

国際開発研究フォーラム

FORUM OF INTERNATIONAL DEVELOPMENT STUDIES

研究論文
ARTICLE

Connectivity and Interdependence: Evolving Social Networks in Pamilacan Island Community Tourism

Carl Milos R. BULILAN

46-3

名古屋大学大学院国際開発研究科

GRADUATE SCHOOL OF INTERNATIONAL DEVELOPMENT
NAGOYA UNIVERSITY

Connectivity and Interdependence: Evolving Social Networks in Pamilacan Island Community Tourism

Carl Milos R. BULILAN

Abstract

Community approach to tourism envisions self-sufficient communities in developing countries through self-managed sustainable touristic enterprises. Though earlier studies have analyzed community tourism projects in many parts of the world, less attention has been given to the relational dimension of local tourism organizing activities. Using Social Network Analysis, this present case-study examines how social networks sustain community tourism in Pamilacan Island, the Philippines. The study argues that failure of formal tourism organizing activities does not necessarily mean total loss of community tourism industry. Local people continue to participate in and benefit from the industry by engaging in informal transactions. The case demonstrates that villagers are capable of addressing the problems of limited resources, internal conflicts, and competition by restructuring their social networks to gain access to resources and build mutual support.

1. Introduction

Community-based tourism (CBT) has been promoted by development agencies and has been implemented in many developing countries as an alternative means for socio-economic development (Goodwin and Santilli 2009: 4; Okazaki 2008: 511; Sammy 2008: 75). Highlighting the role of the local people's participation in planning and management, CBT seeks to develop a sustainable livelihood for local communities and empower them to organize themselves for collective interests (Jigang and Jiuxia 2007: 9; Murphy 1985: 153; Rocharungsat 2008: 66). Though having varied definitions and application strategies in many parts of the globe (Blackstock 2005: 41), community tourism as a paradigm to development envisions self-sufficient community-owned sustainable tourism industry with no or less intervention from the private sector (Mitchell and Ashley 2010: 54; Beeton 2006: 11).

However, scholars have been criticizing community-based tourism as having little success in the field (e.g., Goodwin and Santilli 2009; Moscardo 2008). Analyses on community-based tourism activities have focused their attention on the attributes of local peoples as the determining factors for success or failure of the industry. Scholars have identified attributes that constrain community tourism which include poor management, marketing, and entrepreneurial skills; lack of participation and sense of ownership among the local people; imbalance of representation in the organization; and

over dependence on government and funding agencies (Sebele 2010: 142–143). Scholars have also criticized the failure of the CBT approach to recognize the heterogeneity of communities, not taking into account internal conflicts and political struggles among villagers (Blackstock 2005: 41–44; Telfer and Sharpley 2008: 117). Other scholars have argued on the incompatibility of CBT strategies with the socio-cultural contexts of developing countries, since the model is based primarily on realities in more developed western countries (Rocharungsat 2008: 71).

Although earlier analyses have generated meaningful insights on the success and failure of CBT, their conclusions were based on limited investigations of formal tourism organizing activities and the attributes of local communities. Studies tend to portray villagers as being trapped by limited local resources and internal conflicts that hinder them from sustaining touristic livelihood. Thus, from this logic, CBT activities are doomed to collapse after organizing agencies stepped-out from the project. Otherwise, communities have to pay the high price of acquiring the necessary requirements to actively participate in the touristic market on their own. With this narrow perspective, scholars were not able to examine existing informal touristic transactions which continue to benefit the locals, in spite of the failure of the official organizing structures.

This present inquiry then seeks to answer the following questions: How are local villagers able to continue participating in and benefiting from tourism in spite of the collapse of formal organizing structure? What is the role of social networks in sustaining community touristic activities? Aside from examining patterns of social interactions, this study also explores the reasons behind the movements of actors and their ties within the social network. Community-based tourism involved closely bonded villagers (who are very familiar with each other) with patterns of interactions that have facilitated communal activities and livelihood and have sustained the community even before the coming of tourism. These interactions have functioned as support system to address limited material and technical resources. This characteristic makes CBT essentially a relational phenomenon that could be understood by examining social networks which facilitate the flow of resources, information, and benefits among the participants and how these sustain the industry.

This present study argues that collapse of formal community-based tourism organizing structures does not necessarily mean total loss of community tourism industry. Instead, this paper claims that villagers are capable to address collectively the problems of scarce resources, conflicts, and competition by restructuring their networks and alliances. Building informal connections with actors occupying central positions in the tourism network, poorer villagers were able to integrate themselves into the wider touristic system, in spite of the failure of formal organizing structures. Using social network analysis enables researchers to examine pattern of interactions and its movements which may not be analyzed just by simply using attribute data.¹ By consciously restructuring their pattern of interactions, villagers gain access to points of resources with lesser costs and build new alliances for mutual support in the midst of internal conflicts and competitions. These informal interactions among

locals and outsiders could only be examined through relational data and analyzed through a social network perspective.

In this study, I employ social network analysis to examine the evolving social interactions involving community tourism in the island of Pamilacan in the province of Bohol, the Philippines. The 144-hectare island has around 200 families or 1,422 residents (National Statistics Office - Philippines 2010: 3). The community's traditional livelihood was hunting marine mammals, especially whale sharks (*Rhincodon typus*) and manta rays (*Manta birostris*) which sustained the people since the beginning. Hunting was a communal activity involving informal work and payment arrangement, based on mutual support system. Local villagers with material resources financed hunting trips; boatmen and spotters did the actual hunting; women and other villagers prepare the meat for consumption and selling. After the banning of their traditional livelihood, islanders experienced crisis since the local resources were limited.²

Through the support of NGOs and government agencies, the Pamilacan islanders organized community-based tourism to serve as a pilot ecotourism project in the Philippines in the year 1997 (PAWB-DENR and PCW n.d: 18). The project aimed at developing community-owned and managed sustainable tourism industry to compliment the loss of the island's hunting livelihood. The community-based organization had operated its own touristic services including dolphin and whale watching tours, island hopping and snorkeling in marine sanctuaries, food catering, and accommodations. The men members took charge of bringing tourists for dolphin and whale watching and other marine life tours. The women members, on the other hand, took care of food preparation and maintenance of accommodations. The local people had underwent various skills training and seminars on touristic services and participated in formulating tourism business plan (Heah 2006: 58-60; Twining-Ward 2007: 53-55). The community tourism project had also received recognitions from various local and international institutions for its success in stopping the hunting of endangered marine species and in organizing the villagers to engage in touristic business.³ In spite of its short success, the formal organizing structure started to decline in the mid- 2000s until it collapsed.

2. Network Analysis in Tourism Studies

Employing network analysis in tourism is something new. Scott et al. (2008: 15) argue that tourism by nature is "a network industry par excellence" involving both big-time and small-time actors, from multinational tourism developers, resort owners, and operators to community-based tourism organizations, waiters/waitresses, and tourist guides. Government agencies, on their part, intervene in touristic activities in their own territories, while development agencies and NGOs work together with local peoples in seeking ways to make tourism truly beneficial to communities (Holden 2008: 128). Interactions among these actors reveal patterns of information and resource flow, the degree of

collaboration among actors, and the centrality of certain individuals in the network which are critical in achieving benefits from and maintaining harmony among participants.

While earlier empirical studies have given insights on how social connections among different actors influence the efficiency of touristic enterprises on the macro-level, the role of social networks in community-based tourism is nevertheless an issue which has not been fully explored. Scott et al. (2008) compile theoretical and empirical studies for both the qualitative and quantitative approaches. For example, Wilkinson and March (2008) attempt to formulate a model for an effective network organization in a regional tourism area which may assist in the development of sustainable tourism networks. Dredge and Pforr (2008) highlight the use of Policy Networks for a more democratic and participatory governance in tourism.

Focusing on the cross-cultural dimension of tourism networks, Pan (2008) examines how Chinese cultural values and practices hinder the building up of touristic networks of operators. Scott et al. (2008) also use network visualization to examine the pattern of interactions among tourism stakeholders from different geographical locations of the same region. Using the stakeholders' perspective, Timur and Getz (2008) examine the macro-level inter-relationships among local government, the community, and destination management organizations. Shih (2006) examines the network characteristics of 16 dive tourism destinations in Taiwan and its implications for planning what the type of tourism to promote.

The above studies have presented interactions of stakeholders in tourism industry only in a specific period of time. This present study, on the other hand, presents tourism networks as social structures constantly evolving in the community since the beginning of the local industry.

3. Social Network Analysis (SNA)

Approaches to collective action have highlighted the importance of group characteristics, the nature of different incentives involved, leadership (see Olson 1998), and the capacity of locals to self-organize (see Ostrom 1990) as determining factors of the life of social organizations. Although analyzing organizations as social networks started from the 1930s, recent interest in the approach has increased due to the trend of globalization and the advancements in the field of information technologies which make communities more accessible than before (Nohria 1992: 1-2; Scott et al. 2008: 3). The network perspective takes organizing activities as interactions among different actors which form systems and patterns of connections through which people exchange information, resources, benefits, and the like. The network approach assumes that efficiency in organizing activities depends not only on the attributes of the people, but also on how people/institutions are connected to each other in a particular pattern and on how individual relations exist as "part of a wide network of social relations" (Radcliffe-Brown 1965: 191).

Social network analysis as a tool to analyze relational data treats social organizations "as a system

of objects (e.g., people, groups, organizations) joined by a variety of relationships,” and identifies structural patterns, their causes, and consequences (Tichy et al. 1979: 507). Graphical representation consists of Nodes (or vertices) which represent individuals or groups; and Edges (or lines) which represent relationships that connect nodes to illustrate relational patterns (see Scott et al. 2008: 8). By visualizing network relationships, SNA seeks to analyze patterns of communication and the flow of resources, identify critical positions of actors, hierarchy, and power relations which influence the dynamics of the organization.

In this study, I employ two basic properties of social networks as follow (Scott et al. 2008: 148-150; Tichy et al. 1979: 509):

(1) **Transactional content** answers the question what is exchanged by the social objects. This study will focus on the following: exchange of influence; exchange of information, resources, goods or services; and competition.

(2) **Structural characteristic** refers to the overall pattern of relationships among the actors in the network.

Table 1 summarizes the network properties used in analyzing this study. The second column provides explanations of each property; the third column highlights general assumptions/implications in relation to each property. This study uses two basic Centrality measures: Degree Centrality and Betweenness Centrality. Degree Centrality is the number of direct connections in a given subject

Table 1 Network properties employed in this study

Property	Explanation	Assumption/Implication
A. Transactional Content	Types of exchange: 1. influence 2. exchange of information, goods or services 3. competition	
B. Structural Characteristic		
1. Centrality	The importance (positioning) of a subject (node) within the network	Informs how decisions are made and how transactional contents flow through the network
a. Degree	The number of connections to which individual nodes are directly connected	Indicates who has the potential control/power of over other members in the network
b. Betweenness	Measures the extent to which an individual node lies ‘between’ the shortest path from one point to another in the network	Identifies the greatest influence over the flows of transactions in the network, important ‘bridge’ between sub-groups and individuals
2. Isolate	Individuals who have uncoupled from the network	Individuals who are at the periphery, excluded from the group; thus have less accesses to information and less chances of participation in network activities

Notes: Based on Freeman 1978/79; Scott 2011; Scott et al. 2008; Tichy et al. 1979

(node); Betweenness Centrality is equal to the number of instances a subject lies within the shortest path from one node to another in the network. Computations were processed through the SNA computer software *Gephi* (Bastian et al. 2009).⁴

This study is based on relational data gathered through ethnographic methods including participant observation, in-depth personal interviews, group discussions, and employing Key Informants (see Tremblay 1957). I employed a socio-centric approach “which focuses on the pattern of connections in the network as a whole” (Scott 2011: 72) mapping-out the degree to which each subject is connected to all other subjects in the network (Tichy et al. 1979: 510). I used non-random sampling method, *Reputational approach* (see Scott et al. 2008: 147; Scott 2011: 56; Tichy et al. 1979: 511) in mapping social connections, starting from a person who is widely known as having actual/potential influence in and possessing a wide knowledge about the community. A *Name generator* technique then was used to establish further connections, using a set of questions designed to elicit as many names as possible. For the purpose of confidentiality, I use pseudonyms for personalities including the names of institutions (particularly government institutions, local organizations, NGOs, and development agencies) involved in the case.

The names of persons, with whom an individual considers to be in relation with, were then interviewed and asked further in the same manner as above using *Snowballing technique* (see Bryman 2008: 184–185). After the social networks were mapped out (see Scott 2011: 57), data were then analyzed and visualized using the SNA computer software. This paper is a product of a nine (9) month fieldwork, from July to December 2012 and again from May to July 2014.

4. External Actors Involved in Pamilacan Tourism

Network analysis starts by identifying the different actors involved in the system. Table 2 identifies the external actors and the contents of their transactions with Pamilacan islanders. By “External Actors,” I refer to people or institutions that are not based in Pamilacan, but who have been involved or influential in the development of CBT in the island. “Development institutions” refer to the three main institutions which assisted the organizing of community-based tourism in Pamilacan. These include the WK with its local arm (in 1997 until 2000), the ND (around 2002 to 2004), and the AF (around 2008 to 2010). “Government agencies” refer to Philippine national and local government institutions which directly or indirectly intervened in the development of tourism in the island.

Fifteen PTO (Provincial Tourism Office) accredited “Tour Agents” are based in Bohol. However, only twelve of them were available for interview since the other three had gone out of business. “Competitors” include individuals and private businesses which offer touristic services like those of the Pamilacan community-run enterprises. These are boatmen and tour canvassers based in the island of Panglao, and private hotels/resorts (based in Pamilacan, Panglao, and mainland Bohol). There

are an estimated 300 boats operating in Alona beach of Panglao, aside from those based in the other parts of the island (compared to around 32 accounted touristic boats in Pamilacan). “Tourists” include both domestic and international visitors. PTO noted an increase of tourist arrivals in the past years reaching 415,530 in 2006 (Province of Bohol and German Development Service 2010: 9); WWF (WWF-Philippines 2006: 2) estimated around 3000 visitors coming to Pamilacan each year, an increased number from around 165 guests in 1999 when the industry has just started (PAWB-DENR and PCW. n.d: 16).

External actors have played important roles in the development of tourism in Pamilacan. It would be proper to say that community tourism in the island had been an externally initiated organizing project. From its beginning until the present emergence of an informal support system, external actors have been influential. During its initial stage, external actors came as supporters of the formal

Table 2 External actors and their transactions with Pamilacan

External Actor	Character	Transactional Content
1. Development Institutions		
WK	International NGO	Sponsored scientific research on the condition of the marine life around Pamilacan; Said to have influenced the government legislation banning of traditional hunting; Facilitated the organizing of CBT by providing financial and technical assistance to cooperating islanders
ND	New Zealand government international development agency	Offered financial assistance to Pamilacan through the local government
AF	Manila-based NGO	Offered financial and technical assistance to the community to re-organize community-based tourism in the island
2. Government Agencies		
	Philippine national and local government institutions	Formulated legislative mechanisms and development plans for eco-tourism; Assisted in training the locals for hospitality services; Provided marketing assistance for Pamilacan touristic enterprises
3. Tour Agents		
	Private tour and travel businesses based in Bohol	Marketing Pamilacan as a tour destination; Offering tour packages to tourists; Providing guests for Pamilacan community tourism
4. Competitors		
Panglao Boatmen and Canvassers	Based in Panglao Island; Mostly operating without license	Competing with Pamilacan villagers in marine life tour services
Resorts/Hotels	Tourist accommodations based in Pamilacan, in Panglao, and mainland Bohol	Used to provide guests exclusively for Pamilacan community-based tourism organization
5. Tourists		
	Both domestic and international guests	Visiting Pamilacan for dolphin and whale shark watching, snorkeling, swimming, also for food and accommodations

organizing activities. When the tourism industry started to flourish, new external actors started to come into the scene, this time as competitors. With the coming and going of different actors, social transactions in Pamilacan tourism also evolve. Patterns of interactions adapt with changing social circumstances.

5. Evolving Structures of Pamilacan Tourism Networks

Transactions between the Pamilacan villagers and the external actors generate dynamic social networks. From its organizing stage to its present condition, the patterns of interactions have constantly changed; former actors have been disconnected from the network while new ones have come onto the scene. The original community organization once central to the network has been isolated, while the new comers have occupied important positions. New connections have emerged; some older ones have survived, while others have vanished.

In the following sections, I examine three periods after the formal tourism organization was founded (in 1997) and analyze the social network patterns that have evolved within seventeen years (until 2014). Aside from investigating structural properties, this study also explores the reasons of the changes in the network and how the actors reconstructed their pattern of interactions. The time periods are represented by three socio-graphs. Color of nodes represents measure of Betweenness Centrality, that is the higher the number of points the darker the color of the node; Nodes' size represents measure of Degree Centrality, that is the greater the number of direct connections the bigger the size of the node.

5.1 Period of Uncontested Success

Tourism in Pamilacan was introduced as an alternative livelihood after the traditional hunting was banned. Having limited option for subsistence and facing the powerful authorities, villagers collaborated with government agencies and NGOs in organizing tourism development project in the island. This collaboration between the locals and outsiders resulted in the formation of a formal community tourism organization, called the Pamilacan Whale Watching Group (PWWG). Through the organization, funding institutions exclusively channeled resources, including money, facilities, and information to the villagers. People were attracted by the financial and technical assistance offered by the organizing agencies. Cooperating with the group, islanders were able to access and benefit from the external support. Thus, during this period, PWWG was central in the network because it had the direct access to supporting agencies, and at the same time, served as the bridge through which resources could reach to the community.

Participating in PWWG, villagers received financial assistance in the form of loan amounting to around PhP 200,000, according to the former village Chief. This amount was intended to be spent in

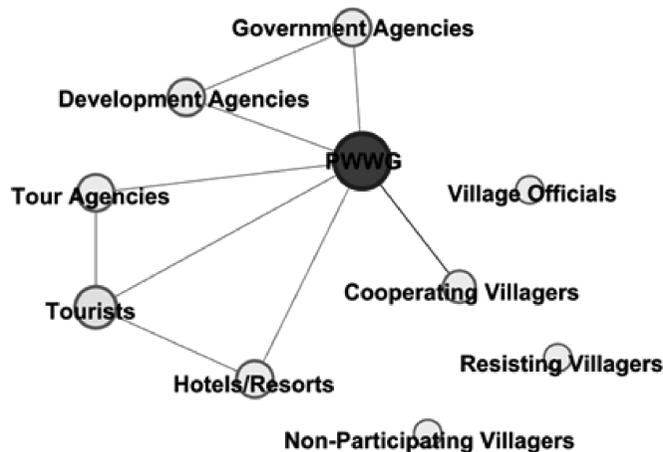
transforming and repairing fishing boats for touristic purposes. The islanders were also provided with other touristic facilities such as life jackets and snorkeling gears. Aside from the material supports, organizers also conducted free training and workshops on marine life tours and basic touristic service skills to the cooperating villagers. Local people were also educated about ecological preservation and the value of collective efforts to achieve development in the community.

During this period of success, the nature of ties between the villagers and the supporting agencies could be described as resource dependence. People, who by that time had just lost their main livelihood, cooperated in the community tourism project because they needed money to survive. Connecting with PWWG was the only available means for them to gain access to financial resources. The “people received many benefits,” a former local organizer argued. “They shared the benefits among the members.”

Aside from having the central position in transactions concerning the flow of material and technical assistance, PWWG also was central in transacting with clients. Since it was the only business establishment that provided marine life tours, the organization monopolized the services in the whole province of Bohol (and probably the first to operate dolphin and whale-watching tours in the whole country). Having no competitors, tour agencies, tourists, hotels and resorts connected exclusively with PWWG, making it central to the network in facilitating the coming of tourists to the community. Tour agents with the local government tourism offices also assisted the organization in marketing its products and services.

The centrality of PWWG during the period of uncontested success can be illustrated in the network graph in Figure 1. The organization’s crucial position is obvious just by looking at the diagram. Both in terms of Degree (=6) and Betweenness (=11.5) measures, it has the highest counts. Having the most direct connections enables PWWG to access the most number of other actors in the network,

Figure 1 Tourism network during the early success period



which could mean direct access to resources and information. Being situated the most number of instances between the other actors, the organization was able to facilitate and control transactions between parties. With this position, the institution served also as channel through which resources and information flow between participants. Without the bridging role of PWWG, the local villagers could not access resources and information; thus could neither participate nor benefit from the industry.

Government and development agencies continued to channel funds and technical support exclusively through PWWG which lasted for about three years (i.e. around 1997–2000) until conflicts among the members broke out. Disagreements among villagers led to the defection of some of its members and the formation of a separate group. These movements marked the start of internal competition between two local groups that led to changes in the local tourism network.

5.2 Period of Internal Competition

Conflicts among PWWG members resulted to division and the beginning of internal competition among the villagers. Distrust started with accusations of corruption against its leaders, particularly Jay a former local NGO staff and chairman of the organization. People claimed that he had been using funds from supporting agencies to finance his private business. Even local government tourism officers were aware of the accusations against Jay. “Perhaps, along the way, he [Jay] realized, Wow! There is so much money in these [touristic activities],” the Provincial Tourism Office chief commented. Eventually, Jay began to acquire tour boats and operate his own tour services and restaurant in the island.

After being kicked-out from PWWG, the former chairman formed his own group, called the Pamilacan Island Seamen Association (PISA). In spite of the charges against him, he was able to maintain some friends and relatives from his former organization who became the first members of his new group. During that time, tourism was thriving and people were now becoming interested to participate in the local industry seeing its economic opportunities. With this atmosphere, Jay was able to convince islanders who once actively resisted tourism in the community. With the new group, these villagers found the opportunity to be integrated into the tourism industry and thus hoped to benefit from it.

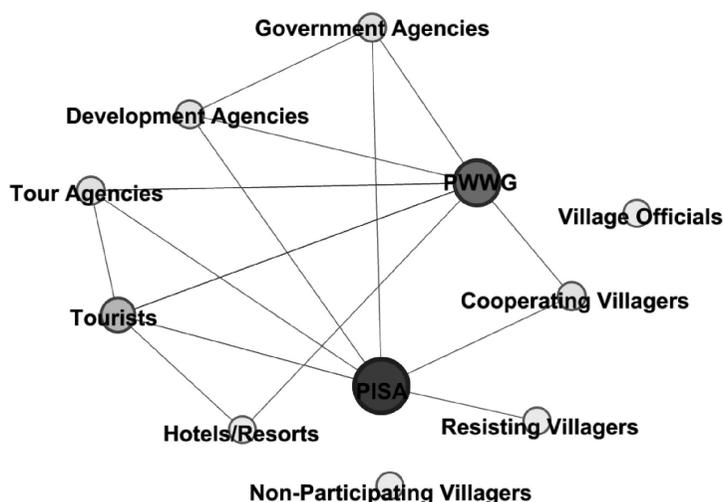
Composed of boat owners and spotters, PISA started to act as service providers for Jay’s tour business. Unlike PWWG, the new group does not own business establishments. Jay would only contact members whenever he would need their services for his clients. Having the financial capacity, marketing knowhow, and social connections, the former NGO staff was able to connect with significant external actors in the local tourism industry. The new group also gained financial and technical support from government and funding agencies. Members received trainings in marine life tours and basic hospitality skills. With his marketing and technical skills (using modern means of communication such as the internet), Jay was also able to build new partnerships with tour agencies and individual tourists.

With these ties, PISA touristic network grew and became a central actor both in attracting clients and receiving financial and technical assistance. In spite of the internal competition, there had been no violent confrontations between the two groups. In a positive sense, it facilitated the integration of more and more villagers to the touristic livelihood.

The formerly monopolized tourism industry started to become a field of competition. Figure 2 illustrates the decentralizing tourism network in Pamilacan with the emergence of the new group. In terms of Degree centrality, the two competing groups had an equal number of direct connections with other actors in the network (=6). This indicates that both groups had equal access and potential control of the flow of information and resources from the assisting agencies and from tourist providers. However, in terms of Betweenness centrality, PISA has a higher score (=11) than PWWG (=7.5). This means that the former lies more frequently in between the other actors than that of the latter. This position made PISA a more efficient bridge through which information, resources, and benefits could be channeled from outsiders to the local community than the older organization.

The higher Betweenness centrality measure of PISA is due to the integration of the former Resisting Villagers into the group. The sociograph also shows that local people who were once faithful to PWWG started to connect with PISA. People wanted to maximize the benefits from the growing tourism activities and they witnessed the capacity of Jay’s group to bring in tourists to the island. Thus, other Cooperating Villagers, while maintaining their affiliation with PWWG, also informally transacted and participated in PISA’s touristic services. This situation led not only to the decentralization of the tourism industry, but also to the declining commitment of people to a single affiliation.

Figure 2 Tourism network during the period of internal competition



5.3 Period of the Decline of Formal Organization and the Emergence of New Organizing Networks

When the last funding agency (i.e., AF) that supported Pamilacan community tourism project left around the year 2010, the situation changed drastically. With no more financial and technical assistance coming in, both PWWG and PISA experienced financial and organizational difficulties. The situation was worsened with the increasing number of competitors from outside, particularly the boatmen from the neighboring island of Panglao and the hotels/resorts who by that time started to operate marine life tours on their own.

Pamilacan community-based tourism depended heavily on external support. The once well-supported community organizations now had to live by their own resources. Communal funds started to be exhausted and income from touristic activities could no longer provide the incentives to cooperating members. Members were becoming “lukewarm to engage in communal activities,” as the former village Chief described the situation. Blaming the funding agencies, he argued that local people became too dependent on funding agencies. “They [villagers] still continue [to participate in touristic services],” he said. “However, unlike before when it started, there were funds from outside and people were enticed by these.”

People started to lose interest in cooperating in collective activities. Members expressed their frustration with the declining number clients and the decreasing income, while seeing external competitors bringing in more tourists to the island. The wife of a PWWG leader commented on the declining collective industry: “No more,” she lamented, “We [our business] will become slower and slower.” The PWWG women also felt the declining community livelihood with the growing external competitors. Financially exhausted and started to lose its members, PWWG organizational structures began to breakdown and its leadership becoming dysfunctional. People would no longer participate in communal activities, nor listen to their leaders. For example, of the around 100 registered members, only around 10 to 15 people would participate in regular meetings. Because of this, regular group gatherings were cancelled. The Chairman also complained about members who no longer consult him in making decisions regarding the organization, nor coordinate with him about incoming touristic activities. Communal fund and properties were nowhere to be found.

The declining number of clients, particularly of PWWG, was due in part to the inability of the organization to market its touristic services. The group neither had the financial resources, nor the professional capacity to engage in marketing activities. Before, organizing agencies took the responsibility of marketing Pamilacan community tourism, but now such support no longer exists. In addition, the leadership refused to take in private individuals to take care of marketing, thinking that such partnership would only lessen their share of income. For example, Jay offered to market the group’s service while taking 5 percent of the income for each transaction he could make. However, his offer was rejected because for the leaders, it was too high.

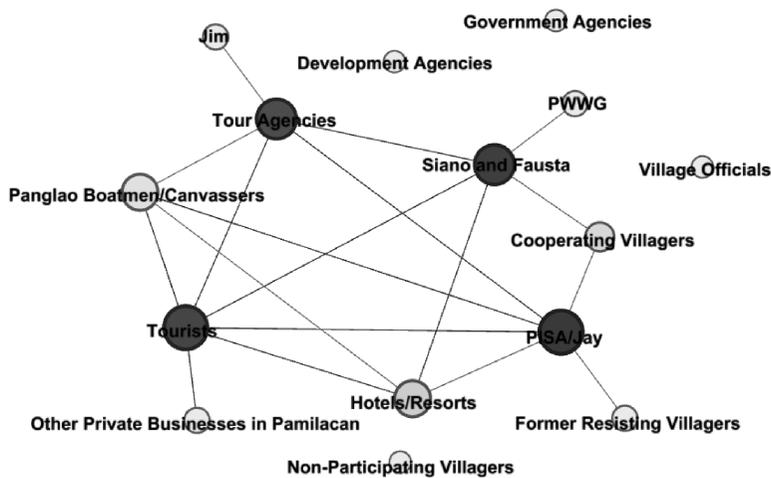
With their own understanding of self-sufficiency, PWWG officers wanted to do everything by themselves even without the marketing and technical skills. Their attempts all failed and money wasted. In the face of growing competition, the group was not able to make new connections with clients while older clients started to transact with its competitors. The organization became isolated from the tourism network. This marginalized the group from the local touristic network and thus from the flow of resources. With its limited local resources, the organization suffered exhaustion - communal funds dried up, while income from touristic services was declining. The group could no longer maintain its activities nor provide incentives to its members.

External competitors continued to grow in number. The once faithful tour agencies and individual tourists were now transacting with other service providers, particularly with the boatmen based in the neighboring Panglao Island. Aside from their cheaper rates (i.e., PhP 1,500 per trip) compared to that of the Pamilacan villagers (i.e., PhP 3,000), connecting with these boatmen lessens transaction cost. Since these competitors are stationed in Panglao Island (one of the province's top destinations where most hotels/resorts are located), tour agents do not need to transport guests to Baclayon port which save them time and money. Tourists also find it more convenient to contact these people than those in the far away Pamilacan.

The loss of external funders and the growing competition also challenged PISA. Financial difficulties triggered conflicts among its members. Although it lost its original identity as community organization, members remained connected with each other. Unlike PWWG, PISA members opened up to marketing partners. The group decided to retain its connection with Jay who, by that time, had been operating his touristic business. The group knew that Jay possesses the necessary material resources and connections with tour agents, tourists, and funding agencies to operate touristic businesses. Through informal agreement, the group functions as service personnel for Jay's guests, while Jay takes care of marketing the group's services. With this arrangement, PISA does not have to worry about marketing its services, nor pay the costs of transacting with tourist providers and individual tourists. Members are able to focus their energy and resources on operating tours, particularly transporting guests for dolphin and whale watching.

During the decline of formal community organizations, local villagers reconstructed their pattern of interactions. Through informal transactions among fellow villagers and with outsiders, local people were able to continue to participate in and benefit from the touristic activities in their community even with the fall of formal organizing structures. Several individuals are central in mobilizing touristic transactions between outsiders and the local people. One is Jay of PISA who was able to maintain business partnerships and build connections with new clients and prospective funding agencies. Another is Siano (one of the coordinators of PWWG) with his wife Fausta who took the initiative of coordinating with clients without going through PWWG protocols. Doing touristic businesses with outsiders, these individual villagers started to informally employ other villagers as service providers.

Figure 3 Tourism network during the decline of formal organizations and the emergence of informal transactions



Villagers coordinate either with Jay or Siano and Fausta. These individuals have become “bridges” through which islanders continue to connect to the touristic network and thus benefit from it. In this way, the local people, who do not have the financial capacity to do business on their own, continue to participate in the tourism industry, otherwise isolated with the fall of the formal organizing activities.

With his financial capacity (which, according to his accusers, came from organizational funds), Jay was able to start his private tour services and accommodation in the island. He was also able to maintain connections with PISA people who become his service providers, but without becoming his employees. Transactions were made through informal arrangement without formal written contracts. For example, Jay takes certain percentage from the income of every touristic transaction he facilitates. Using modern means of communication and advertising, such as the internet and television, Jay was able to market Pamilacan and expand his clientele. He administered his own website and even appeared in the national television. He also participates regularly in tour expos and joins tour business organizations. Using the story of the Pamilacan community, he coordinates with government agencies and NGOs to support his touristic activities.

On the other hand, Siano with his wife Fausta gets most clients from former contacts. Through his husband, Fausta acquired the official cellphone number of PWWG after the group’s disorganization. This had been the main contact number published in advertising materials during the early years of PWWG. In spite of the growing competition, some tour agencies, hotels/resorts, and former guests still contact this number whenever they request for marine tours. Through this cellphone, Fausta is able to connect with clients and bring in guests to the island. In addition, her husband, Siano has also become the face of PWWG. Some tour agencies think that he is the chairman of the organization and thus continue to support him. For example, one local tour agency has been faithfully supporting

the community industry since the beginning through Siano. "I have been working with Siano for long time," the owner commented, "So I am more comfortable transacting with him."

In spite of the collapse of the formal organizing structure, remaining PWWG members still interact with each other. Since most of them are close neighbors and participate in other community activities (such as religious gatherings), their connections remain. Although not a PWWG member herself, Fausta took the initiative in coordinating with these villagers for incoming touristic services. Villagers trust her and her husband because the couple has not been involved in any accusations of corruption in the former organization. Remaining women members, at the bottom level, still function as cooks and helpers whenever Fausta would ask their services. She also coordinates with boat captains and spotters, although they could now freely transact with clients on their own. Through this informal arrangement, villagers are able to continue to participate in touristic services and thus gain benefits. Although, income from touristic activities is lower compared to the former years, local villagers of Pamilacan continue to be integrated within the touristic network involving their island. Otherwise, the collapse of formal organizing structure could have isolated them totally from the industry.

Informal transactions between villagers and outsiders generated new network pattern. Figure 3 visualizes the social network that has emerged from new transactions after the fall of formal organizing activities. The graph shows that among the service providers (excluding Hotels/Resorts and Tour Agencies) three main actors are competing in terms of Degree centrality: PISA/Jay (=5); Siano/Fausta (=4); and Panglao boatmen/canvassers (=4). This means that these three actors have potential control over the other actors in the network.

However, in terms of Betweenness centrality, PISA/Jay has the highest measure (=13) followed by Siano/Fausta (=12). These figures illustrate that in spite of the coming of outsiders, local actors still occupy Central position in the network. By connecting with these central actors, local villagers who do not have the means to create direct connections with tourists and tourist providers, continue to participate in the local tourism without having to pay a high cost.

6. Discussion and Conclusion

The evolving social networks in Pamilacan tourism illustrates how villagers are able to maintain their participation in local tourism and continue to benefit from it in spite of the failure of formally organized activities. Through employing informal transactions, local people remain integrated in the tourism network, otherwise the collapse of the formal organizing structures could have totally isolated these people from the industry, and outsiders could have taken over the operating of touristic services without necessarily involving the locals.

Overly dependent on external assistance, the community-based tourism organization collapsed when organizers left the island. Financial and technical resources were exhausted and income from

the community business could not compensate in providing the needs of the organization. Number of clients had declined with the growing external competitors. The formal organizing structure could no longer function to access resources and facilitate the flow of benefits since most of its ties with former supporting actors had gone out. Because of limited local financial and technical capacity, PWWG was not successful in marketing its services which could have expanded its networks with outsiders.

Faced with this reality, islanders reconstructed their pattern of interactions without following their organization's protocols. Through informal transactions among themselves and with outsiders, villagers were able to continue participate in the local tourism industry even without formal organizing structures. After defecting from official procedures, certain individual islanders became central in facilitating interactions between locals and outsiders. With their established social connections and means of marketing, these individuals were able to have direct connections to clients and expand their networks. Their ties with outsiders enabled them to access both material and technical resources. On the community level, these individuals gained trust either for their moral credibility or professional and material capacity to engage in business. For example, villagers connect with Siano and Fausta because they trust the couple for not being involved in corruption. Former resisting villagers found the opportunity to participate and benefit from the thriving industry by connecting with Jay. Villagers were also convinced to join him, in spite of the accusations from his former group because they trust his professional and the technical skills to operate touristic businesses. Still other villagers connect to both because they want to maximize the benefits from the industry.

After the formal organizing structures collapsed, the above individual villagers serve as "bridges" between tourists, tourist providers, and assisting agencies through which information, resources, and benefits could flow and reach the villagers. This pattern of interaction is not something new for the villagers. It had been employed in operating their former traditional hunting livelihood with which transaction is based on informal agreements and communal support. This system is advantageous because it enables them to engage in touristic businesses with less cost. On the part of the bridging locals, having formal employees in running the business would be more costly than transacting informally with fellow villagers who would provide them with services they need. On the part of the villagers, transacting directly with tourists and tourist providers needs marketing and business skills and material facilities, which these local people do not possess, and are costly to acquire. With this arrangement, internal connections among villagers have been strengthened and the value of mutual support has been revitalized.

The changing conditions involving Pamilacan tourism, particularly the exhausted financial and technical resources, the dysfunctional formal organization, and the increasing number of external competitors, necessitate restructuring local people's pattern of interaction - from formal to informal arrangements. The original organization (i.e., PWWG) lost its central position in the tourism network due to its unwillingness and incapability to build new connections with the other players in the

industry. This attitude disconnected the organization from the flow of resources and information, particularly those coming from the tourist providers, and consequently isolated itself from the whole touristic system.

Situating the case of Pamilacan tourism into the wider discussions on community approach to tourism in a village context, we can learn meaningful insights as follow:

- (1) Failure of formal organizing activities does not necessarily mean total loss of community tourism industry, and
- (2) Villagers are capable of addressing the problems of limited resources, internal conflicts, and competition by restructuring their social networks in order to gain access to resources, build mutual support, and thus benefit from the local tourism industry.

First, the case of Pamilacan challenges earlier studies which equate the success and failure of community-based tourism based primarily on the sustainability of formal organizing activities. These studies see the collapse of formal organizing projects as a total failure of community tourism without looking into the emerging informal organizing activities which sustain local people's livelihood. Using social network analysis, this case study illustrates that local people have the capacity to restructure their pattern of interactions and place themselves in favorable positions enabling them to access resources even without formal organizing structures.

Second, this study challenges the view of community based tourism as a self-sufficient local industry. In reality, most of the communities in developing countries have very limited resources. The idea of self-support could only isolate communities from the wider network, thus depriving them from resources, information, and innovations. This could lead to exhaustion. Community-based tourism projects should acknowledge and take into account existing patterns of interactions among the villagers that facilitate livelihood activities and address the issues of scarce resources, conflicts, and competition in organizing touristic activities.

This study does not reject the formal institutional approach to community tourism, nor claim that the present informal arrangement operating in the island is more sustainable than the original formal arrangement. Rather, this study argues that networking with the other actors in the tourism industry is inevitable requirement for community-based tourism activities to sustain. The case of Pamilacan tourism clearly illustrates this reality at least within the period of seventeen years. The condition of connectedness characterizes both the early phase of the formal tourism organization in Pamilacan (when it enjoyed a period of success having many connections even during the time of internal competition) and the present informal arrangements. When its connections collapsed and it was not able to build new partnerships, the formal organization was not able to restructure its networks until it became isolated and its resources started to be exhausted. Facing this condition, local people resorted to

informal transactions forming network to continue participate in and benefit from the tourism industry.

Limited resources (e.g., material, technical, and information), unstable traditional livelihood, and high level of competition often characterize communities involved in tourism in developing countries. Enhancing the local people's skills for touristic services is not enough. Through broadening networks, local organizations and individuals are able to access information and resources, enhance communication and understanding among themselves, and bring about the integration of participants into the wider system. In this way, community approach to tourism, with its visions of self-sustainability and self-sufficiency, may not lead to isolation of local communities, but interdependence and connectivity with the other actors in the industry.

Notes

- 1 "Attribute data" include people's individual or collective attitudes, opinions, and behavior which could be collected through surveys and interviews. "Relational data" include contacts, ties and connections, which link actors which could not be regarded as properties of individuals but of systems of agents (Scott 2011: 2-3).
- 2 Although the island is rich in marine resources, most of the seas surrounding the island are restricted marine sanctuaries; Agriculture had become unproductive due to past soil erosions and pest attacks. The island also suffers from lack of tap water source.
- 3 Recognitions include those from international development institutions like the World Travel and Tourism Council (see WTTC n.d.). Each year WTTC accepts applicants for four categories relating to ecological conservation and tourism activities. In 2006, the Council awarded Pamilacan community tourism organization as a finalist in its Conservation category.
- 4 For algorithms, please see Brandes 2001; Scott et al. 2008: 161-162. Numerical values of network properties (particularly Centrality measures) are indicated primarily to illustrate differences and facilitate comparison between actors.

References

- Bastian, M., S. Heymann, and M. Jacomy. 2009. *Gephi: Open Source Software for Exploring and Manipulating Networks*. International AAAI Conference on Weblogs and Social Media.
- Beeton, Sue. 2006. *Community Development through Tourism*. Collingwood: Land Links.
- Blackstock, Kirsty. 2005. A Critical Look at Community Based Tourism. *Community Development Journal*. 40(1): 39-49.
- Brandes, Ulrik. 2001. A Faster Algorithm for Betweenness Centrality. *Journal of Mathematical Sociology*. 25(2): 163-177.
- Brie, Michael and Erhard Stölting. 2012. Formal Institutions and Informal institutional arrangements. In Thomas Christiansen and Christine Neuhold, eds. *International Handbook on Informal Governance*. Glos/Massachusetts: Edward Elgar Publishing Limited, pp. 19-39.
- Bryman, Alan. 2008. *Social Research Methods (3rd ed.)*. Oxford: Oxford University Press.
- Dredge, Dianne and Christof Pforr. 2008. Policy Network and Tourism Governance. In Noel Scott, Rodolfo Baggio, and Chris Cooper, eds. *Network Analysis and Tourism*. Clevendon/Buffalo/Toronto: Channel View Publications, pp. 58-78.
- Freeman, Linton. 1978/79. Centrality in Social Networks Conceptual Clarification. *Social Networks*. 1: 215-239.

- Goodwin, Harold and Rosa Santilli. 2009. Community-Based Tourism: A Success? *Responsible Tourism*, ICRT Occasional Paper 11: 1-37.
- Heah, Michael. 2006. *Best Practices in Sustainable Tourism Management Initiatives for APEC Economies*. Singapore: APEC Secretariat.
- Holden, Andrew. 2008. *Environment and Tourism*. London/New York: Routledge.
- Jigang, Bao and Sun Jiuxia. 2007. Difference in Community Participation in Tourism Development between China and the West. *Chinese Sociology and Anthropology*, 39: 9-27.
- Mitchell, Jonathan and Caroline Ashley. 2010. *Tourism and Poverty Reduction: Pathways to Prosperity*. London/Sterling, VA: Earthscan.
- Moscardo, Gianna. 2008. Community Capacity Building: An Emerging Challenge for Tourism Development. In Gianna Moscardo, ed. *Building Community Capacity for Tourism Development*. Oxfordshire/Massachusetts: CAB International, pp. 1-15.
- Murphy, Peter. 1985. *Tourism: A Community Approach*. New York: Methuen.
- National Statistics Office - Philippines. 2010. *Total Population by Province, City, Municipality and Barangay*. Accessed on June 12, 2012. http://www.census.gov.ph/data/sectordata/2010/2010CPH_reg7.pdf.
- Nohria, Nitin. 1992. Is a Network Perspective a Useful Way of Studying Organizations? In Nitin Nohria and Robert G. Eccles, eds. *Networks and Organizations*. Massachusetts: Harvard Business School Press, pp. 1-22.
- Okazaki, Etsuko. 2008. A Community-Based Tourism Model: Its Conception and Use. *Journal of Sustainable Tourism*, 16(5): 511-519.
- Olson, Mancur. 1998. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge/London: Harvard University Press. (Orig. pub. 1968.)
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.
- Pan, Grace Wen. 2008. International Tourism Trade Networks: The Case of the Chinese Inbound Travel Trade to Australia. In Noel Scott, Rodolfo Baggio, and Chris Cooper, eds. *Network Analysis and Tourism*. Clevedon/Buffalo/Toronto: Channel View Publications, pp. 115-130.
- PAWB-DENR and PCW. n.d. *Developing a Gender-Responsive Ecotourism Management Plan: The Case of Pamilacan Island, Baclayon, Province of Bohol, Philippine Commission on Women*. Accessed on November 11, 2014. <http://www.pcw.gov.ph/publication/gender-responsive-toolkit-ecotourism-planning-and-management>.
- Province of Bohol and German Development Service. 2010. *Biodiversity Conservation and Ecotourism Framework Plan of Bohol 2006-2015*. Accessed on June 18, 2011. http://www.ppdobohol.lgu.ph/?page_id=2727.
- Radcliffe-Brown, A. R. 1965. *Structure and Function in Primitive Society*. New York: The Free Press.
- Rocharungsat, Pimrawee. 2008. Community-based Tourism in Asia. In Gianna Moscardo, ed. *Building Community Capacity for Tourism Development*. Oxfordshire/Massachusetts: CAB International, pp. 60-74.
- Sammy, Joy. 2008. Examples of Effective Techniques for Enhancing Community Understanding of Tourism. In Gianna Moscardo, ed. *Building Community Capacity for Tourism Development*. Oxfordshire/Massachusetts: CAB International, pp. 75-85.
- Sebele, Lesego. 2010. Community-based Tourism Ventures, Benefits and Challenges: Khama Rhino Sanctuary Trust, Central District, Botswana. *Tourism Management*, 31: 136-145.
- Scott, John. 2011. *Social Network Analysis: A Hand Book (2nd ed.)*. Los Angeles/London/New Delhi/Singapore/Washington DC: Sage.
- Scott, N., R. Baggio, and C. Cooper. 2008. *Network Analysis and Tourism*. Clevedon/Buffalo/Toronto: Channel View Publications.
- Shih, Hsin-Yu. 2006. Network Characteristics of Drive Tourism Destinations: An Application of Network Analysis in Tourism. *Tourism Management*, 27: 1029-1039.
- Telfer, David and Richard Sharpley. 2008. *Tourism and Development in the Developing World*. London/New York: Routledge.
- Tichy, N., M. Tushman, and C. Fombrun. 1979. Social Network Analysis for Organizations. *Academy of Management*

- Review*. 4(4): 507-519.
- Timur, Seldjan and Donald Getz. 2008. A Network Perspective on Managing Stakeholders for Sustainable Urban Tourism. *International Journal of Contemporary Hospitality Management*. 20(4): 445-461.
- Tremblay, Marc-Adelard. 1957. The Key Informant Technique. *American Anthropologist*. 59(4): 688-701.
- Twining-Ward, Louise. 2007. *A Toolkit for Monitoring and Managing Community-based Tourism*. Brooklyn: SNV.
- Wilkinson, Ian and Roger March. 2008. Conceptual Tools for Evaluating Tourism Partnerships. In Noel Scott, Rodolfo Baggio, and Chris Cooper, eds. *Network Analysis and Tourism*. Clevedon/Buffalo/Toronto: Channel View Publications, pp. 27-39.
- WTTC. n.d. *Dolphin Watch Pamilacan, Philippines: Finalist Conservation Award 2006*. Accessed on February 21, 2012. http://www.tourismfortomorrow.com/Winners_and_Finalists/Previous_Winner_s_and_Finalists/2006_Winners_and_Finalists/Dolphin_Watch_Pamilacan/
- WWF-Philippines. *Biota Filipina*, June 2006. Accessed on April 09, 2013. <http://www.wwf.org.ph/downloads/Biota/Jun2006.pdf>.