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Collaboration Among Stakeholders: Key to the Organic Agriculture Movement in Negros Occidental

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Abstract: The organic agriculture movement in Negros Occidental can be traced back in the 1970s through the advocacy of the civil society. The movement received significant push when the local government issued policies and formulated programs that supported organic agriculture, and further, when the private sector supported the marketing of the produce. This paper explores collaboration among organic practitioners, government agencies, and the private sector as well as their interactions that significantly advanced organic agriculture. The research is an intrinsic case study as it investigates organic agriculture through in-depth data collection involving multiple sources of information. Results show patterns of interaction as evidenced by established networks and collaborative arrangements among organic practitioners – as individuals and organized groups – as well as interaction among agencies and institutions – public and private – that provide support services. Pressing needs for inputs, technical support, and market drew organic practitioners together to interact. Organic policies and programs, organic certification and market

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support, among others, were integral in bringing together support agencies and other stakeholders, which created opportunities for collaboration. Despite active collaboration, full development of the organic sector remains elusive. A model is proposed to maximize local market potentials through partnership between big and small farmers.

Keywords: *linkages, partnerships, interactions, collaboration, organic agriculture, innovation system, organic practitioners*

INTRODUCTION

Concerns about the degrading condition of the environment brought about by excessive use of synthetic chemicals coupled with the rising demand of organic products as well as increasing health consciousness constitute some of the factors that paved the way for the present shift of agriculture development paradigm from conventional to organic agriculture (OA). However, as in any development pursuit, concerted effort is necessary to attain success. To ensure efficiency of investment, development of the organic movement has to be inclusive, shared, and holistic – a thrust foremost in the innovation system in agriculture.

The World Bank (2006) defines innovation system as a network of organizations, enterprises, and individuals focused on bringing new products, processes, policies, and forms of organizations or institutions into economic use that are designed to affect behavior and performance. This concept, however, remains widely unexplored in the agriculture sector with its many domains under a globalized setup (Chavez & Federizzi, 2010). Hence, there is a need to produce a diversity of studies to explore this phenomenon in order to map out a variety of designs available for the enrichment of the innovation systems paradigm (Hall, Mytelka, & Oyeyinka, 2004).

In response to this knowledge gap, this study was conducted to investigate collaborative set-ups in the innovation system in the context of a rice-based organic agriculture in one of the Philippines' leading provinces in the advancement of the organic agriculture movement – Negros Occidental. One aspect specifically explored in this study is the presence of collaboration among different stakeholders. Collaboration is generally understood as working together willingly with individuals or groups in order to achieve a goal (Merriam-Webster Dictionary n.d.). To understand the collaboration, this research sought to investigate the linkages and interactions among major actors of farmers/producers/processors and their organizations; and linkages and interactions among support agencies and institutions in the promotion of organic agriculture.

Discussions highlight the reasons for the linkages and interactions, which would explain the collaboration among stakeholders. A model is thereafter proposed highlighting the collaboration between institutions and big and small farmers engaged in an organic business.

Objectives of the Study

The study sought to understand how collaboration among various stakeholders contributed to the advancement of organic agriculture in Negros Occidental. In the context of organic rice-based farming system, this study aimed to:

1. describe the context of organic agriculture movement in Negros Occidental;
2. analyze the linkages and areas of collaboration and interactions among organic practitioners and support agencies and institutions in the institutionalization of organic agriculture;
3. analyze the strength and weaknesses of the above collaboration; and
4. propose a collaborative model that may enhance the organic agriculture movement.

METHODOLOGY

The research employed a qualitative approach in the form of an intrinsic case study as it explored a unique case - organic agriculture movement (Creswell, 2007). It used in-depth data collection method involving multiple sources of information and various techniques such as interview of key informants using a checklist of semi-structured questionnaire, direct and personal observations, focus group discussions, participatory rural appraisal, and review of secondary data (e.g., records, reports, studies, audiovisual materials, and published articles provided by the respondents). Useful tools in the analysis of linkages included typology of relationships, pattern of interaction analysis, and network analysis.

RESULTS AND DISCUSSION

The Organic Agriculture Movement in Negros Occidental

Negros Occidental is a province of over 2.9 million people with 19 municipalities, 13 cities, and 662 barangays. It has a land area of 792,607 hectares, of which 51 percent (406,623 hectares) is agricultural. It is part of the only island that issued an ordinance against genetically modified organisms (GMOs) in order to promote organic agriculture. Moreover, it is the only province that houses one of the only two domestic organic agriculture certifying bodies in the country. Negros Occidental aims to convert at least 10 percent of all its agricultural lands into organic agriculture. To date, there are 584 hectares of certified farms for 11 organic agriculture producers (only one for rice) and more than 4,000 hectares under conversion to organic agriculture.

Negros Occidental is thus known to be one of the leading provinces in the advancement of organic agriculture in the

Philippines. The development of organic agriculture movement in the province is a result of a conglomeration of civil society organizations (CSOs), local government units (LGUs), and the national government. The emergence of this conglomerate can be summarized into four historic waves under Figure 1 (Gasmen, Baconguis, & Medina, 2013).

Linkages and Interactions Among Major Actors of Organic Practitioners

The organic movement in Negros Occidental can be said to be a consequence of active interaction among stakeholders - primarily the major actors of farmers, producers, and processors and their organizations. Partnerships show patterns of interaction that begin within the very basic unit in the movement: individual organic practitioners of farmers, producers, and processors; followed by their organizations. Another type of interaction that appeared to be very successful is one within the family. Lastly, there are patterns of multiple interactions among organic practitioners as individuals and groups.

Individual Practitioners' Interactions

Individual practitioners of farmers, producers, and processors have varied reasons for joining the organic movement. These include economic, philosophical, and health reasons. In a personal level, those with the same reasons have the propensity to interact among themselves and form bonds as they share common interests in organic agriculture.

Specific areas of interaction:

Inputs. Seeds, fertilizers, pesticides, and other inputs are crucial in organic production. Some fellow farmers or producers have either one or two or all of these inputs. Thus, interaction occurs as individuals advertise or reach out to others who can supply what they currently do not have.

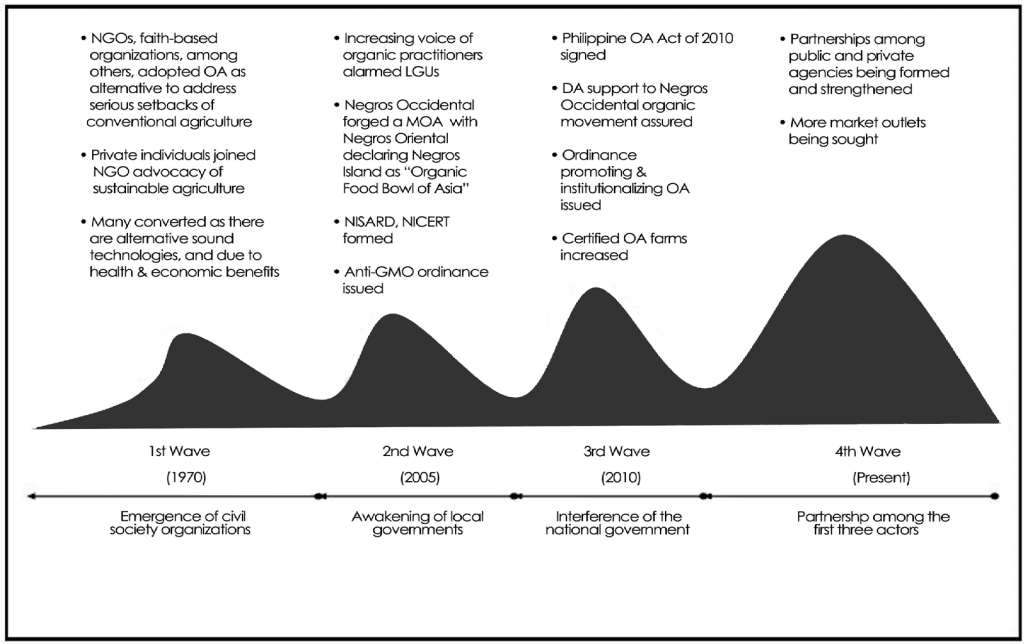

Figure 1. Historic waves of emergence of the organic agriculture movement in Negros Occidental

Technical Knowledge. Beginners usually seek technical guidance from individual farmers who are experienced, have advanced knowledge about organic practice, and have linkage to support systems (e.g., credit, advisory services, and political support, among others). Some philanthropic individuals reach out to assist fellow farmers to guide them. This attitude was demonstrated by farmer-scientists known locally as Magsasaka Siyentista (MS). They are trained and appointed by the Science and Technology (ST) agency through the consortium of ST agencies in the region.

Market. Individual farmers' interactions are also triggered by the fact that fellow organic practitioners serve as outlets of their organic products. In Negros Occidental, two scenarios are distinct: 1) small farmers need consistent market of agricultural products; and 2) farmer-entrepreneurs (such as Magsasaka Siyentista) also need other producers especially when their own produce is not enough to supply the intended market. Figure 2 shows a pattern of interaction among individual practitioners, where (A) is a farmer and supplier of vermicast and organic compost; (B) is a farmer and supplier of foliar fertilizer and other concoctions; (G) is a Magsasaka Siyentista and buyer of organic produce; (D) is a farmer and source of organic seeds; and (C), (E), (F), and (H) are small farmers.

Interactions among Farmers' Organizations

Sharing of common interest in organic agriculture is often more effective when organic practitioners are organized. As in the individual level, organized groups link with each other through a wider array of concerns and more complex interactions. In the case of Negros Occidental, some farmers first organized themselves into people's organizations (POs) or farmers' associations of organic producers. Eventually organic POs federate into organic villages to gain greater voice and access to government support. Figure 3 shows the federation of organic farmers in the Municipality of Magallion that is composed of seven POs – the largest group in

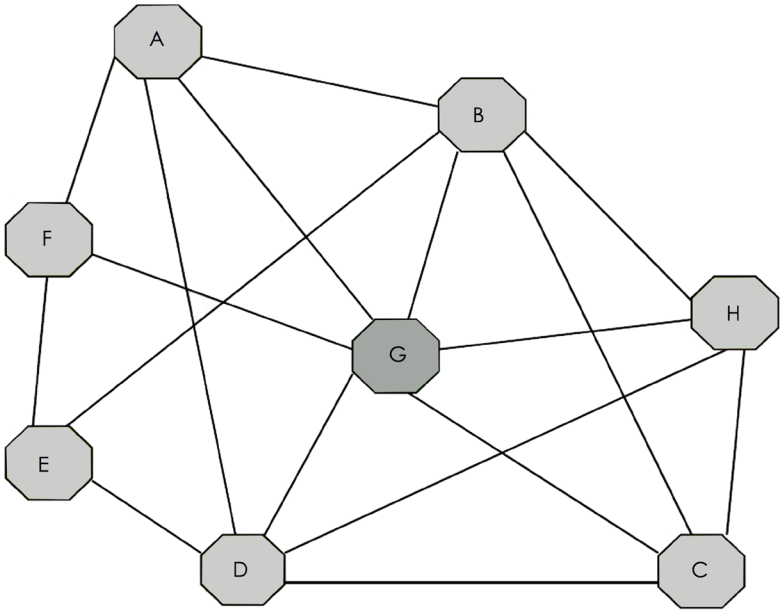

Figure 2. A typical model of interactions among individual stakeholders in the organic movement

Where:
A - farmer and supplier of vermicast and organic compost
B - farmer and supplier of foliar fertilizer and other concoctions
G - Magsasaka Siyentista and buyer of organic produce
D - farmer and source of organic seeds
C, E, F, and H - small farmers

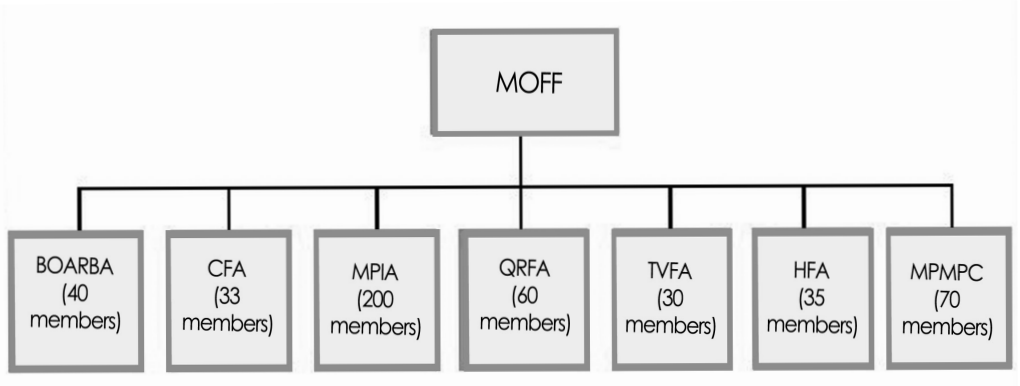

Figure 3. Composition of organic farmers' association in the Municipality of Moises Padilla

Where:
MOFF - Magallion Organic Farmers' Federation
BOARBA - Brgy. Odyong Agrarian Reform Beneficiaries' Association
CFA - Canaan Farmers' Association
MPIA - Moises Padilla Irrigators' Association
QRFA - Quintin Remo Farmers' Association
TVFA - Tubod Vermiculture Farmers' Association
HFA - Hinulingan Farmers' Association
MPMPC - Moises Padilla Multi-Purpose Cooperative

terms of membership in the entire province. It is well-supported by the municipal government making it a model among organic villages in the province.

Specific areas of interaction:

Interactions at the organizational level are broader in scope – covering the value chain and cross-cutting issues – and these are more formal than in individual level of interaction.

Concerns along the segments of the supply chain:

Pre-production. As in individual farmers' interaction, POs are concerned about inputs. They need information about seeds (e.g., type, variety, source, price, selection/production technology), fertilizers, and pesticides.

Production. POs are also concerned about technology and knowledge on cultural management practices relative to planting/transplanting, nutrient management, pest and disease control, irrigation, weeds control, harvesting, and postharvest.

Processing. In processing, POs talk about value adding and processing techniques, facilities needed, and cost to be incurred in putting up these facilities.

Marketing. Practitioners share their knowledge about market outlet, the type of market, volume of products to be transported, and the price that can be gained. Other concerns include product packaging and handling, transportation, and advertising.

Consumption. Farmers are interested in the type of consumers, consumer preferences, and the quality of product that commands the highest price.

Cross-cutting concerns:

Organizational. Organized groups of farmers, producers, and processors interact on issues that require inter-organizational attention, such as: how to obtain organic certification and comply with other organic standards, organizational strengthening, meetings and conventions, business concerns, building partnerships, and having a greater voice and political representation, among others.

Financial. These include credit support and other financial resources that POs may share among themselves, or collectively avail of from financial institutions.

Research and extension. POs care about new and up-to-date knowledge and technology on organic agriculture and how these can reach farmers to be used effectively.

Opportunities to Interact

POs interact on the above concerns during meetings, seminars, and similar activities. These activities are venues for them to get acquainted with each other and an opportunity to link each others' interest. The role of extension agencies, public and private, is crucial as they organize events that enable groups to interact. Such events include the following:

- Establishment of organic villages - The organic villages proved to be a venue for groups of organic practitioners to interact as they learn from each other in a participatory approach. They also get guidance from experts and support agencies. Some organic villages are organized to compose different farmers' associations to facilitate more interactions.
- Organic festivals - These festivals provide opportunities for organic practitioners to jointly promote organic agriculture. These have become annual activities since

2006. They feature exhibits of local organic products and technologies, cooking demonstrations by famous Negrense chefs, fora, and sharing of experiences and new technologies regarding organic production, processing, and marketing. Another milestone that they achieved in promoting organic agriculture was to make it a major part and highlight of the province's mother festival called the Panaad.

- Trainings, field days, and seminars - Sharing of experiences is normally part of these learning events.
- Weekend markets - These markets are usually organized by private individuals and groups of organic practitioners as places to sell their products. Some can afford markets that are exclusively organic, while others share a space in a big market.
- Tour packages to agro-ecotourism sites - These tour packages provide opportunities to learn and interact with one another as well as with foundations or POs that often manage the sites.

These interactions are concrete opportunities for collaboration as groups plan and act together to pursue a common goal.

Family Business Interactions

This portion illustrates patterns of interactions within family circles as they engage in businesses that help promote organic agriculture in Negros Occidental. Following is a case of a family whose contribution to the organic movement is influential not only in the province but also in the organic community nationwide.

The Case of the Uy family

Mr. Ramon Uy, Sr., known locally as RU, is an agricultural entrepreneur in Sitio Aning, Barangay Pahanocoy, Bacolod City. The Uy Family owns five businesses that concentrate on organic farming, namely: RU Foundry and Machine Shop Corporation, Ecological and Agricultural Development Foundation, Inc. (EcoAgri), Fresh Start Organics, and PURO Organic Company. The newest addition is the Ecological Organic Park and Restaurant, which intends to provide a venue for families and other business organizations to relax and enjoy an organic farm and eat organic produce.

Production of machines through RU Foundry and Machine Shop Corporation

RU Foundry is a producer of high-performance shredders of different sizes and capacities to support production of organic fertilizer. It also fabricates other equipment and machinery that respond to the needs of the organic community, such as rice thresher with a capacity of 40 to 45 cavans per hour, rice mill and dryer, essential oil distiller, and a biogas system based on orders of various organizations.

Organic production, processing, and trade of Fresh Start Organics, Inc.

The Uy family established Fresh Start Organics in 2005 to produce as well as to procure organic fertilizers, fresh organic produce, organic rice, organic coffee, and organic free range chickens from certified organizations. Other Fresh Start product lines are healthy pantries and natural personal care products from other organic companies. There are 10 market outlets of Fresh Start mostly in supermarkets, malls, hotels, and organic markets.

Expanding organic business with PURO Organics, Inc.

PURO Organics complements the packaging and processing needs of organic products that it produces and buys from other certified producers. This ensures that processed products meet the safety and regulatory requirements for commercial purposes (Figure 4).

EcoAgri Development Foundation, Inc. extending to organic farming communities

EcoAgri Foundation is an NGO formed in 2008 to handle all activities related to sustainable farming initiatives. EcoAgri services include research and development, manufacturing, and installation of technologies to support organic farming activities of partners and beneficiaries; promotion and marketing of farmers' organic products under fair trade conditions; establishment of community-based organic fertilizer production and seed banking, collection, and propagation of indigenous varieties of rice, vegetables, and other crops. EcoAgri also manages an ecotourism park with interactive showcase/demonstration of technologies to support organic farming activities as well as May's Organic Restaurant within the park. The interaction of the family businesses with that of other stakeholders is outlined in Figure 4.

Multiple Interactions Among Organic Practitioners

The study found a pattern of multiple interactions among individual and group organic practitioners due to various concerns and as evidenced by their multiple affiliations with established farmers' associations and other organizations (i.e., NGO, PO, business organizations, etc.). In a rice-based farming system, a farmer who is a member of a PO for rice, is also affiliated to one, two, or all of the following: irrigators' association, vegetable farmers' association, hog raisers' association, and multi-purpose cooperative.

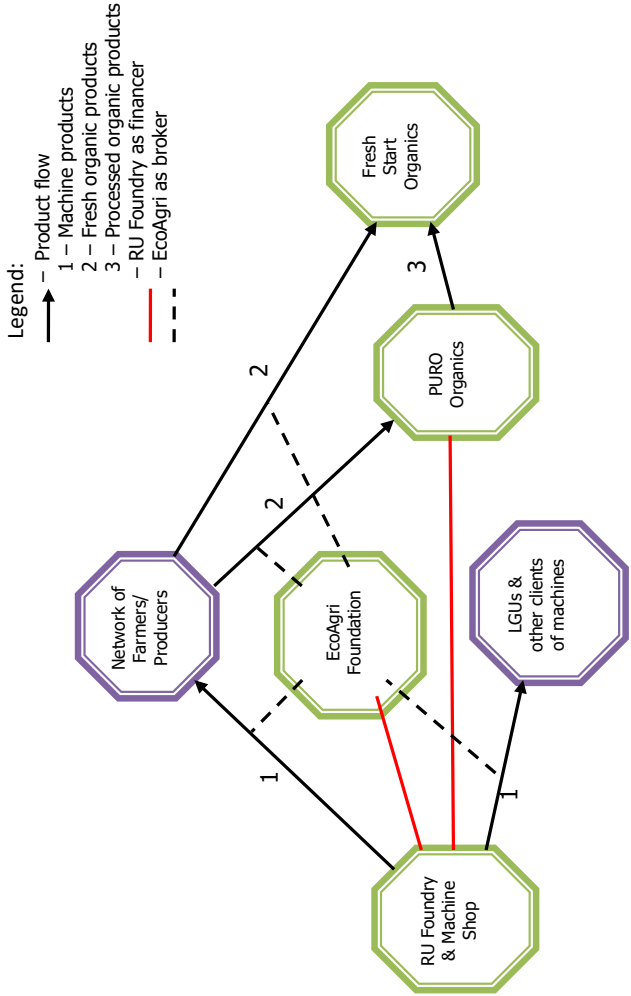

Figure 4. Interrelationship of Family Uy's organic business with other stakeholders

Collaboration Among Support Agencies and Institutions

Four types of linkages/partnerships exist in Negros Occidental, namely: collaboration among public agencies, among private institutions, among public and private institutions, and among extension providers.

Collaboration Among Public Agencies

Public agencies involve three levels of government – national government agencies (NGAs) and provincial and city/ municipal governments (local government units) – that are working hand in hand in the promotion and institutionalization of OA in Negros Occidental.

Areas of collaboration:

A. Adoption of national organic policies and formulation and advocacy of local counterpart policies

The three levels of government that collaborated in putting in place supporting policies to the organic movement are as follows:

- National government policy - Republic Act 10068 (Organic Agriculture Act of 2010): calls for the national adoption of organic agriculture with provisions of fund support for stakeholders who choose to adopt the new agriculture development paradigm;
- Provincial government policies - Provincial Ordinance No. 007, series of 2007: bans the entry, importation, introduction, planting, growing, selling, and trading of genetically modified organism (GMO) plants and animals within the territory of Negros Occidental; and Provincial Ordinance No. 007, series of 2011: institutionalizes promotes, and develops organic agriculture in the province; and

- City/Municipal government policies: Organic resolutions and local versions of the above ordinances/law (e.g., City Ordinance No. 485, series of 2009, known as Bacolod City anti-GMO ordinance).

B. Development and implementation of organic programs

The Office of the Provincial Agriculturist (OPA) spearheaded the crafting of the Provincial Organic Agriculture Program. One of its seven component projects is the establishment of 10 organic villages in 10 host cities/municipalities. These villages serve as convergence areas for government agencies to collaborate in terms of expertise (Figure 5), and the role of the OPA in the partnership is largely coordinative.

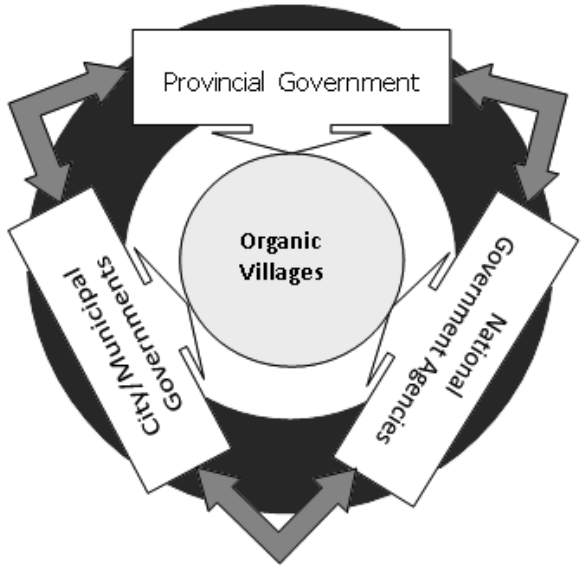

Figure 5. Collaboration of the provincial government, city/ municipal governments, and national government agencies in the organic villages

Other agencies respond to technical and resource needs, as with the following collaborations:

- Collaboration with NGAs – Among the agencies that OPA collaborated with were the Department of Agriculture (DA), the Department of Agrarian Reform (DAR), and the Department of Trade and Industry (DTI). Their roles:

  DA: provision of organic seeds; technical assistance through capacity building of OPA and city/municipal agriculture offices (CMAO) personnel; and financial assistance in the form of subsidy for initial organic certification;

  DAR: provision of both technical and financial assistance to cooperatives of agrarian reform beneficiaries organizations (ARBOs) under its jurisdiction; and

  DTI: provision of assistance to organic producers/ processors to link with market outlets and to comply with requirements of both local and international markets.

- Collaboration with City/Municipal Governments – Host cities/municipalities of organic villages collaborate by identifying communities or POs that can promote OA. They share their facilities in the conduct of trainings and demonstration of technologies. City/Municipal technicians collaborate and cost-share with OPA and NGAs in organizing and conducting local events.

Collaboration Among Private Institutions

Historically, the organic movement of Negros Occidental was spearheaded by civil society organizations. Some NGOs have assumed leadership in building partnerships by consolidating private organizations as affiliates and partners.
Areas of collaboration:

A. Organizing and strengthening communities of organic practitioners

Individual NGOs and networks of NGOs and other private organizations collaborate in reaching a greater number of communities of organic practitioners.

- Multi-Sectoral Alliance for Development - Negros (MUAD-Negros) – This NGO is an alliance of 22 NGOs, POs, church-based organizations, and multi-sectoral special bodies organized to promote sustainable agriculture, OA, environment, and education mostly of the sugarcane and rice sector.
- Networks of NGOs – These are usually vertical networks created in the implementation of rural-based programs and/or projects.

  MUAD-Negros - Partnership for Development Assistance in the Philippines Inc. (PDAP) promotes and develops rural enterprises for poverty reduction and promotion of peace in conflict-affected areas.

  MASIPAG (Magsasaka at Siyentipiko para sa Ikauunlad ng Agham Pang-Agrikultura) network is a farmer-led network of POs, NGOs, and scientists who are working towards the sustainable use and promotion of biodiversity. They develop rice varieties or select organic seed materials that are appropriate for specific areas.

B. Development of the organic sector

Support agencies of the private sector comprising voluntary organizations such as NGOs and business organizations, and POs have tried to provide support services to organic practitioners for the total development of the organic sector.

- Business organization - NGO/PO collaboration – NGOs collaborate with business entities/organizations and POs, just like the Uy family's organic business.
- Coordinating role of NISARD (Negros Island Sustainable Agriculture and Rural Development) – This was created as a result of collaboration between the two provincial governments of Negros Occidental and Negros Oriental, in which NISARD is the major agency in the private sector. It plays the most significant role in networking by forging partnership with almost all private organizations and individuals involved in organic agriculture so as to advance the field.

C. Marketing assistance to organic practitioners

To assure consumers that products are organic in the truest sense, the private sector embarked on three strategies to support the organic movement, namely: 1) certification of organic farms and producers; 2) consolidation of organic practitioners into clusters; and 3) linking of organic producers to markets. To operationalize these strategies, the sector created the following mechanisms to address market issues confronting the movement:

- NICERT (Negros Island Certification Service) – a third-party certifying body for organic agriculture that provides inspection and certification services to would-be organic producers, traders, processors, handlers, and retailers.
- ONOPRA (Organik na Negros! Organic Producers and Retailers Association) – acts as consolidator of organic producers, retailers, and all stakeholders who seek to ensure effective and efficient organic agriculture market development, promotions, and networking resulting to better access to environment-friendly and healthy products and services in Negros Island.

- NORIA (Negros Organic Rice Industry Association) – originally a member of ONOPRA, it became an independent commodity cluster for rice. During the study, NORIA has about 300 official individual members.
- Other cluster groups – Like NORIA, farmers or groups of farmers, producers, and advocates of different organic products are clustered into industry groups or associations basically to provide marketing assistance (Table 1). The concept of clustering, however, is more than attending to market needs. Cluster groups cater to all the needs of organic producers and traders as independent organic industries.

Table 1. Other cluster groups of organic commodities in Negros Occidental

NAME OF CLUSTER GROUP	COMMODITY
Negros Island Organic Fertilizer Producers' Association (NIOFPA)	Organic fertilizers
Vermicast Producers' Association in Negros (VPAN)	Vermi worms for vermi-composting
Organic Coffee Producers' Association (OCPA)	Organic coffee
Negros Organic Muscovado Industry Association (NOMIA)	Organic sugarcane and muscovado
Negros Organic Vegetables Industry Association (NOVIA)	Vegetables
Others being formed: • clusters on organic corn and other cereals, fruits, livestock, fisheries, and poultry	Organic corn and other cereals, fruits, livestock, fisheries, and poultry

Tracing the interrelationship of the above actors, Figure 6 shows their interactions resulting from their multiple affiliations in the above clusters (Gasmen et al., 2013).

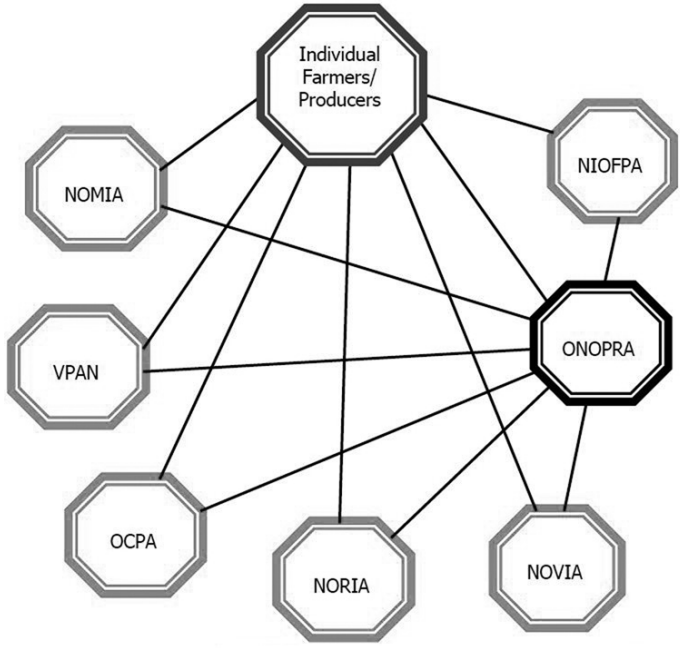

Figure 6. Interaction among individual organic producers, cluster groups, and ONOPRA

Public-private Collaboration

Areas of collaboration:

A. Crafting and implementation of ordinances in support to organic agriculture

NISARD provided the expertise and coordination within the private sector for the crafting of this ordinance, while the OPA marshaled support within the public sector. OPA facilitated the

consolidation of all inputs of content. They worked together in packaging the documents and defended the ordinance before the Sangguniang Panlalawigan.

- Sangguniang Panlalawigan – Collaboration of both sectors is also seen in the implementation of such policies. For instance, the Provincial Organic Agriculture Ordinance provided for an institutional mechanism for its effective implementation called the Negros Occidental Provincial Technical Committee on Organic Agriculture (PTCOA). The PTCOA has multi-sectoral composition largely of government agencies (LGUs and NGAs) and private sectors (NISARD, NICERT, NGOs, agribusiness organizations, consumers' associations, and their networks and alliances). This institutional mechanism led to the development of a provincial organic agriculture plan. PTCOA also monitors the implementation of the organic agriculture plan and recommends actions for improvement.

- Certification of organic producers – While NICERT provides certification services for smallholder producers, the process requires participation of other agencies providing assistance. First, they need to be organized to achieve economies of scale. Extension agencies then assist in setting up internal quality control systems as prerequisite to certification. During the certification of the first batch of certified organic producers, the Provincial Government subsidized the small farmers. Recently, the national government through the DA promised to extend the same assistance to smallholder farmers/producers.

- Establishment of organic market and restaurant – The organic market or "bagsakan" was established in 2007 and the organic restaurant in 2010, both at the back of the Provincial Capitol in Bacolod City. These two establishments are significant physical evidences of public-private partnership that respond to the call of

the consumers to make readily available to them organic products and food. ONOPRA runs the business with technical, policy, and management advice from NISARD and OPA, while OPA provides the space for free.

- Implementation of organic festivals – The implementation of the yearly Organic Festival is a joint responsibility of NISARD, the provincial government through the OPA, and ONOPRA. This partnership involves sharing of expertise and resources in coming up with a program that is unique for each year's celebration. They also share in the responsibility of overseeing the whole event and addressing issues that may arise in program implementation.

Collaboration Among Extension Providers

A more specific form of collaboration exists among the providers of extension services. This study traced the presence of at least four collaborative arrangements or networks in the provision of extension agencies to organic practioners in Negros Occidental.

A. OPA and City/Municipal Agriculture Offices (CMAOs) collaboration

C/MAOs are often involved because they are directly responsible for empowering the farmers and their communities. Under the principle of territorial responsibility, nearly all OPA extension projects need to collaborate with C/MAOs for effective implementation in the farming communities. As mentioned earlier, a key to success in the development of organic villages – although generally initiated by OPA – is the collaborative effort of the two local government agencies.

B. National extension agency and NISARD collaboration

NISARD has been accredited as an extension service provider (ESP) by the Agricultural Training Institute (ATI), the lead extension arm of DA because of its track record as the prime mover of the province's organic agriculture plus its linkage with experts/trainers and top model organic practitioners. As an accredited ESP, NISARD can deliver publicly-funded extension and advisory services. In 2011, it conducted three batches of trainings for organic practitioners.

C. Research consortium and national extension agency interaction

This interaction relates to the operation of 10 Farmers' Information and Technology Service (FITS) Centers and farmer-scientists locally known as Magsasaka Siyentista in serving the organic movement in the province. FITS Centers are learning hubs for farmers situated at selected state universities and colleges (SUCs) and LGUs. The Philippines' Techno-Gabay (Technology Guide) Program, a consortium of research institutions in the region called Western Visayas Agriculture and Resources Research and Development Consortium (WESVARRDEC) – with seven member agencies in Negros Occidental – developed the FITS Centers and Magsasaka Siyentista to complement the Centers.

The Magsasaka Siyentista serves as resource person during technology trainings, seminars, and educational tours; promotes science and technology-based farms as demonstration sites; and gives farmer-to-farmer advisory services. Recently, the Techno Gabay Program was transferred to ATI including the oversight of FITS Centers and the Magsasaka Siyentista. Figure 7 illustrates their interaction with emphasis on the flow of research-generated knowledge to organic practitioners.

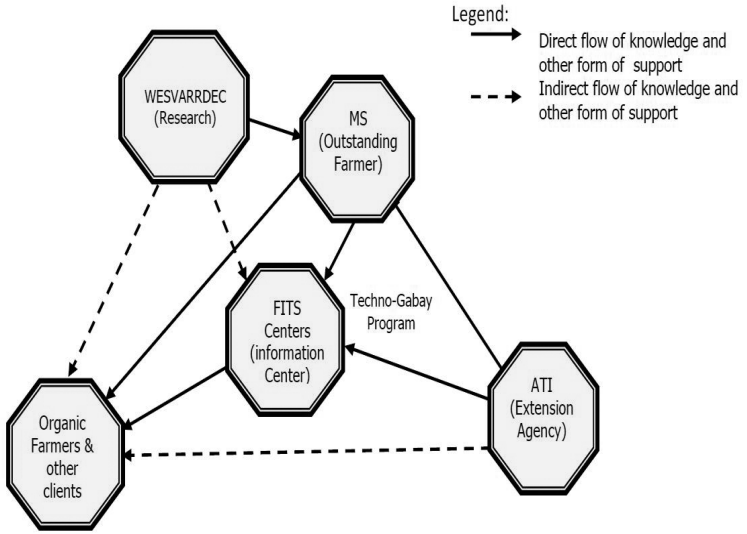

Figure 7. Model of interaction of WESVARRDEC, ATI, FITS Centers, and Magsasaka Siyentista (MS) and fellow farmer

D. Farms-Schools Network

The Farms-Schools Network is a nationwide network of farms set up by the ATI and the Foundation for People Development that serves as on-the-job training venues for the farmers, students, and would-be farmers. The network serves as a model for good agricultural practices, such as organic agriculture and the so-called "agricultural tourism." From the list of 24 initial members, five farms are located in Negros Occidental. The presence of this network indicates the potentials of added support to the organic movement in the province.

Analysis on the Strengths and Weaknesses of Existing Collaborations

Strengths

Overall, existing collaborations of stakeholders comprising the organic practitioners as individuals and organized groups as well as public and private support institutions are indicative of success of the organic agriculture movement. It should be noted, however, that there are other factors contributing to the overall success of the movement. Qualitatively, the following are the perceived strengths of existing collaborations based on Table 2 that analyzed the different types of collaboration based on commitment, openness to share, and sustainability of collaboration:

- A considerable number of influential individuals willingly share their knowledge and expertise to fellow and interested organic practitioners;
- The proliferation of organized groups interacting to advance OA is a result of an over-30-year old endeavor indicating sustainability of the movement;
- Family ties show sincerity, growth of agri-tourism, and indicate profitability of the organic business;
- Government agencies exhibit commitment to support the organic movement; and
- The private sector is determined to advance the cause of the organic movement.

Weaknesses

The following are the perceived weaknesses of the existing collaborations that can be worked out to improve the organic agriculture movement:

- A large portion of the population as individuals are not yet organic converts. Many refuse to join the organic movement due to wait-and-see attitude.

Table 2. Indicative strength of existing collaborations to advance organic agriculture

TYPOLOGY OF COLLABORATION/ INTERACTION	NATURE OF INTERACTION	AREAS OF COLLABORATION	INDICATIVE STRENGTH OF COLLABORATION
Organic practitioners' collaboration			
• Individual	Person-to-person	Inputs, technical knowledge, marketing	3
• Organizational	Organization-to-organization	Value chain concerns, organizational, financial, and research and extension	3
• Familial	Family members	Family business concerns	4
• Multiple	Complex interactions of the above	Varied	3
Collaboration among support agencies and institutions			
• Government agencies	Public to public	Policies and programs that provide holistic support	3
• Private organizations	Private to private	Community organizing, marketing, etc.	4
• Government-private	Public to private	Varied (organic ordinance, OA certification, etc.)	3
• Extension providers	ESP to ESP	Extension concerns	4

Note: 5 = Very strong; 4 = Strong; 3 = Fair; 2 = Weak; 1 = Very weak

- Organized organic practitioners tend to depend highly on government subsidy to finance collaborative partnerships.
- The failure of the government to provide subsidy for organic certification of smallholders' farms is weakening the farmer's trust on the government's commitment to organic agriculture.

The Provincial LGU initially provided the subsidy for the first batch of smallholder organic producers. But this proved financially burdensome with more applications. Hence, farmers are now hoping for help from the national government.

SUMMARY AND CONCLUSIONS

This study explored collaboration among stakeholders in organic agriculture, specifically in a rice-based farming system in Negros Occidental. Results showed patterns of interactions and collaborations among organic practitioners within individuals and their organizations. While individuals varied in their reasons for joining the movement, they commonly interacted with each other because of their need for inputs, guidance, and marketing support. Interaction in the organizational level was wider in scope and covered a wider array of concerns along each segment of the supply chain. Patterns of interaction also appeared within the family of organic practitioners and enthusiasts whose main concern was business. Lastly, there were multiple interactions among organic practitioners as individuals and groups with various affiliations in the movement.

Four types of collaboration among providers of support services were observed, namely: among public agencies; among private institutions; between public agencies and private institutions; and among extension providers. Public agencies generally collaborated in the development and implementation of organic policies and programs converging in the organic villages. Private institutions, on the other hand, concentrated on organizing

and strengthening communities of organic practitioners and helping them gain access to support services such as marketing assistance. Collaboration among public and private institutions was seen in the crafting and implementation of organic ordinances, organic certification, establishment and operation of organic market and restaurant, and implementation of special events such as organic festivals. Lastly, collaboration among extension service providers from both public and private institutions involved the provision of extension services. Significant of these interactions is the model of a consortium of research institutions, an extension agency, knowledge hub, and farmer-scientist collaborating in the countryside.

These multiple collaborative arrangements among individuals and institutions made possible the advancement of Negros Occidental as the primary province in Philippines for organic agriculture. Other provinces and agriculture systems can draw lessons from the province in promoting and institutionalizing organic agriculture. With the interaction and collaboration of individuals, organized groups, families, and support services of the government and the private sector along diverse concerns but with the same cause, the organic agriculture movement can flourish.

RECOMMENDATIONS

To improve the organic agriculture movement based on the lessons learned from this research, the following are recommended:

1. A collaborative extension model that builds upon two concepts evident in this study is proposed – collaboration and growth of organic agri-tourism, also known as "farm tourism." The organic movement in Negros has advanced to an entrepreneurial model that rests on the principles of organic agriculture. Negros now is home to farm tourism

sites. However, the current models of farm tourism operate independent of each other and run as a business by entrepreneurial farmers. This collaborative model (Figure 8) puts organic farms as centers of learning and collaboration, not only as sites of relaxation by consumers. Hence, accreditation of farm tourism sites that will act as "big brothers" will have to be devised by government agencies.

As tourist destinations, organic farm tourism sites increase the popularization of the culture and the promotion of national identity. The model is patterned after a partnership between a "big brother" and a "small brother" evident in the organic agriculture collaboration study, particularly with the Uy Family business. This model builds on the knowledge that there are certain individuals in the agriculture sector who have accumulated knowledge, skills, experiences, and wealth and are willing to help inexperienced farmers. This model, however, departs from the entrepreneurial collaborative model of the Uy Family business as it proposes that farm tourism sites serve as centers of collaboration. Putting farm tourism sites as centers of learning and collaboration supports both the technical and marketing needs of small farmers and promotes the organic movement to a wider range of customers.

This collaborative extension model promotes learning between and among various key stakeholders and increases participation of small holders. Given that it is operated by the private sector, the responsibility of maintaining the facilities and ensuring services that are based on quality specified by the government rests on the owner of these farm tourism sites. This arrangement frees the government of tasks related to infrastructure improvement and operations management – including organic certification of small farmers – and can therefore concentrate more on policies that will improve the system.

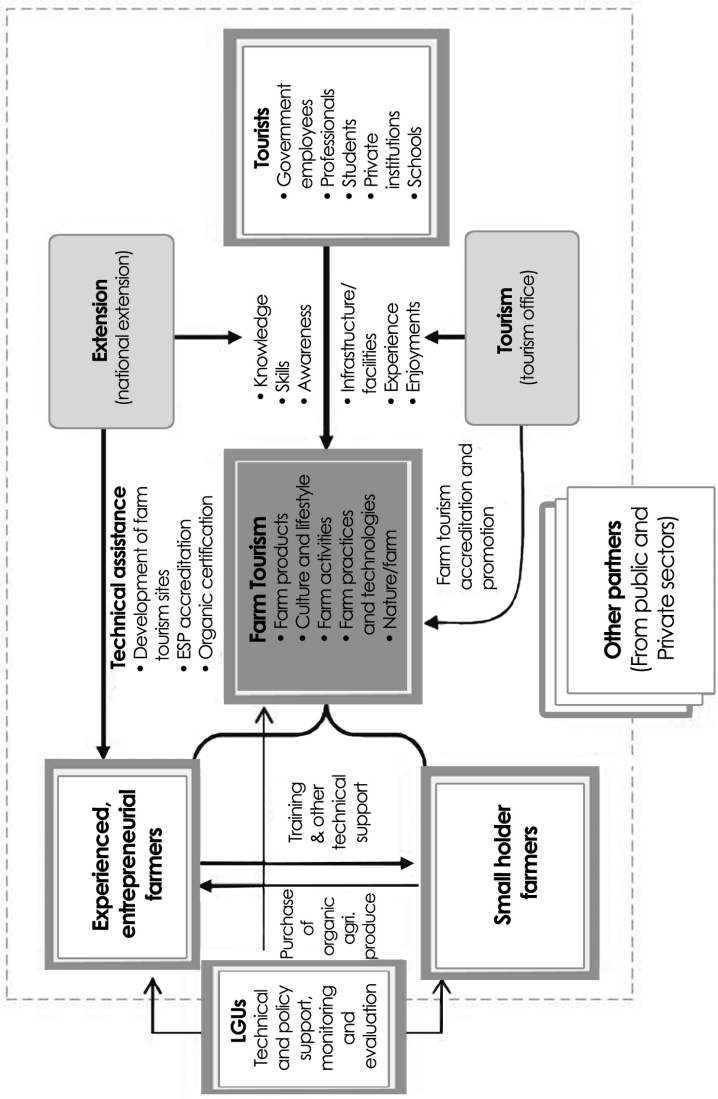

Figure 8. Collaborative extension farm tourism model

The sustainability of this model from the standpoint of farm owners heavily lies on their business interest. The farm owners can collect a reasonable amount of fees, such as but not limited to, entrance fee and disturbance fee (as some call it for maintenance due to possible damages in the farm caused by tourists), and the selling of organic food and other organic products. Farm tourism sites can be a good venue for informal learning and non-formal learning once accredited by the national extension agency represented by the Agricultural Training Institute. If accredited also by the Technical Education and Skills Development Authority, the sites can likewise provide learning opportunities where certification of training is recognized abroad. As this happens, these farm tourism sites can engage in partnership with local universities offering ladderized agricultural programs.

The participation of more small farmers will not only contribute to inclusive growth as they engage in livelihood that results in increased income but also ensure the availability of organic food. Farmers often take advantage of the market leverage of organic food and other organic products, although these also have to be affordable even to poor consumers. This model is anchored on the belief that joining producers and marketers in farm tourism maximizes the strengths of the more advanced farmers. It also promotes the role of the private sector in providing direct services to more small farmers as government agencies now focus on steering the movement.

Lastly, this model presents a simpler way by which to promote collaboration as it centers on a specific agricultural business model – farm tourism. The experience of Negros Occidental may be difficult to duplicate as it is a result of more than three decades of lobbying, networking, partnership building, and finally collaborating through various modes and activities. The proposed model centers on a specific agricultural business model that could propel collaborative

activity, and therefore, may be more practical to institute. The proposed collaborative extension model shows the interactions of actors providing support services.

Adoption of this model is very timely since the Philippine Congress is presently proposing a Farm Tourism Bill. The bill can be piloted in strategically located sites. The farm tourism site of social entrepreneurs like the Uy Family, who had been working closely with farmers through its various businesses, can be piloted as one of the ESPs in the province. Depending on the viability of each circumstance, there should be on-farm tourism accredited as a learning site per province.

Accreditation by ATI gives the farm tourism learning sites an advantage as accreditation provides legitimacy and support to an agricultural business model that is just starting in the country. This model also brings in a key national government agency, the Department of Tourism, to provide support in terms of accrediting farms as farm tourism sites and in attracting local and international tourists. The role of local government units in monitoring and evaluating the activities of the farmers and the accredited farm tourism sites is equally important. Based on the success and lessons learned from the pilot accredited farm tourism sites, the model can be replicated nationwide for institutionalization.

2. To further enrich this purely qualitative study, a more in-depth investigation may be conducted to quantify more thoroughly initial results particularly in the analysis of strength and weaknesses of existing collaborative arrangements.

REFERENCES

Chavez, R. & Federizzi, L. (2010). *Towards a National Innovation Framework for Agricultural Science Agencies in Emerging Economies*. Montpellier, France: ISDA. Retrieved from www.isda2010.net on 24 June 2012.

Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 2nd Edition. Thousand Oaks, CA :Sage Publications.

Gasmen, A., Baconguis, R. d.T., & Medina, J. (2013). *Organizational Innovations in the Promotion of Sustainable Agriculture – The Case of Negros Occidental*. SGRA 16th Sustainable Shared Growth Seminar, University of the Philippines Diliman, Philippines. Retrieved from www.aisf.or.jp/sgra-in-english/seminar16 on 10 November 2013.

Hall, A. J., Mytelka, L., & Oyeyinka, B. (2004). *Innovation Systems: Concepts and Implications for Agricultural Research Policy and Practice*. Maastricht, The Netherlands: United Nations University.

Merriam-Webster Dictionary. (n.d.). Collaborate. Retrieved from http://www.merriam-webster.com/dictionary/collaborate on 10 November 2013.

World Bank. (2006). *Enhancing Agricultural Innovation: How to Go Beyond the Strengthening of Research Systems*. Washington, D.C.: Economic and Sector Work, The World Bank.