P. Robbins, R. Best, D. Seville, A. Buxton, J. Shriver, E. Wei and MEAS Project. (2014, May). Linking Smallholder Farmers to Markets and the Implications for Extension and Advisory Services. MEAS Discussion Paper 4. [On-line]. Available: https://www.researchgate.net/publication/285771192_Linking_smallholder_farmers_to_markets_and_the_implications_for_extension_and_advisory_services [June 5, 2016]
- [9] OECD and World Bank. (2015, October 6). Inclusive Global Value Chains: Policy Options in Trade and

Complementary Aspects for GVC Integration by Small and Medium Enterprises and Low-income Developing Countries. [On-line]. Available: <https://www.oecd.org/trade/OECD-WBG-g20-gvc-report-2015.pdf> [September 10, 2018]

- [10] S. Vermeulen and L. Cotula. (2010). Making the Most of Agricultural Investment: A Survey of Business Models that Provide Opportunities for Smallholders. Rome: FAO and Institute for Environment and Development (IIED). [On-line] Available: <http://pubs.iied.org/pdfs/12566IIED.pdf> [September 30, 2018]
- [11] CRS. (2014, August). Moving Together to the Market: The Clustering Approach to Agroenterprise Development for Small Farmers. 2nd Ed. Baltimore, Maryland, USA: CRS. [On-line] Available: <http://static1.1.sqspcdn.com/static/f/752898/25350064/1408713852200/moving-together-to-the-market-the-clustering-approach-to-agroenterprise-development.pdf?token=xVOWbvXYzrNVdRpbGs4lgAd3QGw%3D> [May 5, 2015]
- [12] S. Ferris, E. Kaganzi, R. Best, C. Ostertag, M. Lundy, and T. Wandschneider. 2006. A Market Facilitator's Guide to Participatory Agroenterprise Development. Centro Internacional de Agricultura Tropical (CIAT). Cali, Colombia. [On-line]. Available: <https://www.crs.org/sites/default/files/tools-research/market-facilitators-guide-to-participatory-agroenterprise-development.pdf> [February 10, 2015]
- [13] M. Lundy, M.V. Gottret, C. Ostertag, R. Best, & S. Ferris. (2007). Participatory Market Chain Analysis for Smallholder Producers. Colombia: CIAT. [On-line]. Available: https://www.fsnnetwork.org/sites/default/files/participatory_market_chain_analysis_for_smallholders_procedures.pdf [February 15, 2015]
- [14] Philippine Statistics Authority. "Poverty incidence among Filipinos registered at 21.6% in 2015 – PSA." Internet: <https://psa.gov.ph/content/poverty-incidence-among-filipinos-registered-216-2015-psa>, (October 27, 2016) [September 12, 2018]
- [15] C.E.J. Jimena, Pulumbarit, C.C., Montes, N.B.D., Visco, E.S., Cabardo, J.J.S., & Mendoza, M.E.T. (2016). Linking Microenterprises to Modern Value Chains: Case Studies in the Philippines. Research Report. [On-line] Available: http://www.academia.edu/32787068/Linking_Microenterprises_to_Modern_Value_Chains-.pdf [January 20, 2018]
- [16] _____. "Location and Land Area." Internet: <http://www.ilocossur.gov.ph/index.php/gen-info/geography/location-and-land-area> [August 5, 2018]
- [17] National Economic and Development Authority Regional Office 1. (2017). Ilocos Regional Development Plan 2017-2022. La Union, Philippines: National Economic and Development Authority Regional Office 1. [On-line]. Available: <http://www.neda.gov.ph/wp-content/uploads/2018/02/1-Ilocos-RDP-2017-2022.pdf> [January 30, 2018]

- [18] J. Hartley. (2004). "Case study research." *Essential guide to qualitative methods in organisational research*. C. Cassell & G. Symon (Eds.). London: Sage Publications Ltd, pp. 323-333.
- [19] International Labor Organization. (2007). *The promotion of sustainable enterprises*. International Labor Conference, 96th Session. ILO, Geneva. [On-line]. Available: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_093969.pdf [February 10, 2015]
- [20] M.A. Chen. (1997). *A Guide for Assessing the Impact of Microenterprise Services at the Individual Level*. *Assessing the Impacts of Microenterprise Services Project*. Washington D.C., USA: Management Systems International.
- [21] Cooperative Development Authority. "Nueva Segovia Consortium of Cooperatives." Internet: <https://cda.gov.ph/resources/updates/featured-cooperatives/676-nueva-segovia-consortium-of-cooperatives-3rd-best-performing-cooperative-federation-in-2015> [February 6, 2017]
- [22] Jollibee Group Foundation. "Farmer Entrepreneurship Program." Internet: https://jollibeefoundation.org/wp-content/uploads/2015/05/About-FEP_10th-YR-CommBook.pdf [May 1, 2015]
- [23] L. Pagliettie and R. Sabrie. (2013). *Review of Smallholder Linkages for Inclusive Agribusiness Development*. *Good Practices in Investment Design*. Rome: FAO. [On-line]. Available: <http://www.fao.org/docrep/019/i3404e/i3404e.pdf> [August 10, 2018]
- [24] D. Domenico, V. Blok, T. Lans & R. Wesselink. (2012). "Developing Human Capital for Agri-Food Firms' Multi-Stakeholder Interactions." *International Food and Agribusiness Management Review*. 15 (Special Issue A), pp61-68. [On-line] Available: http://www.academia.edu/1808946/Developing_Human_Capital_for_Agri-Food_Firms_Multi-Stakeholder_Interactions_D._Dentoni_V._Blok_T._Lans_R._Wesselink_International_Food_and_Agri_business_Management_Review_Vol._15_pp._61-68 [August 9, 2018]