# Selected Organic Agricultural Organizations' Social Networks in the Promotion of Organic Agriculture in Quezon Province, Philippines<sup>i</sup>

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Abstract -Using the relational approach to network analysis (SNA), this explored the importance of interlocking organizations, rather than the organization alone, that can facilitate the promotion of organic agriculture in Quezon Province. This study sought to answer these objectives: identify organizations' underlying capacity that contribute to the achievement of their goals; characterize the social network formed by organizations; and identify the bases of their interaction. The five organic agricultural organizations were selected based on the criteria that members are practicing organic agriculture and they have been existing for at least five years. A total of 11 key informant interviews were conducted with the officers and staff of the five organic agricultural organizations in Quezon Province. Review of organizational documents was also conducted to complement the interviews. UCINET 6.528 was used to characterize the social networks and generate graphs for network visualization. The different organic agricultural organizations were established even before the promotion of organic agriculture. Though hierarchical in nature, responsibilities and decision making power were shared among members which fostered bottom-up and collaborative approach. Social networks were formed by establishing linkages either initiated by the organization or mandated under the program to enhance capacity building, to gain access to information and resources, and to seek cooperation. Being part of a social network helps enhancing organizational capacity, an imperative in achieving organizational goals, making them an important agents of program implementation. Hence, social network can facilitate more the delivery of services and disseminate information to a large extent.

Keywords -organic agriculture, organizational capacity, social network analysis, UCINET.

### INTRODUCTION

Organization is a "social system" oriented to the attainment of a specific goal which contributes to the function of the society [1]. Most studies on organizations have only been carried out focusing on the different factors contributing to the success of the organization. Organizations are influential since day-to-day activities are organizational-centered. Even the production and consumption are organizational enterprises.

Strengthening agricultural organizations and promoting organic agriculture have received increasing attention in the Philippines especially after the declaration of Republic Act 10068 also known as the "Organic Agriculture Act of 2010". This aims to enrich

soil fertility and eventually to increase farm productivity. However, organizations alone cannot achieve these goals on its own. There is a need for a collective understanding of the goals of the programs among different organizations for the successful promotion of organic agriculture. There is a need to establish linkages and networks among organizations engaging in organic agriculture because this will facilitate coordination of organic agricultural programs [2].

This study intends to gain understanding of how organizations and formation of social networks facilitate the promotion of organic agriculture in Quezon Province. This study may provide insights on the patterns and status of relationships among

organizations facilitating the promotion of organic agriculture. For program implementers, this study may provide how organizations will help achieve organizational goals and how social networks contribute in the sustenance of a program.

### **Review of Related Studies and Literature**

In 2015, there was an exponential growth in the number of organic farming adopters in the Philippines since R.A. No. 10068 was enacted. There were approximately 43,000 organic farming practitioners in 2015 as compared to approximately 9,000 in 2011. In spite of the increase in the number of adopters, out of 483,550 hectares of land that need to be converted to organic farming in 2016, only 107,911 hectares were converted as of 2015 [3].

Department of Agriculture (DA) has been implementing interventions to reach the target of the program and encourage more farmers to engage in organic farming. DA through Regional Field Offices (RFOs) are providing starter inputs such as seeds, planting materials, and fertilizers. Research and Development (R&D) extension centers are developing more organic farming technologies. Technology demonstration farms are established to facilitate learning among farmers who want to practice organic farming. Organic trading posts are also established to help farmers market their products [3]. The challenge is on how to bring the programs to the grassroots levels.

It was proposed that to achieve efficiency in provision of public goods and services, good development policy should consider not only legal institutions and government but also trust and leadership. Promotion of association and networks can be done if general trust can be promoted. These should be formed without creating deep-rooted interest .Provisions of goods and services should be complemented by the government intervention and the participation of the community [4].

Effective implementation of a program can also be achieved through the involvement of the community in of planning and implementing policy terms interventions [5]. Community mobilization participation among farmers are recommended to improve agricultural production [6]. Community development strategies such as trainings on selfawareness and livelihood programs enhance the people's capability and activities (e.g., agricultural production and livelihood enterprises) [6], [7]. These strategies could be effectively and efficiently delivered among farmers when these farmers are organized in a group [8].

However, organizations have their distinct characteristics according to its nature that may contribute or hinder the implementation of a program. Such, community-based organizations (CBO) for instance, like any other type of organizations, have different nature, history of establishment, and attributes that influence their operation in a given setting. These organizations have different contexts, functions, internal processes, and external linkages [9] that can influence organizational behavior.

Organizational behaviour can be influenced by the organizational capacity which includes 1) strategic leadership; 2) human resources; 3) core resources; 4) programming/process management; and 5) interinstitutional linkages [10]. Another interest in studying organization is to understand organizational behaviour by looking at organizations using four explanatory differing internal 1) and expectations; 2) different amounts of internal conflicts; 3) possibility to receive external resources; and 4) different organizational contextual factors. It is found out that the contextual factor, like the size of the organizations (based on the numbers of members), is important since it can be a source of income of the organization. Receiving assistance from the government in the form of trainings, or dialogue of representatives indicates that there is a "need to cooperate". This indicates that organizations have to unite with internal and external expectations while securing legitimacy and efficiency within a constantly changing environment [11].

Organizations also exist with external environment necessitating them to have exchanges with other organizations. In the study of organizations dealing with youth problems [12], exchange between organizations was found not to be always in economic value but also includes services, clients, and economic units. There are also relationships formed because there is a formal agreement or legal mandate. The findings had shown that organization interacts with others for the attainment of their goals which is also the basis of their interaction. The coordination occurs when the organizations are trying to adapt to their environment especially when they are maximizing the attainment of their goals.

Studies conducted in the Philippines found out that organizations are active in promoting organic agriculture. There are also umbrella organizations composed of network of people's organizations (POs), non-government organizations (NGOs) and scientists

which led the sustainable use and management of resources, indigenous practices and independence from using farm inputs. Through the initiatives of farmers' organizations and NGOs, many international donors supported organic agricultural projects [13]. Demonstration farms were also established by organizations to improve agricultural production through farm-based learning [14]. This active participation of organizations is vital in the successful implementation of organic agriculture program.

It has been recognized that social networks can also facilitate the implementation process by developing partnerships multi-sectoral including different stakeholders such as community leaders, organizations, practitioners, and researchers [15]. Being part of a social network, the capacity of the farmer's association and NGOs can be reinforced through the increase of exchange of information and collaboration with the local government and other agencies [16]. Social network can influence the adoption of new technologies since flow of knowledge is embedded in the interaction within the network [17]. In addition, the ability of the farmers can be enhanced through sharing of their experiences and knowledge [18] that can be facilitated if their organization is part of a social network. Social network is considered as assets not only for individuals but also for the households in the rural areas. This is because it helps in the access of information and benefits from research and development. Having social network can be a means for the efficient delivery of extensions services at individual level [19]. In terms of implementing programs, leveraging social networks is more cost-effective and time-efficient since these are already group of different organizations [20].

In Quezon Province, organic farmers are very active in promoting organic agriculture. These farmers are members of different organizations that were established with the assistance of different agencies such as the government, NGOs and SUCs before and after the promulgation of R.A. No. 10068 [14]. Based on the initial interview with the Focal Person on Organic Agriculture in 2016, there were already ten organic agricultural organizations in Quezon from the original six in 2012.

Aside from having organizations engaging in organic agriculture, Quezon Province has many first in terms of program implementation. Quezon Province is the first to establish and implement a participatory guarantee system (PGS) that protects farmers and guarantees that the products sold are organic. Quezon Province is the first to have a DA secretary who

initiated organic farming even before R.A. No. 10068 was enacted. In addition, there was a Provincial Organic Agriculture Technical Committee created to support organic farming in Quezon Province through Executive Order No. 32 s. 2010.

In May 27, 2011, Organikong Kalakaran sa Quezon (OK sa Quezon), formerly known as Quezon Organic Producers Association, was also established which serves as an umbrella organization of the organic farmers and organic agricultural organizations in Quezon Province. In the same year, an organic market every Friday at Perez Park was hosted by the provincial government as a support for organic farmers that is still operating every Friday in Quezon. This is currently known as "Organic Tiangge sa Parke" where organic farmers can market their produce after they secure certification through QPGS. In the study conducted from 2012-2015, it was reported that the average farm size devoted for organic farming in Quezon was 2.81 hectares and the produce mostly are vegetables, fruits, herbs and spices [14].

Hence, the context and basis of this study revolved around different types of organic agricultural organizations and how their networks facilitate the promotion of organic agriculture in Quezon Province, Philippines.

# **OBJECTIVES OF THE STUDY**

This study sought to explore how organic agricultural organizations and social networks facilitate the promotion of organic agriculture in Quezon Province. Specifically, the study aimed to determine the organizations' underlying capacity that contribute to the achievement of their goals in terms of Strategic Leadership, Financial Management, Program/Project Management, and Inter-organizational Linkages; determine the bases of their interaction with other organizations; and determine the characteristics of the social network formed by the organizations in terms of Structure and Content/relationships.

# MATERIALS AND METHODS

## Research Design

Network research in the past always used quantitative approach when doing Social Network Analysis (SNA). Recently network researchers advocated for the use of qualitative methods of data collection and analyzed using network data and quantitative analysis [21]-[23]. Use of mixed-method approach in SNA is based on the assumption that social

networks are not just structurally-defined but also form social relations [24]. Qualitative approach to SNA was demonstrated as appropriate in exploring networks and describing network practices [22].

Relational approach to social network analysis was used in this study to understand the social networks of the five organic agricultural organizations in the promotion of organic agriculture in Quezon Province. Social network analysis is used in studying the relationships among interacting units. These interacting units can be individual, group or collective social units. Specifically, this study looked into the organizational capacities and the links of the organizations between different types of organizations that contribute in the promotion of organic agriculture in the province. Relational approach focuses on network patterns of the organizations through the count of links that organizations extend to others [25]. Impact of the structure on the operational of the organizations and transfer of resources both material and non-material can also be studied using social network perspective [26].

# **Data Collection**

This study employed qualitative method of data collection such as key informant interviews and document reviews to characterize and explore the social network of five organic agricultural organizations in Quezon Province.

Table 1. List of Organic Agricultural Organizations and Key Informants interviewed for the Study

Unit of	Sele	ia for the ction of		Key Informants (Positions in the Organization)	
Analysis	Formation (Year)	nization Organization initiated the formation	Location		
Organiza- tion "A"	1986	INGO	Lucban	Project-In-Charge Training Coordinator Staff	
Organiza- tion "B"	1986	NGO	Tiaong	Foundation Manager	
Organiza- tion "C"	1994	NGO/CO	Sariaya	President Secretary	
Organiza- tion "D"	2007	SUC	Tayabas	Adviser, Former President President Secretary	
Organiza- tion "E"	2010	LGU	Sariaya	President	

Table 1 shows the criteria for selection of organizations and the different key persons interviewed for each organization.

A total of 11 key informant interviews (KII) were conducted to the representatives of each of the five organic agricultural organizations. These were key persons holding positions and identified by the members to be knowledgeable in the overall management and processes of the organization.

Aside from the interviews, documents such as bylaws or Articles of Incorporation, minutes of the meetings (organizations and Sangguniang Bayan), Internal Control System Manual, posters, list of trainings, project documents or Memorandum of Agreement, "Komiks Pahayagan para sa Kalikasan" and organization's official website were also reviewed.

# **Data Analysis**

Qualitative data from the interviews and from the documents were analysed and presented in a tabular form and used to describe each organization and overall pattern of the characteristics of each organization. In exploring the properties of network, relational information were extracted from the transcripts to create a network data. The relational information includes the different organizations identified (served as "nodes") and the transactions or flow of resources between organization in the network(served as "ties"). These relational information are important to determine the network structure and the contributions of the organizations in relation to the promotion of organic agriculture.

The common notion when doing network research is that data should always be in graph. A graph is a set of points which in SNA is known as "nodes" or "vertices" connected with a set of lines also known as "links", "ties" or "edges". For this study, the term "nodes" was used interchangeably with organizations and the term "links" was retained for the links between organizations. These information in a graph can also be represented by a matrix which is required in UCINET (ver. 6.528).

In using the UCINET (ver. 6.528), the datasets should be a collection of one or more matrices [27]. This matrix is called "adjacency matrix". To input data in an "adjacency matrix", the cell should contain a value of "1" if nodes A and B have link and the value is "0" if there is no link. For example, the organization A has links with B, C, but not with D. Organization B has links with A, C, and D while organization C has links with A, B, and D. The matrix that will show the

network of these organizations was represented in Figure 1.

	Α	В	С	D				
Α	0	1	1	0	0	1	1	0
В	1	0	1	1	1	0	1	1
С	1	1	0	1	1	1	0	1
D	0	1	1	0	0	1	1	0
(a)							(b)	

Fig. 1. Sample of 'adjacency matrix' a) with headings for the node numbers b) without the node numbers

In this study, all organizations identified by the interviewees were considered as "nodes" comprising the whole social network in Quezon and used to fill the "adjacency matrix". The value is "1" if the organization was identified and "0" if not identified by other organizations. To visualize the network, a sociograph was generated through a NetDraw application of UCINET (ver. 6.528) using the completed "adjacency matrix".

## RESULTS AND DISCUSSION

Data from the interviews and document reviews were analyzed and presented in Table 2. The table shows the different organizational capacity each organization has.

# Organizational capacity in achieving goals Organizational Context

The five organic agricultural organizations studied were already practicing organic agriculture even before the enactment of Republic Act No. 10068. Based on the interviews, organizations C and E were established in 1986 by two nuns and an International non-government organization (INGO), respectively. Organization D was established in 1994 by community organizers. These three organizations were originally formed to address poverty-related and environmental-related problems in the community. Organizations A and Bwere the only organizations established as a response to the government's agriculture organic program. Organization A was established with the help of SUC and served as cooperators in the organic vegetable project while Organization E was assisted by LGU to easily facilitate the delivery of the organic farming technologies in the community.

As stated in their respective Articles of Incorporation, goals of organizations are geared towards the environment (D and E), self-sufficiency (C) and promotion of organic agriculture (A and B).

# Strategic Leadership

The different organic agricultural organizations were

characterized generally as formed together, some were holding positions and functioning as leaders who were mostly organic farmers in the attainment of the purpose of the organization. Such characteristics are also characteristics of empowering community that leads to social relationships that can help in achieving the development in the community [28]. For example, all these organizations have hierarchical leadership except for organization E wherein the structure is based on the functions assigned to them. But, all five organic agricultural organizations were headed by farmers, overseeing the activities, and representing the organizations in the community.

Organizational structures can have a major impact on organizational outputs and the attitudes of members [29]. In the case of the five organic agricultural organizations, the leadership structure was hierarchical but most of the decisions were still made with the consensus of the whole group that can create trust among members. Informants reported that majority of the members of these five organic agricultural organizations are farmers, so it is easy for them to relay their concerns to their leaders since they have, if not the same, common interests which can promote trusts. These strengthen the ability of the members to adapt to unseen problems because everyone can share and think of solutions [30]. All of the informants reported that members can talk about issues on their farming because their leaders can understand their concerns and can relate as a farmer.

Having farmers as leaders are advantageous in the five organic agricultural organizations because they have common knowledge and experiences as the members. Having the same characteristics as to the members can enhance participation and promote collective actions within the organization because trust is develop. Access to resources can also be increased and participation of the members can be encouraged. Participation in activities are expected more in this kind organizations. Practical farming demonstration-farms can be facilitated by their leaders. Such activity can maintain engagement of the members to organic agriculture and identity as organic farmers [31]. This can also be coordinated with the members of the organizations. It is said that cohesion is produced when activities are properly coordinated with the members. In this instance, it could be noted that cohesion helps the five organic agricultural organizations in their activities [32] such as organic farming.

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Table 2. Organizational Capacities of the Five Organic Agricultural Organizations

Organizational	"A"	"B"	"C"	"D"	"E"	
Capacity	INGO-initiated	Self-initiated	NGO-initiated	SUC-initiated	LGU-initiated	
	organization	organization	organization	organization	organization	
Organizational Context	Organized by INGO	Organized by NGO	Organized by NGO	Organized by SUC	Organized by LGU	
	Established in	Established in	Established in 1994	Established in	Established in 2010 in	
	1986 in Lucban,	1986 in Tiaong,	in Sariaya, Quezon Province	2007 in Tayabas, Quezon Province	Sariaya, Quezon	
	Quezon Province	Quezon Province	Province	-	Province	
	Organized to share	Organized as a	Organized to secure land tenurial	Organized to implement an	Organized to facilitate the transfer of	
	technologies to	replacement for		organic	technologies on organi	
	out-of-school youth	microfinance cooperative	Purpose: Protect the environment	vegetable project	farming	
	Purpose: Create a	Purpose: Create a	chvironment	Purpose:	Purpose: Create a healthy people by	
	sustainable	self-sufficient		Promote organic	planting in an organic	
	environment	community		agriculture in the community	or natural way of	
		<u> </u>		•	farming	
Strategic	Functional	Hierarchical flat	Hierarchical	Hierarchical flat	Hierarchical flat	
Leadership	organizational structure	organizational structure	organizational structure	organizational structure	organizational structure (open-role structure)	
	(closed-role	(closed-role	(open-role structure)	(open-role	(open-role structure)	
	structure)	structure)	_	structure)		
	medium-size	small organization	medium-size organization (40	small	small organization (23	
	organization (100	(11 members)	members)	organization (30	members)	
	members)		memoers)	members)		
	over-all-in-charge: farmer	program manager: farmer	president: farmer	president: farmer	president: farmer	
Financial	Trading; donation;	Trading, donation;	Trading, assistance,	Trading,	Trading, assistance,	
Management	assistance	assistance;	grant/funding, self-	assistance,	loan/financing	
	0.5 hectare of land	loan/financing	finance	loan/financing		
	used by the	3.5 hectare of land;	1000 sq. m. of land			
	organization in	rice mill used by	used by the			
	their production	the organization in	organization in their			
D /	T	their production	production	Turining	Tii	
Program/ Project	Trainings on technologies of	Trainings on technologies of	Trainings on technologies of	Trainings on technologies of	Trainings on technologies of	
Management	organic farming for	organic farming for	organic farming for	organic farming	organic farming for	
	members and non-	members and non-	members and non-	for members and	members and non-	
	members	members	members	non-members	members	
	Holding regular	Holding regular	Holding regular	Holding regular	Holding regular	
	Meetings	meetings	meetings	Meetings	meetings	
	Implementing	capacity building	capacity building	Producing	Producing	
	and advocating hands-on	Giving loans to	Activities for	organic vegetables	organic	
	experiential	Farmers	the protection of environment	vegetables	vegetables Producing	
			such as			
	programs for people,		such as "publication of		organic rice	
	programs for people, knowledge and		"publication of IEC material",		organic rice	
	programs for people, knowledge and skills transfers,		"publication of IEC material", environmental		organic rice	
	programs for people, knowledge and skills transfers, and cultivation		"publication of IEC material", environmental exhibit		organic rice	
	programs for people, knowledge and skills transfers,		"publication of IEC material", environmental		organic rice	

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Organizational	"A"	"B"	"C"	"D"	"E"
Capacity	INGO-initiated organization	Self-initiated organization	NGO-initiated organization	SUC-initiated organization	LGU-initiated organization
Inter- organizational Linkages	agents (NGO, government agencies, SUC) partnership and provider-recipient relationship	agents (friends and relatives; government agencies, SUC, private sector)	agents (friends and relatives, POs, NGOs, government agencies, SUC, private sector) locations (local,	Agents (SUC, government agencies, private sector) Location (local, national)	Agents (SUC, government agencies, private sector) Location (local, national)
	locations (local, national, international)	provider-recipient relationship locations (local, national	national, international) partnership; collaboration; provider-recipient relationship	partnership; collaboration; provider- recipient relationship	partnership; collaboration; provider-recipient relationship

# **Financial Management**

In terms of financial management, the five organic agricultural organizations source their funds from trading and assistance from external organizations. Organizations A, B, and C have loan financing. Organizations C and E receive donation. Only organization D has grant funding and most of their operations are self-financed.

Members of the organization lend parcel of their land to the organization for organic production such as in organization C with 3.5 hectares, D with 0.5 hectares and E with 1000 sq. m. These lands serve not only for organic production where they get additional budget for the operation of the organization but also as a learning ground for the members in terms of organic farming practices.

# **Program/Project Management**

There are many programs and services provided by the five organic agricultural organizations. All key informants interviewed said that regular meetings and trainings for their members are conducted regularly. These activities can increase face-to-face interaction. Aside from face-to-face interaction that can facilitate learning, these five organic agricultural organizations promote hands-on learning experiences in their technology demonstration farms. Members produce and market their organic products. These two activities are intended not just to earn but a way to promote organic agriculture their respective municipalities emphasized by all key informants. Organization E advocates and implements hands-on experiential knowledge and skills programs, transfers and cultivation of good qualities among people. These activities are in line with the goals of the INGO that assisted their formation. Organization E also shares knowledge through lectures under internship of students as part of their program. On the other hand, Organizations C and D conduct capacity building activities for the farmers such as coaching in organizing farmers and publishing IEC materials.

Technologies on organic farming are being shared to the members and non-members of the organization through trainings. This is the strategy used by all the organizations studied. People's capabilities and activities are enhanced through trainings [6]. Members of these organic agricultural organizations usually attend trainings on organic farming technologies sponsored by the LGUs and NGOs and as a result, they can echo what they have learned to others. In fact, four of the key informants reported that they were invited as resource speakers on trainings on agriculture production. They also said that not only them but some of the members in organizations A, C and D were invited to become resource speakers on organic farming after they have attended different seminars and trainings on organic agriculture production. This finding indicates that members of the organizations become a strong workforce that help the organization in providing their services not only in the production but also in providing trainings to other farmers and other stakeholders. This is possible because these members had enhanced their knowledge and skills through trainings [33].

It is also through trainings [13]where different types of organizations promoted the sustainable use and management of resources, indigenous practices and farm inputs. In Quezon Province, these five organic agricultural organizations practice organic farming technologies such as composting, vermicomposting and

making own concoctions for farm inputs. Practicing these organic farming technologies are not only their way of sharing technologies to the people in the community but also an effective way of encouraging other farmers to go organic farming.

Organization D meanwhile implemented an environmental exhibit showcasing organic farming methods as well as promoting awareness on environmental protection. IEC materials such as book on organic farming technologies and a comic book were co-authored by one of the members of Organization D as part of their advocacy. These activities made organization D known in Quezon Province. In fact, they were awarded with "Gawad Saka" for their best practices of organic production. Organization D was also featured in an international TV network for their organic production.

# **Inter-organizational Linkages**

All of the organic agricultural organizations have established their own linkages. Most of their linkages are government agencies, SUCs, and civil society organizations. Only organization D and E have international linkages which for them was their most important organizational capacity that help them in their promotion of organic agriculture in the province.

Partnerships, collaboration, and provider-recipient relationships are usually the type of relationships they have with other organizations that help them implement their activities and programs. Having external linkages not only facilitate the delivery of services to them but also help them in providing services to the people of the community [4], [5], [34]. In relation to the promotion of organic agriculture, these organic agricultural organizations receive different assistance coming from their external linkages. In addition, the government provides goods and services to these groups of farmers rather than to individual farmers.

The strategies that these five organic agricultural organizations have in promoting organic agriculture depend where the funds are coming from. For organization E, activities are implemented to share the different technologies learned from the INGO. This INGO provides fund to them. In the case of organization D, most of the activities they conducted were also based on the goals and thrusts of their funding agency. For instance, organization D was able to set up an environmental exhibit incorporating the promotion of organic farming technologies with the awareness of the environmental protection because the assistance came from an environmental advocate. This confirms

that the organizations reconcile with the thrusts of the funding agency before they can receive assistance [32], [35], [11].

Organic farming is believed to be sustainable. However, the membership fluctuates because of problems in production and marketing. According to the three informants, the low production in the initial phase is experienced by new members and encounter problems in marketing (lack of market outlets or lack of supply). To be able to continue the practice, they needed to link the organizations to other government agencies, POs and private sectors. At present, there is an active support given by the provincial government of Quezon. This was confirmed by all key informants. The active support includes continuous trainings and a market space in Perez Park in Lucena where farmers can market their organic products. Key informants from organization D shared that two members of their organization were able to establish an organic stall in Manila where some of the members of the five organic agricultural organizations sell their products. This implies that elements of networking arrangement supports sustainable agriculture since farmer's activities include both technical and social innovation which confirmed the study in 2004 [36]. In achieving the goals for sustainable agriculture, all the supply chains still need to be met.

# Social network, contents and other properties

According to the literature, reasons why network is formed include: distribution of resources, cooperation, and partnerships [37]. In the five organic agricultural organizations, there are three major reasons why they formed social networks. These are capacity building enhancement, access to information and resources, and cooperation.

Even before the Republic Act No. 10068 was enacted, Key informant from organization C mentioned that they were already establishing linkages with POs and NGOs to implement their programs on the protection of environment and this is reported to be the organizations' strategy to gain access to resources. Gaining access was reported to be of help for them in implementing their programs and at the same time enhance their capability. In 1999, they formed linkage with another NGO to implement Sustainable Agriculture Program. In this program, they practiced natural farming and eventually organic farming. Because of the practice of organic farming, the organization was recognized as the best in organic farming practices in 2010. This helped them establish

more linkages with other organizations and social groups. In fact, they were able to establish linkage with international agencies that helped them implement their environmental exhibit promoting awareness of the protection of the environment through the practice of organic farming technologies.

In organization C, there is a manager assigned to oversee the production and marketing, and to establish linkages. This manager also serves as the initial contact or point person for the organization when it comes to information, activities and services the organization provides. Initially they form networks with their friends and relatives in terms of the needs of the organization. These friends and relatives also served as people who are instrumental why and how the organization was established. When they started practicing organic farming, they have established linkages organization D to promote organic products in Sariaya. Organization C partnered with organization Din putting up "tiangge" in the municipal hall and in the park in Sariaya. They established linkages to disseminate information so that other people will gain knowledge about organic farming. At present, organization C had established linkages with other NGOs and government agencies and their exchanges were mostly in the form of assistance in the production and marketing of their products.

On the other hand, Organization A was established as a response to the organic agriculture program after R.A. No. 10068 was enacted. This time, Organization B formed network for resource distribution such as financial, knowledge and information resources. Having link with mostly government agencies, organization B was able to gain access to farm inputs necessary for their farm operation.

Organization E did not establish linkage on their own since they have an immediate link with INGO which finance their activities and programs. When R.A. No. 10068 was enacted, active participation from different stakeholders were encouraged. Being organic practitioners, they were tapped by the government to implement a project (e.g., Organic Seeds Production) and provide trainings on organic farming technologies. In this case, the network formation for organization E is not merely for resource dependence but also to seek cooperation and building partnerships with others, such as the government.

In the case of organization A, establishing linkages occurred with the help of the organizations which contributed to their establishment. Being part of the project, organization A was able to access capital (in the

form of inputs) necessary to sustain their vegetable production. Aside from SUC, many agencies provided them trainings to improve their organic agricultural practices. The linkages of organization A are dominated by government agencies. This attributed to the first main reason why this organization came into being which is in response to the organic agriculture program. In this case, the network of organization A was formed to seek cooperation and for the distribution of resources.

Formation of the social networks of the five organic agricultural organizations confirmed that the basis of interaction in a network is not merely always for economic reasons [12]. The basis for interaction is voluntary because of the legal mandate such as the promotion of organic agriculture. Though there are differences in the reasons why the five organic agricultural organizations form their social network, the common to all of them was that, they interact with other organizations and agencies for the attainment of their goals. This also confirms that organizations, in order to adapt to the changing environment such as the organic agriculture program, form social networks. Forming social network enhances capacity building, helps in gaining access to information and resources and seeks cooperation [12], [37] with other organizations and stakeholders.

### **Production Content**

The production content present in the networks of the five organic agricultural organizations are mostly technical and financial assistance. The technical assistance includes trainings and seminars, facilitation of documents and consultation which are mostly provided by government agencies, SUCs and Research center while the financial assistance (e.g. grants) provided by international funding agencies. Farm inputs, machineries, office space, market outlets and budget for activities of the organizations are mostly provided by government units and national agencies.

Aside from the exchange of goods and services, there are also partnerships and collaborations in implementing programs and projects and business-relationship in marketing of organic products that were formed.

All of the five organic agricultural organizations have the same patterns with regards to production content. This is attributed with the social context where they are situated. These five organic agricultural organizations are following the mandated program of the government which is the promotion of organic agriculture. This shows that the type of relationship

present in their respective social network is not just for economic reasons but a function of the policy implemented. This confirms that mechanisms of the organizations in relation to establishing linkages are dependent on the context in which the organizations are in [12].

# **Network Structure**

To visualize the network of the five organic agricultural organizations in Quezon Province, a sociograph was also generated using UCINET 6.528 [27]. Figure 2 shows the different organizations identified by the key point persons of each five organic agricultural organization as part of their social network, the types of organizations and the location (locally, nationally and internationally) of these networks in relation to the promotion of organic agriculture.

There were a total of 30 organizations comprising the social network of the five organic agricultural organizations studied. Based on the location of the organizations, most of them are accessible because 17 are mostly situated in Quezon Province. Others are outside the Province, where 10 are nationally-based and three internationally-based. Most organizations promoting organic agriculture were civil society organizations (14), government units and national agencies (13), private sectors (3) and SUC (1). These organizations were identified as significant to the five organic agricultural organizations studied in the implementation of activities in relation to the promotion of organic agriculture.

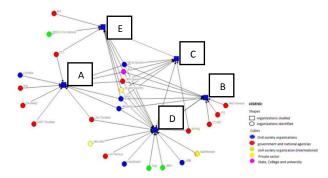


Fig. 2. Sociograph of the actual social network of the five organic agricultural organizations in Quezon Province having 53 links

The network size of the social network of the five organic agricultural organizations in Quezon Province is medium determined by the number of the organizations which is 30 organizations. On the other

hand, among the five organic agricultural organizations, organization D has the biggest size of the network having 17 organizations identified as part of their network while organization Bhas the smallest in terms of network size having seven organizations identified. This indicates that among the five organic agricultural organizations, organization D can get more resources such as information, grant, capital and other resources that they can use in implementation of their activities which was also the findings in the production content.

Though, all organizations have different sizes, they receive the same types of assistance. There are differences in networking size but networking patterns in relation to the interaction present in each network is the same in all organizations studied. This is because they are all engaging in organic agriculture. These findings indicate that social network can really help in the promotion of organic agriculture because there are many organizations within the social networks of the five organic agricultural organizations that could enhance more the underlying organizational capacities of each organic agricultural organization. The organizational capacities were reinforced through the exchanges in technical and financial assistance within the network.

Using UCINET 6.528, density was also computed to be 0.36 which means 36% of the potential links between organizations are actually present. This means that these five organizations can facilitate the delivery of services and can serve as venue for collaboration in the implementation of the organic agriculture program. However this is not maximized in Quezon Province in terms of connections. It is better for organic agricultural organizations to be connected to the networks of other organic agricultural organizations to give more influence or equal flow of resources and services in the network. These could not only have an impact to the effectiveness of the implementation of a program of each organization but also impact to the state of the members of the organization socially, economically and politically.

Since, it is said that social network is formed to seek cooperation and to build partnerships [37], it would be better if the government will tap these five organic agricultural organizations not just forthe delivery of services but also to collaborate in the implementation of the promotion of organic agriculture. Because even without the assistance of the government, these five organic agricultural organizations have established linkages with other organizations such as SUC, civil society organizations, international civil society

organizations and private sectors that contribute to the enhancement of their capacity building as an organization. These can also influence not only in the exchange of information about organic agriculture but also in the diffusion of organic agricultural technologies as well.

The findings from the properties of network suggest that the patterns of the interaction between organizations in a network is important in understanding the different social relations present in the network. The structure of the network depends on the resources and needs of the five organic agricultural organizations that influence them to whom and why they interact with other organizations. Being in a social network increase their performance in relation to the promotion of organic agriculture by providing mechanisms in the delivery of goods and services.

#### SUMMARY AND CONCLUSION

Having a farmer as a leader creates more participation in terms of decision making. In addition, having members with the same characteristics as to the leader makes the communication flow freely since they have the same identity as farmers and as part of a group practicing organic farming. Strategies and activities, resources, linkages are interrelating factors that can help in achieving the goals of the organizations. The strategies, programs and their services are in accordance with their goal which is also the reason why they were able to establish linkages with other organizations. strategies activities The and implemented by the organic agricultural organizations are also in line with the organizational goals and the expectation of the external linkages where they acquire some of their resources.

The existing strategic leadership can be capitalized in implementing interventions in the community. This is because trust is formed in the five organizations studied. Since these farmers are already equipped with the knowledge on organic farming based on their trainings and farm experience can be tapped to spearhead agricultural extension especially that we are lacked of agricultural extension workers.

The organic agricultural organizations serve as conduit or the mouthpiece of the national government in disseminating the organic farming technology to the grassroots level. Once the technology is well understood and the application of it prove successful, adoption is expected to follow thereby organic agriculture is promoted.

Organizations, in order to adapt to the changing environment such as the organic agriculture program, form social networks to enhance capacity building, gain access to information and resources and seek cooperation. Being in a social network increase their performance in relation to the promotion of organic agriculture.

Organizations have their own characteristics that would help facilitate the promotion of organic agriculture but it is better if these organizations form social networks so that promotion of organic agriculture will be achieved in a more efficient and effective way.

This study suggests that promotion of organic agriculture was facilitated by establishing linkages within Quezon and outside Quezon. Though organizations have their own capacity in implementing activities, having linked with other organizations helped them to conduct more and different organic agriculture-related activities as prescribed by the organizations linked to them. Having social networks on organic agriculture helped them to gain more access to technical and financial assistance on organic agriculture.

Widespread promotion of organic agriculture can be done if all organic agricultural organizations will be linked together and coordinated each activities for collaboration and cooperation. Results suggest that organizations have their own capacity to operate in a social context pursuing their organizational goals but linking with other organizations existing and pursuing the same thrusts can enhance their ability to achieve their goals.

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76

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