

CHAPTER VI: OUTPUT AND OUTCOME

Existing relationship and Social capital: What have we become after the disasters?

6.1. Introduction

This Chapter discusses the output and outcome of the cross-sector collaboration of the Philippine DRRM network during disaster response since 2011-2015. Theoretically, Bryson, Crosby, and Stone (2006) refer output and outcome to the relationships built after the cross-sector collaboration.

For this study, the output is operationalized in terms of the existing relationship between and among the members of the network as suggested by the result of the analysis on the structural configuration of the network in Chapter 4 and governance processes in Chapter 5. Meanwhile, the outcome is used to refer to the social capital in the community particularly on the social trust and institutional support rendered by the survivors of the victims of typhoon Washi in 2011 to the other members of their community and to the government institutions.

This chapter presents the output of the cross-sector collaboration based on the analysis offered in Chapters 4 and 5. Subsequently, the result of the analysis of the outcome of the disaster collaborative management based on the dimensions of social capital is shown followed by a discussion. Finally, conclusions are presented

6.2 Existing relationship

As the output of the cross-sector collaborative disaster governance in the Philippines, the existing relationship is quantitatively measured in terms of the frequency of the respondent's interaction with the other members of the network. The respondents assessed the frequency of their interaction with other agencies in the delivery of their mandates. In Chapter IV, the higher the frequency the more connected the agency with the other members of the network (network analysis) while in Chapter V, the sum of such frequencies is considered the value of existing relationship which was utilized in SEM together with the other variables in this study.

The data presented in Chapter IV showed interesting findings among the characteristics of the governance networks in the local government units and the regional level. Generally, the networks' high-density scores, lower diameter, and lower average distance are products of a lesser number of network members which suggest easier familiarity between and among agencies. On the hand, the regional and over-all disaster management networks' low density and higher average distance suggest a lesser connected relationship between member agencies. Meanwhile, the local disaster management networks show that there is high density, higher diameter, and the average distance are almost the same as the rest of the networks.

The value of the density scores suggests that in the Local Government Units of Misamis Oriental, Cagayan de

Oro, and Iligan City, there are relatively a number of connections (high density) among their respective networks. However, the density of the networks of the Region X DRRM Council and the over-all DRRM network in the Region is low which implies fewer connections among member-agencies in the network. Moreover, the diameter scores of the networks are high which means that despite the number of connections, member-agencies are still distant from each other. Practically, the data showed that each agency is at least 3 agencies apart from the other agencies. This data suggests that the member-agencies in the network lack familiarity with each other.

Therefore, the lesser number of agencies involved in the Regional level of disaster management, lesser connections are made particularly towards the member-agencies in the local disaster management networks. Hence, various challenges are encountered during disaster response operations. This finding is consistent with the data presented in Chapter V that the major problems in times of the disaster management are the lack of available resources and the absence of reliable information.

Moreover, the less centralized nature of the disaster response networks disrupts the governance processes. The mandated structure of the network strengthens the capacity of the lead agencies to steer the disaster response operations in the region. Kapucu (2006) asserted that a network should remain highly centralized in decision-making and becomes decentralized in the implementation of policies. The data

revealed that decision-making is shared by the members of the network as well as its implementation. Further, the data indicated that there are agencies which are not as active as they should be given that their mandate on disaster management is just among of the mandates given to their agencies. As a result, in times of disasters, decision-making is slow as it requires that the network convenes, and a consensus is reached before an important action is done. Thus, disaster response is considered slow and ineffective.

Further, the data revealed that despite the lessons learned by the member-agencies in their respective experiences in disasters as revealed by the statistically significant relationship of the previous performance to initial agreement, leadership and managing conflict (Chapter 5), and despite their efforts to provide innovation and changes to improve the governance processes of the network, still none of such mechanisms were significant in explaining the existing relationships in the disaster response networks.

The data also suggested that with strong leadership capabilities, governance processes could significantly improve. The positive relationships between leadership, initial agreement, and trust propose that when lead agencies are skilled enough to innovate and transcend beyond politics, motivation among network members might easily observe together with deeper relationships in the network in terms of dependability and competence in times of disasters. More importantly, deeper relationships among agencies lead to more effective mechanisms in managing conflict and

emergent disaster planning. Therefore, strong leadership capabilities have the potential to be sufficient in effectively managing post-disaster conditions in the country.

Unfortunately, the mechanisms and governance processes currently in place in the disaster management networks are insufficient and statistically not associated with the existing relationship of the network as assessed by the respondents themselves. Therefore, disaster governance processes in the disaster management network are relatively weak.

Moreover, despite the assessment of the disaster governance, the impact of disaster governance to the victims of the typhoon and the community at large is noteworthy to explore.

6.3 Impacts of disaster governance on the social capital

6.3.1 Introduction

The impacts of disasters vary between different communities. Some communities are more resilient while others are having difficulties in coping the impacts of disasters. The varying capacities and characteristics of each community provide a possible explanation for this observed reality. Primarily, the community's capacities and characteristics are a major part of the overall social network which is best understood in the context of social capital. As Zhao et al. (2013) put it, disaster causes social order following social disorders and conflicts. Hence, in managing

disasters it is important to consider social networks, social relationships and social structure of a community as these are the basic social unit that must be assessed before and after disasters (Drabek et al. 1981).

Several pieces of research have been made on the role of social capital in disaster management and community resilience (Shaw and Goda 2004; Hawkins and Maurer 2009; Lalone 2012; and Murphy 2012). Disaster resilience, to a certain extent, is attributed to social capital as eminent in community engagement (MacRae and Hodgkin 2010), shared communication and information (Miyaguchi and Shaw 2007) as well as interventions of non-government organizations (Pierre-Louis 2010). Currently, the role of social capital in the community and the impact of disasters on the community are not yet fully explored (Patterson et al. 2010; Albrecht 2017).

Over the years, Region X in the Philippines is one of the most typhoon-visited parts of the country. Hence, the authors deemed it necessary to investigate how social capital shape the post-disaster conditions in the affected communities of Cagayan de Oro and Iligan City after the 2011 Typhoon Washi. In doing so, trust and social cohesion, as well as the institutional dimensions of social capital, are particularly explored.

6.3.2 Findings

6.3.2.1 Trust and solidarity

Trust and solidarity as a dimension of social capital refer to the extent to which people feel they can rely on relatives, neighbors, colleagues, acquaintances, key service providers, and even strangers, either to assist them or (at least) do them no harm. In measuring the trust and solidarity dimension of social capital, key informants were asked about the goods or services that they have received from the people who have more than they have, people who have less than they have, people who have the same capacity as they have, and from closely related family members.

Figure 3 shows that for both Cities, food, clothes, medicine, household items and introduction to potential employers or influential people are the goods and services that are most received from the people who have more than what the key informants have. On the other hand, in terms of the goods received from the people who have less than the key informants, food and in-kind services are the most common among the key informants from both cities including clothes and households items for Iligan City informants. Meanwhile, in terms of the goods and services received from those people who have about the same as what the informants have, food, clothes, school supplies, household items and in-kind services are common in Iligan while in Cagayan de Oro City, food, money, medicine and in-kind services are commonly received by the key informants. Lastly, money, food, and clothes are the most

received goods from the key informants' close family friends and relatives.

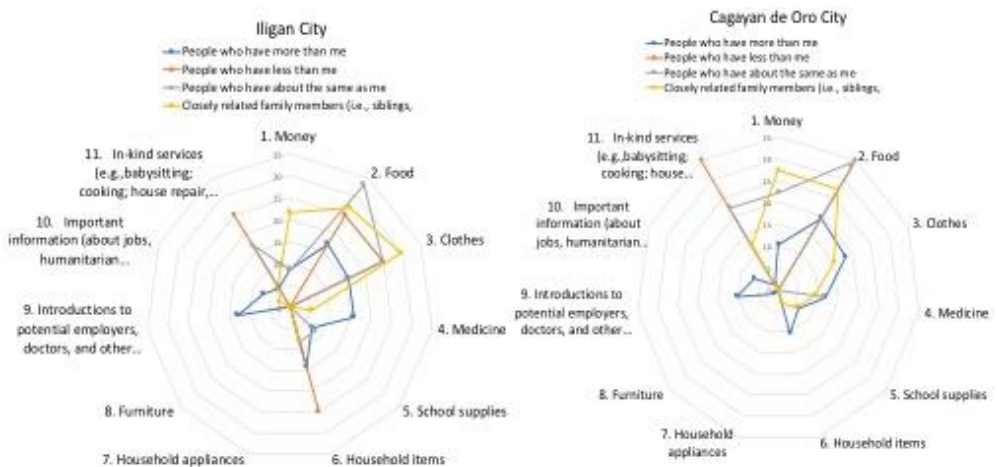


Figure 6.1 Trust and solidarity based on the goods and services received by key informants

Generally, food is the most received goods in times of disasters, followed by clothes, money, medicine and in-kind services. Moreover, introduction to potential employers or influential people is only offered by the people who have more than what the key informants have. On the other hand, in-kind services are rendered both by the people who have less and who have the same status as the key informants. G. Rivera recalled that "our neighbors helped us during the typhoon. They rescued us from our homes and they gave us clothes in the evacuation center" (personal communication, December 16, 2016). Ms. R. Polinar expressed that "our

condition in the evacuation center was bearable. I and the other victims shared our experiences, sentiments, and grief, and somehow, I feel lighter, and better" (personal communication, December 21, 2016). These findings imply that solidarity is apparent in the community.

6.3.2.2 Social Cohesion

Moreover, in terms of understanding social cohesion, key informants were asked about their social networks (see Figure 4). Particularly, on who or what social institution do they tap whenever they have problems such meeting their basic needs, have the desire to improve their social and economic situation or maintain social relationships in the community. Figure 4 shows that in terms of meeting the minimum basic needs, the key informants generally, turn to closely related family members, NGOs, and religious organizations. Primarily, key informants from Cagayan de Oro, turn to community elders or community leaders. Meanwhile, in terms of improving the social or economic condition, key informants are more keen on NGOs followed by closely related family members. Key informants from Iligan turn to religious organization too and those from Cagayan de Oro, turn to nearby friends. Lastly, in terms of maintaining social relationships, key informants most often go to closely related family members, NGOs, and nearby friends. Informants from Iligan City turn to rural relatives and religious organizations while informants from Cagayan de Oro turn to neighbors and community elders and traditional leaders.

Generally, in times of disasters, key informants commonly go to non-government organizations and closely related family members such as siblings, parents, and children. Key informants from Iligan City go to religious organizations, charities and rural relatives more than the informants from Cagayan de Oro. While informants from Cagayan de Oro turn more on their nearby friends, neighbors and community elder or traditional leaders. Ms. C. Rapanot shared that "Bible study was conducted regularly in our evacuation center and it made us feel better and closer to each other" (personal interview, December 16, 2017). Additionally, Ms. D. Camasura explained that "the help from the government and other groups arrived days after the typhoon. And in order for us to survive, my family and other evacuees shared whatever we had like food, milk, biscuits." Meanwhile, key informants from Iligan City received assistance from religious organizations. Mr. F. Maturan shared that "when Sendong happened, the Church was quick to send us food and clothing in our evacuation centers. The Church also gave us a temporary source of income" (personal interview, December 18, 2017). These findings imply that key informants in Cagayan de Oro have stronger bonding social capital, while key informants in Iligan City have stronger bridging social capital.

Although the majority of the key informants no longer part of any group after the typhoon, some of the key informants remain part of their respective social network. In Iligan City, most of the key informants (20%) who belong to a group, are members of the Basic Ecclesiastical

Community, a church-based group, while in Cagayan de Oro, 26.67% of the key informants are members of the Homeowners Association who cited that being a member of the Homeowners Association give them an assurance that in times of calamity, their group will help its affected members. On the other hand, key informants from Iligan City expressed that being a member of a church-based group help them in praying and in loving God more. Other benefits of a group membership cited by key informants are the livelihood assistance and the cash assistance that a member can avail to address the daily needs of the family.

In an interview with Ms. R. Tomondo (Iligan City), she stated that "being part of a group in the community helps in securing the daily needs of my family especially in times of emergencies" (personal interview, December 22, 2017). When asked about the problems encountered in being a member of a group, the key informants cited that the most common problem is that some members are not able to comply with their obligations, such as payment of their debts and misunderstanding during meetings which sometimes results to backstabbing/backbiting or bigger conflict. Meetings are held to fix the differences among members and in terms of financial obligations, the group members pay for the unpaid debt. Ms. S. Barrios shared that "because of the differences among members in the group, many are no longer active and sometimes, the group is taken down" (personal interview, December 18, 2017).

These findings imply that social cohesion in the disaster-affected communities is bound by common interests and abilities which are commonly demonstrated through communal activities such as Barrio fiesta commonly for religious groups, and other activities which the group has initially agreed. For example, some groups are organized to provide assistance to the family of the member who is in need or provide financial assistance or in-kind services whenever there is a funeral. Moreover, the findings revealed that the success of these groups lies in the members' adherence to norms and agreed policies. In doing so, some members of the community are excluded from these organized groups.

6.2.2.3 Institutional Analysis

Figure 6.2 revealed that NGOs is one of the social networks that key informants go to in times of need. This result is consistent with the data in Figure 6.3 where local and international NGOs are the most trusted institution of the key informants in times of disasters. As shown in Figure 6.3, key informants perceived that among the social institutions, the Social and Welfare Office of the government is the most trusted, reliable and effective institution, followed by International and local non-government organizations and the Church. Ms. S. Colot of Iligan City stated that "the Social and Welfare Office of the City and the Mayor's Office gave us relief such as food and clothing and later on, the aid from the Regional office of DSWD, and NGOs arrived" (personal interview, December 16, 2017).

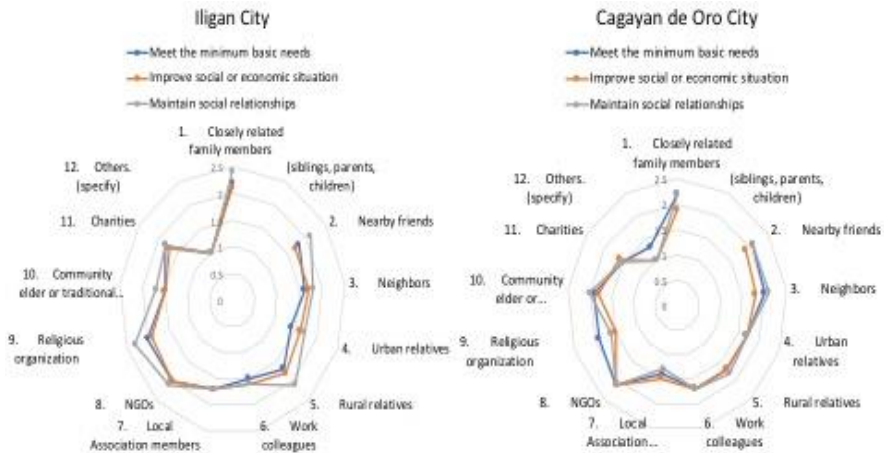


Figure 6.2. Social Network

Interestingly, key informants from Cagayan de Oro City expressed relatively higher trust among public hospitals, village, barangay and city officials (Mayor, Councilors, DRRM Office), army and the police forces (see Figure 5). One of the key informants from Cagayan de Oro, Mr. M.J. Pagayogdog explained that “I will always be grateful to the soldiers and rescuers who saved me and my family during Sendong. If it were not for their quick response, any of my family members could have been dead by now. They brought us to the evacuation center where there were food and water” (personal interview, December 27, 2017). Ms. L. Ramirez added that “aside from the relief goods from the City and NGOs, we also received cash from our LGU. It was only 1,000.00php but it meant so much to us because we were able to buy the things that we need that

were not provided in the relief goods” (personal interview, December 19, 2017). These findings are supported by the results of the Citizen Satisfaction Index System.

In 2012, the Department of Interior and Local Government (DILG) launched the Citizen Satisfaction Survey (CSIS) as part of the Philippine Development Plan 2011-2016 of the Aquino Administration. The CSIS served as a set of mechanisms that generate citizens' feedback on local governments' performance on service delivery and the citizens' general satisfaction. The CSIS results showed interesting findings in terms of the health, education, social services, governance and response, public works and infrastructure, agriculture, environmental management, and tourism services of Cagayan de Oro and Iligan City.

For Cagayan de Oro (Quibal 2014) and Iligan City (Jovita et al. 2014), the findings on social services as well as governance and response services are almost similar as it revealed that many of the respondents were not aware of the social services offered by the City Social and Welfare Development (CSWD) as well as the governance and response services offered by the City Government. As a result, they were not able to avail of most of these services. However, for the very few who were able to avail of such services, they were highly satisfied. The results of the CSIS also revealed that most of the respondents of the survey (80%) were survivors of Typhoon Sendong, who affirmed that the Barangays were more active than the city in activities related to disasters. Nevertheless, the respondents commonly

asserted that they are generally satisfied in the adequacy of the government responses that came in the forms of relief, food, and relocation. These CSIS results imply that the people of the community trust the government and its institutions in their respective Cities as they are highly satisfied with the services rendered to them.

On the other hand, the findings in Figure 5 showed that the trust of the key informants in Iligan City is relatively lower than that of Cagayan de Oro. In an interview with Ms. D. Gomez and Mr. F. Risal, respondents from Iligan City, they mentioned that "they were disappointed because they know that there were donations which were corrupted by the City Government who received the assistance from various donors" (personal interview, December 8 and 13, 2017).

In an interview with the former DRRM Officer of Iligan, Mr. A. Bendijo narrated that "pre-emptive evacuations were made as well as ensuring that all human resources (i.e Army, Police, disaster responders) are positioned, to look after the communities in high-risk areas. Unfortunately, flashfloods wiped the communities near the major rivers and the damage was beyond the level of our preparation. Unfortunately, the City Government of Iligan was unable to respond fully as resources were needed to be re-aligned according to the level of priorities and the DRRM Council was unable to convene immediately until January of 2012 because the members themselves were affected by the flood and had to tend to the needs of their families. Despite our lack of manpower, we evacuated the victims of TS Washi

in covered courts of every barangay, schools, and churches. Together with the City Social Welfare and Development, who is the frontline in the City's disaster response and camp management, we provided the basic needs of the victims especially those who were in the hinterlands. Fortunately, the NGOs, CSOs, Church, and academe were able to mobilize on the spot, and there were assistance and resources poured for Iligan including the arrival of the response teams from the neighboring towns of Linamon and Kauswagan, Lanao del Norte who came to help in the retrieval and rescue operations” (personal interview, December 14, 2017).

Meanwhile, the Church and the Academe were instrumental to the post-disaster management in both Cities (see Figure 6.3). Fr. D. Manipon, representative of the Catholic Church in Iligan and Prof. E. Empig, the representative of the MSU-IIT stated that, “we were not ready for disaster but we had to address the need of the people who sought refuge in the Churches and University Gymnasiums and the absence or unavailability of government agencies in the first few days after TS Washi, forced us to create our own ways of managing the evacuees in our property" (personal communications, December 15 and 18, 2017). Volunteers such as Church parishioners and officials, University students, staff, and faculty as well as people who survived the flood, extended assistance and facilitated the activities in the Churches and gymnasiums. Disaster managers came out of the need to manage not just the victims but also the huge amount of donations given.

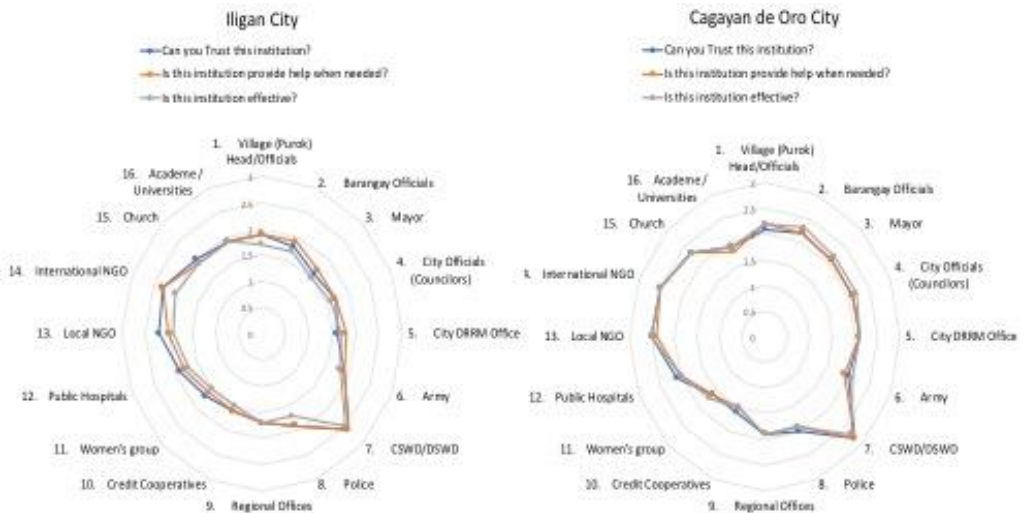


Figure 6.3. Institutional analysis

Beyond initial disaster response, the Church also donated hectares of land for the rehabilitation of the victims and the Academe strengthened its respective community engagement efforts by adapting and empowering communities. For example, Xavier University launched the Xavier Ecoville Project (<http://www.xu.edu.ph/xavier-ecoville>), a special resettlement project located in Lumbia, Cagayan de Oro City for the TS Sendong survivors. Xavier Ecoville is reputed as the first university-led resettlement project in the world. It serves approximately 2,800 people from different barangays of CDO with its current 568 permanent houses, chapel, multipurpose hall, multipurpose cooperative, basketball court and other facilities for its

residents. Different stakeholders are involved to ensure effective and sustainable partnerships: (1) the Xavier Ecoville community; (2) Government agencies, especially the Barangay Local Government Unit; (3) Xavier University; and (4) private organizations. In January 2012, the City Government started to oversee the evacuation centers managed by the University and the Church.

Similarly, CSOs and NGOs were also of huge assistance to the affected communities. Mr. I. Borja of Touch Foundation Incorporated of Cagayan de Oro stated that “I think many local NGOs, like us, were not prepared or trained to respond to disasters, out of the need to do something, we mobilized our resources, and coordinated with the Church and Universities in managing the assistance coming in as well as addressing the needs of the victims” (personal communications, December 15 and 18, 2017).

6.2.3 Discussion

The presence of solidarity and generalized trust among the members of the community who survived Typhoon Washi in 2011 imply resilience. Uslaner (2016) explained that generalized trust depends on the optimistic worldview and a sense of control-life is good, going to get better and I can help make it better. He argued that generalized trust is learned early in life and does not change for most people over time unless mistrust is already strong in the community. The findings revealed that in times of disaster such as Typhoon Washi, social trust is enhanced with the assistance received and shared by the key informants. Particularly, the relatively high scores for family

members in Figure 3 and non-government institutions (Church and NGOs) in Figure 4 show that solidarity and generalized trust are deeply rooted in the social relations for the community to rely on to in times of need. These findings are validated in the study of Rod (2016) where he found that *Bayanihan* or cooperation is widely practiced among Filipino communities. The practice of sharing or *Bayanihan* includes doing business, sharing jobs, money and favors with friends and family, which is beyond sharing and taking care of your family and kin during disasters (Rod 2016).

Further, the findings support the study of Quisumbing et al. (2012) that family is at the core of the social network among Filipinos. Cultural norms such as reciprocity, shame, and debt of gratitude, are oftentimes barriers that prevent the poor from asking help from family members and relatives in times of need (Quisumbing et al. 2012) however, in times of disasters, these norms are tempered as other people either relatives or strangers extended help and assistance. Lastly, the camaraderie among Filipinos in times of disasters, as revealed in the findings, validated the study of Clason (1983) that the caring relationships developed and nurtured in times of difficulties enables affected communities to endure and survive a crisis as revealed in the case of confined prisoners of war in Japan.

Significantly, the findings of this study showed that the solidarity among victims of disaster could be attributed to their economic status. With this, this study validates the study of Brisson and Usher (2005) that bonding social capital

which pertains to the network of trusting relationships, or social cohesion and trust, among members of a neighborhood, as well as bridging social capital or the network of relationships between the members of the community (organizations and institutions), are commonly shared in a low-income neighborhoods.

Meanwhile, social cohesion in the disaster-affected communities (bridging social capital) is bound by common interests and are commonly demonstrated through communal activities. For example, some groups are organized to provide assistance to the family of the member who is in need or provide financial assistance or in-kind services whenever there is a funeral. Moreover, the findings revealed that the success of these groups lies in the members' adherence to norms and agreed policies. In doing so, some members of the community are excluded from these organized groups. These findings are parallel to the findings of Portes (1998) and Arrow (2000) that the social capital enables the members of the community or a group to access benefits in terms of certain resources has the tendency to exclude nonmembers from access under certain conditions. As a result, social capital based on social interaction opportunity through social networking and receiving help did not seem to facilitate morale (Cheung and Chan 2010) which probably explains some key informants' lack of membership to any particular group years after the 2011 Typhoon Washi. These findings validate the study of Calo-Blanco, Mengel, and Romero (2017) as they expounded that

social cohesion increases after a disaster and slowly erodes in periods where environmental conditions are less adverse.

Moreover, the key informants' strong affinity to the Church based organizations and NGOs as well as charities (see Figure 5) imply that bridging social capital is strong which provide better chances in building an effective community-based emergency management. These findings support the findings of Hawkin and Maurer (2009) that bonding, bridging and linking social capital were instrumental in aiding participants to prepare for, endure and mutually aid one another before and during the storm, in addition to recovery following the floods. Moreover, the finding is consistent with the Murphy (2011) that the relationships in the community such as friendships, membership to a certain group and level of familiarity to certain groups or its members, indicates social capital vital coping capacity in times of crisis or disasters. Additionally, the Church and some NGOs have strong relationships with the community in the terms of mutual understanding and trust which could lead to effective response. Social capital, in all cooperation, enables faster output in terms of reconstruction, sustains initial alternatives, improves the capacity of the community, and enhances community participation which leads to successful initiatives (Shaw and Goda 2004).

Meanwhile, the findings established on the accounts of the key informants both survivors and local government officials revealed shortcomings during the post-disaster

activities. Fung (2015) believed that the failure to be responsive to the needs of the public adds to the continuing decline of public trust among government institutions. Brillantes and Fernandez (2011) explained that Philippines' unresponsive governance including the inefficient and ineffective delivery of services, waste of public resources, graft and corruption, lack of integrity in government, poor leadership, excessive red tape, ineffective reorganization and structural changes, too much centralization, among other things, led to the decline of trust in government and therefore require reforms. Quah (2010) explained that the lower level of trust and governance in the Philippines is the result of political instability, the failure of the political leaders to deliver the goods and combat corruption effectively, and its unfavorable policy context.

Significantly, the findings showed in Figure 6.3 revealed that key informants, particularly from Cagayan de Oro City have relatively higher trust in political institutions which imply that social capital is either unaffected or strengthened after the disaster. These findings are consistent with the research of Albrecht (2017) who investigated whether natural disasters and their management by governments generally affect political trust and satisfaction with the government among individuals and found that "disasters generally hardly affect political trust or satisfaction with the government among citizens." Instead, as revealed in the results of the Citizen Satisfaction Index System presented in the findings, the selected political attitudes among individuals appear largely unaffected with

the highly satisfied ratings given on both social as well as governance and response services of both cities. This study implies that despite the shortcomings of disaster response, relief and rehabilitation efforts of the government, the community remains to believe that their respective local officials are capable of helping them in times of need and are therefore can be trusted.

6.2.4 Conclusion

This study found that the generalized trust among Filipinos is part of the social norms. The idea of close family ties and the practice of Bayanihan and cooperation, as well as religiosity, enhance bonding social capital as well as bridging social capital which explains resilience among Filipino communities. Moreover, this study revealed that disasters and crisis do not affect the quality of trust that communities have among its members despite the negative impacts disasters might have caused, such as crimes. Similarly, trust with social institutions is unaffected despite several lapses during post-disaster management. Instead, solidarity increases during disasters as implied in the neighbors helping neighbors practices, pouring out of donations, and volunteers. Significantly, communities develop a certain level of understanding in terms of the failure and appreciation of the performance of its government and social institutions in times of disasters. Therefore, the generalized trust among communities proves that there is a mutual confidence among members of the community that nobody will exploit each other's vulnerability. Hence, the socially cohesive nature of

communities in terms of camaraderie facilitated the rebuilding of societies after the 2011 Typhoon Washi.