CAPACITY BUILDING IN WOMEN'S NETWORKS BASED IN MYANMAR: THE ROLE OF EMPOWERMENT AND DIFFERENT TYPES OF CAPITAL

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Statement of original authorship

I certify that the work presented in this dissertation has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Also,a big thanks to my family back in Yangon, Myanmar. The prayers of my father and mother give me spiritual empowerment when I was away from home. Special thanks and love go to my only daughter, Inggyin, who understands and supports me with her great love at all times. To me, a greatest gift in this life is being the mother of Inggyin, who is such a wonderful and inspiring person in my life.

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ACRONYMS

ASEAN - Association of South East Asian Nations

AIDS- acquired immune deficiency syndrome

AUD- Australian Currency Dollar

DFID - Department for International Development

DSW- Department of Social Welfare, Relief and Resettlement

EU- The European Union

FAO - The Food and Agricultural Organization of the United Nations

FHH - Female-headed households

GNI - Gross National Income

HIV- human immunodeficiency virus

IFAD- International Fund for Agricultural Development

IFRC- International Federation of Red Cross/Red Crescent Societies

INGO - International Non-Governmental Organization

IPO- Input-Process-Output

LDC - Least Developed Countries

MMRD- Myanmar Marketing Research and Development

MoU- Memorandum of Understanding

NGOs - Non-Governmental Organization

NRC - National Registration Cards

OECD - The Office for Economic Co-operation and Development

ONS - Office for National Statistics

PE - Peer Educator

PM- Participatory Mapping

PPM- Participatory Process Map

Po NJA- The Post-Nargis Joint Assessment

PTSD - Post-Traumatic Stress Disorder

SLF - Sustainable Livelihood Framework

STI - Sexually Transmitted Infection

TCG- The Tripartite Core Group (ASEAN-UN-Myanmar)

The US government- The United States Government

TPEW- Trained Peer Educator Women

UN -United Nations

UNDP- United Nations Development Programme

UNESCO- United Nations Educational, Scientific and Cultural Organization

UNFPA- The United Nations Fund for Population Activities or United Nations
Population Fund

UNISDR- United Nations International Strategy for Disaster Reduction

UNOCHA- United Nations Office for the Coordination of Humanitarian Affairs

USA – The United States of America

V1- the poor performing village

V2- the medium performing village

V3- the best performing village

WFS- Women Friendly Spaces

WHO- World Health Organisation

(Myanmar language)

A Khun Hlut Zae- A tax-free market place

Form 10 - the permanent resident document

Ko-Htu-Ko-Hta - Help the self to help others

Kyat- Myanmar currency

Metta- Giving loving kindness

Ngwe-Shin - the wealthy villager

Sin-Ye-Tha - the poor villager

Sone-Se-Yar - Women Friendly Space

Swaen-aer'- Strength

Swaen-yae'- Capability

Tatmadaw - the military

Thar-hman - the middle class

Thu-Gyi   - the village head (Local Authority Figure)

ABSTRACT

This study examined the roles of empowerment and different types of capital in relation to women's levels of capacity building. It focused on women survivors of the 2008 Cyclone Nargis disaster who were involved in a 30-month INGO project created to aid their recovery. In order to analyse the women's levels of capacity building, three villages were selected from the same geographical locations in order to compare their situations before, during and after the INGO's project. A social capital conceptual framework, adapted from the World Bank, was integrated with an input-process-output model to assist the analysis of documents and data gathered through qualitative interviews and focus groups. The various forms of data collated were triangulated and analysed using Nvivo software. The findings confirm that the capacity building approach undertaken by the INGO was appropriate to support sustainable capacity building, empowerment and different types of capital development for the women concerned. It was also determined that training provision alone was not sufficient for their ongoing capacity building and empowerment. The research findings identified three new themes: participation; engagement and mutual respect, as a precursor to trust, indicating that in this case they were necessary for the women to gain the most benefit from development efforts. It is anticipated that the finding will be of assistance to researchers and practitioners associated with women's capacity building and empowerment and, in particular for those involved in humanitarian projects and disaster response and recovery across the globe and specifically, in relation to Myanmar.

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 Introduction

This chapter outlines the background to the study, its objectives, core arguments and the research questions. The primary aim of this thesis is to examine the capacity building and empowerment processes of women cyclone survivors in Myanmar and the role of different types of capital, particularly social capital in the process.

The study focuses on 45 women survivors of the 2008 Cyclone Nargis disaster. The women live in three villages in the Labutta region of Myanmar and were involved in a 30-month project provided by an international, not-for-profit organisation (referred to throughout as the INGO). It is anticipated that the findings will be of assistance to both researchers and practitioners, especially those associated with women's capacity building and empowerment, in association with the development of social capital in least developed countries (LDCs), humanitarian projects, disaster responses and recovery across the globe, both in relation to Myanmar and elsewhere.

Motivation for this study

A 2012 documentary made by the United Nations Fund for Population Agency (UNFPA) in Myanmar showed the recovery experiences of a 22-year old dependent housewife who had lost her husband and her eight-month-old daughter, together with her parents and siblings, due to the 2008 Cyclone Nargis. During the recovery period, she received various kinds of training and assistance through the 30-month INGO project. In 2010, approximately 24 months after the cyclone, she became a community leader and an assistant vocational teacher and tailor, specialising in Myanmar women's clothes and textile handicrafts. The story illustrated the changes from her role as a dependent housewife to becoming an independent community leader and teacher due to an INGO project. However, other post-disaster studies, such as those that investigated the 2004 tsunami affected population in Sri Lanka (Tull 2009) and the 1999 earthquake survivors in India (Jigyasu 2002), indicate that disaster affected populations are likely to

encounter challenges in their recovery process until approximately 20 months after a tsunami and 7 or 8 years after an earthquake has occurred.

Another assessment report by the United Nations Development Programme (UNDP) in Myanmar (2014) maintained that, except for those in the Labutta region, most of the 2008 cyclone-affected population, were still in need of work six years after the cyclone. The UNFPA documentary fuelled my motivation to explore the survivors' recovery process systematically and in-depth, and in particular, to understand how the village women cyclone survivors from the Labutta villages had coped (as shown in the UNFPA documentary).

1.2 Background to the research

When Cyclone Nargis hit Myanmar on 2 May 2008, it affected seven million people (Honda 2009). A lack of emergency preparedness led to devastating loss of human life (over 138,000 lives lost) and resources (shelter, livelihood, financial and physical assets) (Honda 2009; UNISDR 2008, IFRC 2012). In addition, the affected population did not receive any emergency aid until late July 2008 because aid accessibility for the cyclone survivors was blocked and controlled by the military government (Baldwin 2009). According to Human Rights Watch (2010, p.7) those locals who tried to distribute aid were arrested and the range of penalties they suffered varied from months to years of imprisonment. This meant that the cyclone-affected population were both the voiceless and abandoned victims of natural and man-made disasters (MacKinnon 2009). Among the seven million people affected by the cyclone, 2.4 million survivors lived in the Delta Region (Honda 2009); many lost both their homes and their livelihood resources (some also lost their spouses and/or other family members) (UNFPA 2008). Chapter 2 of this thesis outlines the Myanmar context in relation to the government, the cyclone and the women participants involved in this study.

The research problem concerns how rural women based in Myanmar can recover and possibly become empowered after disaster (in this case the cyclone). The changing roles of these women were important- the potential for them to become heads of their

households when they had previously just deferred to their husbands as many had husbands or other male family members who had perished in the cyclone. Hence, the focus on capacity building and empowerment also takes into consideration the women's situations prior to the cyclone, which, in many cases, were found to influence the speed and effectiveness of their recovery.

This study is significant for a number of reasons. Firstly, as it has been determined that the recovery processes of disaster-affected populations should be researched from a local perspective (see Kawanami 2013). This is because the collection of authentic data and data sources can be challenging for non-local researchers in Myanmar (Kawanami 2013). Secondly, although approximately 60 international non-government organizations have led humanitarian activities in Burma/Myanmar since 1998, very little research has been conducted to analysing 'either the depth or breadth of network based social capital or the effectiveness of capacity building projects concerning humanitarian aid provided by various INGOs (Shein & Connell 2016, p. 149). Thirdly, Myanmar has experienced ongoing problems in relation to a lack of research related to economic development (Turnell 2011). This means that data is difficult to obtain due to the lack of systematic data management (Kawanami 2013). Fourthly, the focus of this study includes 3 of the United Nations Sustainable Development Goals (UN, SDGs) towards 2030. These are: Goal 1 (to end poverty); Goal 5 (gender equality and empowerment for women and girls) and to a lesser extent, Goal 4 which addresses education and lifelong learning (United Nations 2018).

The social capital concept is widely used by development agencies (UNDP 1999), including for the analysis of disaster-affected populations in terms of recovery and poverty reduction (Solesbury 2003). The findings from other studies of various disasters and recovery in Asia indicate that social capital and networks have assisted disaster-affected populations through collective action (Aldrich 2011,2012; Durant et al. 2011). Aldrich (2012) maintains that social capital is a useful tool in the analysis of disaster recovery, providing a broad view to assist understanding of catastrophic incidents and their impact on affected populations. In particular, he argues that analysis is required in terms of the roles of government, local social networks and local support groups/NGOs in providing support for affected populations in terms of emergency aid and assistance

during and beyond the recovery period (Aldrich 2012). Moreover, it has been proposed that social capital and rural development can be reconstructed or revitalized through the effective provision of goods and services in conflict or emergency areas (World Bank 2002b).

1.3 Objective, argument and research questions

The objective of this study is to examine the capacity building and empowerment of Myanmar women and the role of tangible/intangible capital in the process. In order to understand the women's experiences and differences in their levels of capacity building and empowerment, three villages within the same geographical region were selected and their situations compared before, during and after the INGO project.

In response to gaps identified in the relevant literature, particularly with regard to how capacity building and different types of capital development can play a role in empowering women in disaster-affected areas, the main research question is: **How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis?**

To answer the main question, three subsidiary research questions are addressed:

1. What were the drivers that assisted, and the barriers that restrained women's capacity building and empowerment during and after the INGO project?

A particular focus is to gain an understanding of the situational changes experienced by the women - from being resource-impoverished after the cyclone to becoming resource-owners and to determine why some women were more effective than others in making this transition.

2: How did the women cyclone survivors perceive the role of networks and tangible/intangible capital in the recovery process?

This question arose from a review of the literature on social capital and empirical studies associated with social capital and disaster-affected populations. Following Aldrich

(2012), this study also focuses on networks and social capital and their role concerning the disaster-affected women during their recovery period.

3. How sustainable were the changes achieved as a result of the INGO project?
This question explores whether the participants' levels of capacity building, empowerment and different types of capital development were sustained beyond the INGO project.

In order to answer the research questions, a multidisciplinary approach was adopted with regard to the primary data collection and analysis of the findings. In this study, inclusion of the tangible/intangible capital (social, human, physical, financial and psychological capital) supported a deeper understanding of social capital development in relation to the recovery processes of the cyclone-affected women.

1.4   Research rationale

Disasters, such as Cyclone Nargis, trigger an acute social crisis affecting the structure, organization and functional capacity of the affected communities (Durant et al. 2011), particularly Myanmar's social and economic sectors were affected severely when Cyclone Nargis hit in 2008 and were required to reform in the aftermath (Turnell, Bradford & Vicary 2009). Thus, community resilience was required to rebuild social capital and social infrastructure within the disaster-affected population (Aldrich & Meyer 2015), In particular women and children tend to be the most vulnerable amongst disaster-affected societies (UN Women 2015).

Others have raised the significance of the role of social capital in assisting survivors in re-establishing their previous situation and achieving a better life (Nakagawa & Shaw 2004; World Bank 2002a). Social capital, and the support found through networks, was also considered important in the early recovery of populations affected by both the 2011 earthquake and the tsunami disaster in Tohoku, Japan and the 2004 Indian Ocean tsunami (Aldrich 2012).

Capacity building means that people are able to handle challenges and attain opportunities, benefitting both individuals and the State (UNDP 1999), in relation to women's empowerment and economic growth (Kabeer 2012). Allahdadi (2011) argues that the majority of empirical research on social capital to date has focused on studies in developed countries relating to Western experiences. Thus, he suggests the social capital of other diverse communities should be a topic for future research, given its important role in building capacity to assist poverty alleviation.

Coleman (1986, 1988) proposes that capacity building occurs when a person attains a sense of self-identity and confidence in expressing their own opinions thus achieving higher levels of representation in society. If this occurs, individuals may then possess higher social status and resources (physical capital) (Bourdieu 1984). Although gender inequality can lead to men and women experiencing unequal opportunities (Chang, Connell, Burgess & Travaglione 2014), participation in networks can reportedly help women access information and knowledge, leading to capacity building. Consequently, effective networks can help to reduce gender gaps, as per the case of Mexican industries in the 1990s (Aguayo-Tellez, Airola, Juhn & Villegas-Sanchez 2014).

The seminal works of prominent sociologists: Bourdieu (1986, 1992) and Coleman (1988, 1994b) refer to the accumulative nature of social capital: it has the capacity to reproduce itself and to produce other types of capital. Other types of capital include economic (physical and financial capital) and human capital which Bourdieu (1986) and Coleman (1988, 1994b) maintain can be enhanced and towards more meaningful social capital. Social capital and other types of capital, referred to here as tangible and intangible capital, are core to this study. The integration of tangible and intangible capital are outlined in Chapter 3 (the literature review). They are included in the research framework used for this study to aid understanding of capacity building and the development of different types of capital. In order to analyse the different types of capital developed by the women cyclone survivors, an input-process-output (IPO) model is also applied in this study. The IPO model assists analysis of the relationship between the various inputs, processes and outputs (Herre 2010).

The social capital framework developed by the World Bank (2011) concerns the role of the community and is considered a suitable framework for this study when integrated

with the IPO model (see Chapter 3). It includes the five dimensions of social capital(see 3.9.3, Chapter 3): networks, trust, communication, cooperation, and social cohesion. As a focus of this study is also empowerment, the empowerment dimension is included in the framework.

1.5   Research method

To analyse the recovery experiences of the women cyclone survivors in relation to their development of capacity, empowerment and the role of social capital, a qualitative research approach was used. This assisted exploration with regard to how social phenomena and other factors were affected (Cresswell 2012; Silverman 2011). It is intended that the use of qualitative research methods, assisted in the understanding of the women's social world (Javalgi, Granot &Alejandro 2011).

Document analysis was also employed to enable analysis of the INGO's project and to aid selection of the villages which provided the research study for primary research analysis. Three villages were selected from the total of 27 villages included in the INGO project - one each from those ranked as 'poor', 'medium' and 'high performing' villages (reflecting the INGO documentation).

Primary data were obtained firstly from key informants comprising INGO staff and the male, village authority figures from the three study villages to examine the tangible/intangible capital of INGO and these three selected villages as each village appoints one male as village head. Next, in-depth interviews were conducted with the village women, along with focus groups comprising women from the three selected villages to attain their primary insider data. An 'exploratory interview' process was employed in this study to support the sharing of experiences drawn from emerging data (Miles & Huberman 1994). This is required to encourage participants to share their 'inside views' as they relate to the study's research objectives and questions (Carter & Fuller 2015; Chadwick 1984; Miles & Huberman 1994). A general interview guide was used for the semi-structured, one on-one, in-depth interviews. The emerging themes arising from the in-depth interviews, which comprised a relatively small number of

interviewees, were confirmed (or otherwise) with a greater numbers of women participants in the focus groups in order to meet the research objectives (Rabionet 2009). The findings relating to the women cyclone survivors' experiences and achievements were compared and contrasted in order to identify similar and different emergent themes. NVivo 10 qualitative software was used to support the organisation and analysis of data, coding and data interpretation. More details concerning the research methods are discussed in Chapter 4.

1.6 Limitations and key assumptions

The limitations of this study relate to several areas. The key assumption is that the understanding of researcher towards capacity development and empowerment of women cyclone survivors were based on the facts, which were shared by the INGOs, the male authority figures and the women. The others are, firstly, there were a limited number of key informants. For example, only 4 of the INGO staff who were involved in the 30-month project could be interviewed as they were the only ones who were still able to be contacted at the time of data collection in Yangon, Myanmar. Also, only three local authority figures were interviewed as each village appoints one male as village head. Another limitation concerned the qualitative research methods. Qualitative research usually involves smaller study sizes than quantitative research and, in this case 52 research participants were included. This limits the opportunity for generalizability to wider populations (Harry & Lipsky 2014; Rahman 2017). That said, qualitative methods are most relevant when rich data is required and when researching sensitive topics, as is the case in this study (Rahman 2017; Silverman 2011).

Assumptions relate to the expectation that the researcher would be able to gain access to the INGO's documents and that the INGO staff, three local authority figures and women cyclone survivors living in the three selected villages would agree to participate in the study. Another assumption was that the local and township authority figures would grant permission for the research to be conducted. Importantly, the context of this study (see Chapter 2) is critical of the emergency response action of the Military Government to the 2008 Cyclone Nargis.

1.7   Outline of the thesis

This study comprises eight chapters with the structure and content illustrated in Figure 1.1. The chapters are: the introduction (Chapter 1), the Myanmar context (Chapter 2), the literature review (Chapter 3), research methodology (Chapter 4), document analysis (Chapter 5), primary data analysis (Chapter 6), sustainability and capacity building (Chapter 7) and the conclusions and implications (Chapter 8).

Chapter 1: Introduction

This chapter introduces the thesis topic, the background information and justification for the study as well as the research methods, chapter outlines, limitations and key assumptions. The study objectives and research questions are also presented. The key arguments are based on relevant literature and empirical studies in order to determine the research gaps and expected contributions from the study. This chapter also outlines the various components of the conceptual framework, which is based on literature reviews of disaster-related studies. The presentation of chapters is also shown in chapter one in the form of a 'roadmap'.

Chapter 2: The Myanmar Context

Chapter 2 presents the background context of Myanmar, the situation after Cyclone Nargis, the roles of the Myanmar government and international communities post-disaster, and the details of the 30-month INGO project.

Chapter 3: Literature Review

Chapter 3 reviews the core and supporting literature concerning capacity building, empowerment and different types of tangible/intangible capital in order to achieve the objectives of this study. The seminal literature on social capital and other types of capital are predominantly drawn from Bourdieu (1986) and Coleman (1988, 1994b), however, to a lesser degree, literature concerning capacity building and other integrated capital support the social capital framework.

Chapter 4: Research Methodology

Chapter 4 presents the research approach undertaken and justifies the methodology used. To examine the women cyclone survivors' experiences, different types of research methods are used. These include document analysis, key informant interviews, one-on-one in-depth interviews and focus groups.

Chapter 5: Document Analysis

Chapter 5 presents an analysis of the INGO documents relating to the 30-month project. A key task of this chapter is to support the selection of three study villages in readiness for the primary data collection phase of the study.

Chapter 6: Primary Data Analysis

Chapter 6 represents the second stage of data analysis, as it concerns the primary data obtained from the women cyclone survivors. Data analysis reveals the interrelationships between different types of capital and their role in the women's capacity building, empowerment and different types of tangible/intangible capital development.

Chapter 7: Sustainability and Capacity building

Chapter 7 represents the third and last component of data analysis. This chapter also concerns primary data analysis in relation to how the women participants had fared 28 months after the INGO's departure. As such, it is concerned with the sustainability of their capacity building, empowerment and related factors.

Chapter 8: Conclusion and Implications

As Chapter 8 is the last chapter, its objective is to answer the research questions by drawing together the findings and theoretical implications drawn within the limitations

of the study. This chapter also presents summary recommendations for the national government and international donor communities and their influential roles in further research, as well as pointing out the contribution of this thesis for both research and practice.

1.8 Chapter summary

This chapter provided the background for the thesis. The research problem, questions, and objectives were outlined before the rationale for the research was justified and the methodology described. The limitations of this study and the content of each chapter were also discussed. The structure of the thesis and organisation are shown in Figure 1.1. Chapter 2 provides a context for understanding Myanmar, and thus, the background of the study in relation to the focus on the women cyclone survivors it features.

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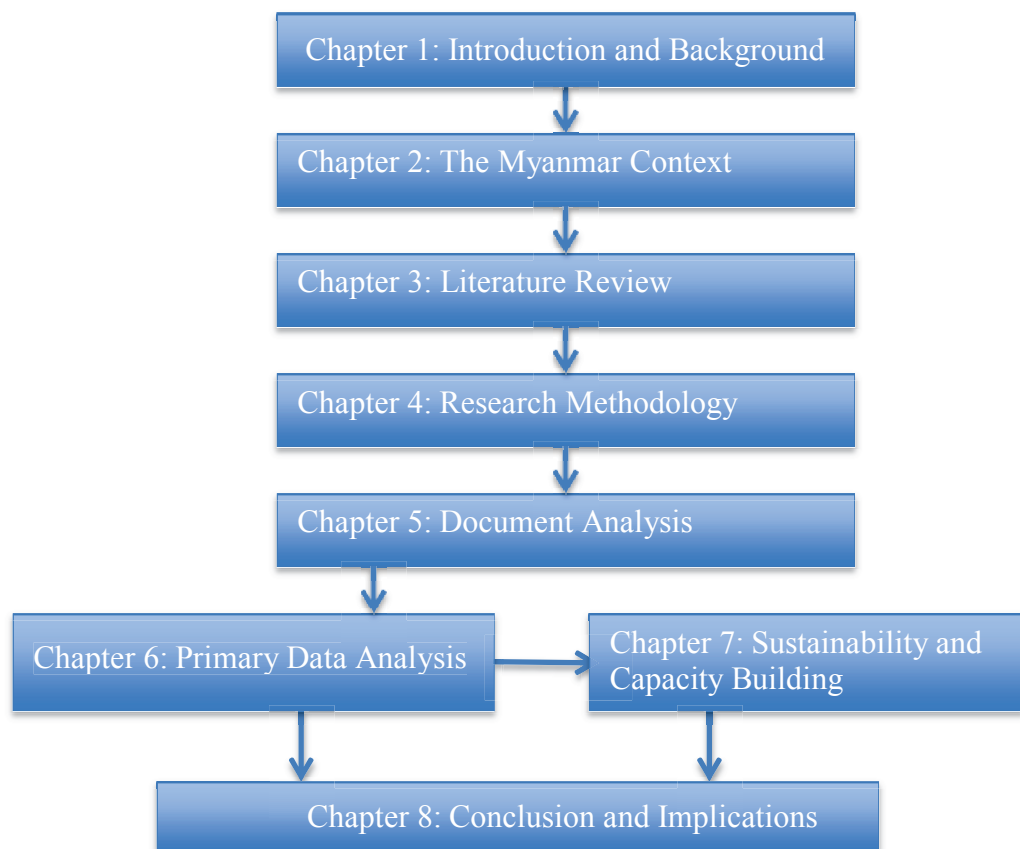
Figure 1.1: Thesis structure and organisation

CHAPTER 2: THE MYANMAR CONTEXT

2.1 Introduction

Chapter 2 sets the scene for this study, which is situated in Myanmar. It also outlines the events before, during and after Cyclone Nargis hit, especially the INGO's post-cyclone project in the disaster area.

2.2 Background information of Myanmar

The British colonised parts of Myanmar after the Burma-English wars in 1824 and 1852 and it became an annexe of India (which was also colonized by the British) in 1885 (Maung 2012). Burma achieved its independence from British rule in 1948 (Borchers et al. 2012) and was renamed the Republic of the Union of Myanmar by the military regime in 1989 (Payne 2011). Therefore, in this thesis, the country is referred to as Burma until 1989, and then Myanmar is used throughout this study.

2.2.1 Geography

Myanmar is located in South East Asia and covers 677,000 square kilometres. It is the largest country in the region (Guilloux 2010) and the fortieth largest country across the globe (The Republic of the Union of Myanmar 2015). As indicated in Figure 2.1, Myanmar shares a border with Thailand (2,099 kilometres), Laos (224 kilometres), China (2227 kilometres), India (1,453 kilometres) and Bangladesh (272 kilometres), and has an uninterrupted coastline (2,229 kilometres) along the Andaman Sea and the Bay of Bengal in the south (Borchers et al. 2012).

Figure 2.1 Geographical nature of the Republic of Union of Myanmar

Source: Burma CIA fact book (https://www.cia.gov/library/publications/the-world-factbook/geos/bm.html)

At 2,012 kilometres, the Irrawaddy River is the longest river in Myanmar. It originates in the Himalayas, flows to the south and empties into the Andaman Sea through the Delta region, which is the lowest land expanse in Myanmar (Borchers et al. 2012; Payne 2011). The focus area of study for this thesis – the Labutta region – is situated in the Delta region (as indicated in Figure 2.2 below).
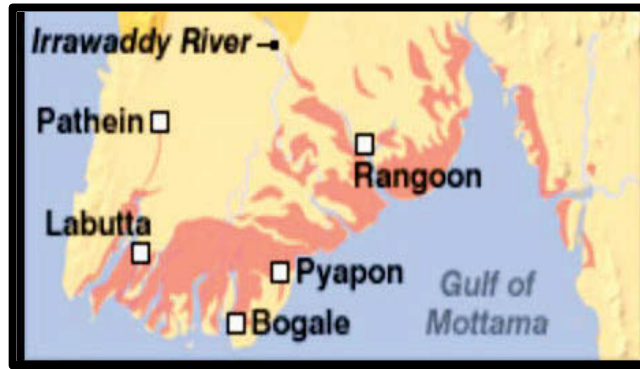
Figure 2.2. Location of Labutta in the Delta region

Source :(www.bbc.uk.com)

Soil from the Delta region contains numerous nutrients and moisture due to several rivers and lakes in the area. Hence, most of the local population is involved in agriculture with the Delta region being the largest rice-producing area in the nation (Fink 2009).

2.2.2 Demographics

By 2014, Myanmar's population had reached 51.5 million, with females comprising 52% and males 48% (The Republic of the Union of Myanmar 2015, p. 1). The country has 135 ethnic groups (Holliday 2010; Walton 2013), the dominant ethnic group is Bamar and the official language is Burmese both in Myanmar and in the Labutta region. The majority of the population is Buddhist, whilst other religions such as Christianity, Hinduism and Islam are also practiced (Borchers et al. 2012; Payne 2011).

2.2.3 Political and economic state of Myanmar

Several turbulent circumstances in Myanmar's political and economic environment have had a substantial impact on factors such as the quality of life attributes - social, economic, education and lifestyle. For example, Burma was a monarchy until the British colonization in the late 19th century (Walton 2013; Womack 2008). It gained its independence from the British in 1948 and was the second wealthiest country in South

East Asia at that time (Baten 2016). In 1987, however, it was declared a 'least developed country (LDC)' by the United Nations (United Nations 2017). The following section explains why Myanmar changed from being the second richest country in South East Asia to one of the world's least developed countries (LDC).

The 1962 military coup (era 1962-1974)

In 1962, a military coup led by General Ne Win overthrew the Parliamentary Government of Prime Minister U Nu (Tallentire 2007). Under General Ne Win's military government, industry and international trade were controlled/ nationalised in 1962 and the local currency was de-monetised in 1964, both having a major effect on the country's economy. Some foreign residents returned to their country (Steinberg 2010) including those of Indian origin who had controlled many resources, including the domestic and international import-export markets (Guilloux 2010; Tin 2008).

The Burmese military regime oppressed people of all backgrounds, including business people, politicians, activists and authors. For example, newspaper journalists, both men and women, were sent to jail for decades under their rule (Amar 2011; Smith 2008). The ability of women to take leading roles in both the public and private sectors was also severely curtailed (Fink 2009) under the male-dominated military (Amar 2011).

Burma Socialist Programme Party (BSPP) (era 1974-1988)

In 1974, twelve years after the coup, the military followed Ne Win's blueprint - the 'Burmese way to Socialism' - and formed a single-party, socialist and military government under the Burma Socialist Programme Party (BSPP).The purpose of this system was to build a self-sufficient nation without the influence of either communism or capitalism (Tallentire 2007).The economic policy of 'Autarky' (refers to an economic system of self-sufficiency and limited trade), which Burma followed, aimed to diminish foreign influence and enhance the role of the military in Myanmar. It resulted in economic isolation (Holmes 1967).

Under the Socialist party, from 1974 onwards, the military (also known as *Tatmadaw*)-transformed Burma and changed the role of the military from a military regime to the Socialist Party (BSPP) (Barany 2016). The majority of military men became leaders at different levels of the party, while the role of women was as 'party cadres', fulfilling the requirements of the party as supporters of socialism. Once the military took control Burmese men took more of a leadership role in both their homes and communities (Amar 2011; Maung 2012). As a result, women's formal work participation was mainly in factories as daily wageworkers and in the informal agricultural sector (Tin 2008).

By this process of socialism, all industries (except for agriculture) and international trade were further nationalized (Aung-Thwin & Myint-U 1992; Holmes 1967) and a government monopoly on goods was implemented. During that regime, a total of 15,000 private companies were nationalised (Aung-Thwin & Myint-U 1992) as the military gained control and properties were seized. Freedom of expression was controlled since independent newspaper publications were banned (Myint-U 2006). To reduce foreign influence, a new public education system was established. The teaching of English language was deferred until secondary school, which is year 6 - instead of being introduced in kindergarten, as it had been previously (Holmes 1967).

Numerous civil service positions were taken over by military officers under that regime and no women were appointed to key decision-making positions in government departments (Smith et al. 2008). Women were traditionally key players in local trades before the 1962 coup and the BSPP era (Amar 2011). However, women's entrepreneurship was not favoured and free markets through local trading had been oppressed since 1962. Smith et al. (2008, p. 267) further states that '…there were sporadic elections of Burmese women to parliament in the 1970s, but no woman has since reached cabinet rank'.

Student protests against the military government led to the weakening of the education system as universities and colleges were closed to prevent further unrest. Sporadic anti-government protests throughout Ne Win's rule were violently oppressed and nearly 8,000 intellectuals and newspaper journalists (including women) were imprisoned for decades under socialist party rule (Tallentire 2007; Amar 2011). Strict limits were applied to immigration (Steinberg 2010), overseas aid ceased, and the only foreign aid

allowed in the country was through government-to-government agreements.

Due to the 'closed economy' policy, foreign investments dwindled and foreign investors residing in Myanmar were required to return to their native countries such as India and the United Kingdom (Holmes 1967; Steinberg 2010). As a result of this economic change, disparity in average income became a primary socioeconomic problem (Aung-Thwin & Myint-U 1992). There was a constant decline in foreign exchange reserves throughout the 1960s along with increased inflation (Butwell 1972), leading to the steady expansion of the black market trade to provide for the needs of people (Aung-Thwin & Myint-U 1992).

In order to hinder the growth of black market trade and inflation, local currencies were demonetized, with little or no compensation, on three occasions: in 1964, 1985 and 1987 (Barany 2016; Hays 2014). During those periods, people lost their properties - including their financial and business resources overnight, further adding to economic distress and instability. Foreign debt rose to 4.9 billion USD (United States Dollars) in 1988 (Steinberg 2010).

Ne Win and his socialist regime isolated Burma from the rest of the world for the 26 years of one-party socialism. The economic crisis and the ranking of Burma as a 'Least Developed Country (LDC)' by the United Nations Conference on Trade and Development in 1987 were one of the root causes of the 1988 people's revolution (Fink 2009). The President at the time, Dr. Maung Maung (2012), stated:

> 1988 was the year of change in Myanmar, as Burma is now officially
> known by her ancient and traditional name. Change is the law of nature,
> and one defies the law at one's own peril. Change – social, economic, and
> political – had been tardy in Myanmar in the few years before that fateful
> year, and when it came, it assumed the proportion of a storm. (p.1)

The socialist regime eventually collapsed in 1988 as the result of a countrywide uprising led by students who demanded democracy (Fink 2009). To control that revolution, Burma again experienced a military coup that took place on September 18, 2008 (Guilloux 2010; Steinberg 2010).

The 1988 military coup (era 1988-2010)

Economic instability, corruption, food shortages and political oppression led to nationwide pro-democracy protests known as the '8888 uprising' against BSPP rule (Fink 2009). This uprising was brutally suppressed by the military with overwhelming force, 'resulting in the death of at least 3,000 people' (Wilson 2016, p.10). Students, townspeople, civil servants and Buddhist monks went missing while thousands were arrested as 'political prisoners' (Ganesan 2013, p.76-79). As a result of the 1988 brutal crackdown, the US government and the European Union (EU) imposed economic and political sanctions in the early 1990s (Stockholm International Peace Research Institute 2017).

(Daw) Aung San Suu Kyi, a daughter of the nation's independence architect General Aung San, became the face of the nation's democratic movement and a leader of National League for Democracy (NLD) (Hipsher 2009; Holliday 2010). Although, the military regime promised to hand over power to the elected party prior to the 1990 election, they broke their promise when the NLD was elected (Tonkin 2007). The military regime would not accept a woman who had married a British Oxford Professor in a leadership role to the landslide victory party (Barany 2016). Instead, they blocked her political movement along with other democratic forces (Harriden 2008) and restrained her under house arrest for fifteen years in Yangon, Myanmar. During this time she was awarded the Nobel Peace Prize in 1991 (Barany 2016; Martin 2012; Payne2011). When attempting to explain the situation in the country Fink (2009) points out some of the contradictions:

> Burma is a surprising country. Boasting emerald-green rice fields, a multitude of tropical flowers and fruits, and brilliantly painted temples and shops, it is awash with colour. Many Burmese, men and women, continue to wear '*longyi*' – tube- shaped pieces of cloth tucked or knotted at the waist – decorated in striking patterns. Meanwhile, children run around with '*thanaka*', a sweet-smelling paste made from ground wood, smeared on their faces. A carefree cheerfulness seems to characterize the people, but you mention 'democracy' or 'Aung San Suu Kyi', people freeze (p.1).

At the same time, the military regime formed a new government, known as State the Law and Order Restoration Council (SLORC), and changed the country's name from

Burma to the Republic of the Union of Myanmar in 1989 (Payne 2011). The SLORC developed new economic policies in an attempt to restore the failing economy (Fujita, Mieno, Okamoto & Thein 2009). One distinct milestone was the replacement of the 'closed' socialist economic system based on 'command/control' with an 'open-door', market-oriented economic system (Than 2005). Reform measures followed, such as revocation of the state monopoly in several sectors of the economy. This led to permission being granted for foreign and domestic firms' investment, expansion of the private sector, boosting the exposure of commerce and trade to market forces (marketization of commerce and trade), increases in natural resource exports and the removal of regulations/restrictions (deregulation) of the agricultural industry, a primary source of income for the nation (Ganesan 2013; Than 2005).

Despite these reforms, certain restrictions were applied, such as strict regulations on foreign currency reserves/holdings by permitting them to be held only in accounts with state-owned entities such as the Myanmar Investment Commercial Bank (MICB) or the Myanmar Foreign Trade Bank (MFTB) (Fujita, Mieno, Okamoto & Thein 2009). Major industries, however, were still under government control (Odaka 2015) and thus, the state was in charge of several important economic activities.

It seemed apparent that the military was still in power despite the political regime change. For instance, the rice trade was controlled by military-related companies. Businesses concerned with natural resources such as oil and gas, gems, teak and rice which had potential for the greatest foreign exchange benefits were controlled by the government and newly-established private firms which were often connected to the state (Egerteau & Jagan 2008). There were shortages of basic commodities. Whilst there was some economic growth after these amendments, the nation's economy was still troubled by high inflation, poor investment rates and budget shortfalls (Odaka 2015).

This period marked the starting point of the military takeover of almost all government organizations, which continued until a civilian democratic government was elected in 2011, after which several positive political developments began (Cheesman, Farrelly & Wilson 2014). However, Smith et al. (2008, p. 267) state that in the early twenty-first century Burma had one of the world's lowest rates of female representation in government'.

Myanmar and international communities

In 1997, during the period of sanctions, Myanmar became a member of the Association of South East Asian Nations (ASEAN) (Petersson 2006; Seekins 2005), allowing the country access to economic cooperation with other member countries in order to try and bypass the marginalisation caused by the sanctions (Than & Thein 2007). As a result of continuous oppression by the military and their broken promises in relation to democratic processes, in 2003, the US government and the European Union (EU) imposed further sanctions against the Tatmadaw regime, then also known as the State Peace and Development Council (SPDC) (Martin 2012). Consequently, the local economy and Myanmar trade relied on neighbouring countries such as China, India and Thailand for business dealings and support (Barany2016).

Through this period of international sanctions, the Myanmar people suffered from both internal oppressions by the military regime and abandonment by international communities (Selth 2008). Instead of changing the Myanmar military regime for the better, the sanctions resulted in the loss of official trade and industry, mainly the garment industry. 'Over 180,000 jobs for women in the textile industries were lost' (Drury & Peksen 2012, p. 464); with the result that many women and girls became destitute and ended up in the illegal sex trade to support their families (Seekins 2005).

Women in Myanmar

The traditional expectation of women in Myanmar society is to be respectful (Amar 2011). Social practice allows women to keep their name when married (Nyo 2011). Husbands give their earnings to their wives so that women can take a leadership position in managing the household and other activities, including business (Amar 2011; Nyo 2011). Husbands, however, make the important and final decisions for their families (Harriden 2008). The intention is for women to control the financial resources and they traditionally take key roles in local trades with other business women, whereas men take formal jobs as civil servants or jobs related to the production of rice, beans, teak, oil, mineral resources, gold and gems (Nyo 2011). The role of Burmese women before 1962

was recognised and respected according to social norms (Amar 2011; Nyo 2011) as women's leadership roles and formal participation in social, economic and political life was permitted under the hierarchical social structure (Harriden 2008).

In relation to the ownership of physical property, the Myanmar Traditional Law stipulates clear, equal roles for men and women (Chit 2011). Parental property is equally distributed between daughters and sons, and both married and unmarried daughters have equal rights to it (Koun 2011). In terms of legal matters, women have joint rights with their husbands and are able to keep property in their own names throughout their lives (Khaing 1958; Nyo 2011; Womack 2008). However, patriarchal practices tend to be embedded at home and over time have become deeply ingrained in Myanmar society (Barany 2016; Harriden 2008; Koun 2011). Therefore, only a few women were supported both financially and intellectually by men taking active roles in policy and governance in both the private and public sectors (Chit 2011; Mya 2011).

After 1962, the military regime undermined women's roles, and women at all levels and they became more vulnerable due to their lack of access to education, economic opportunities and decision-making in general. As pointed out earlier, women (particularly in rural areas) tended to become marginalised in relation to their education, finances, health, and social interactions due to cultural limitations (Barany 2016). In addition, the US and EU sanctions during the SLORC resulted in closures of garment factories and more, further limiting women's participation in the workforce, lowering their social status and reducing their economic independence (Drury & Peksen2014). As a result, women were further socially and politically victimised as the sanctions disrupted their opportunities and routine work (Drury & Peksen2014). Women's situations worsened when Cyclone Nargis hit Myanmar on 2 May 2008.Despite the disaster the military regime (SPDC) focused only on the organisation of the 2008 constitutional nationwide referendum that was held on 8 May 2008 and ignored the need for cyclone response action (Honda 2009; Nyo 2011).

2.3 Cyclone Nargis

Cyclone Nargis hit the southern coastal region of Lower Myanmar on May 2 and 3, 2008 (Lateef 2009; United Nations Office for the Coordination of Humanitarian Affairs - UNOCHA 2008). Figure 2.3 shows the areas in its path: Labutta, Dadeye, and Bogale (the Delta Region), and Rangoon (Yangon Region) where up to 7.35 million people lived (Lateef 2009). Cyclone Nargis took nearly 140,000 lives and affected over seven million people as a result of the massive devastation (Barany 2016; Honda 2009).

As per Figure 2.3, the Delta Region was the first and most devastated area of the three affected areas and had the highest death toll.
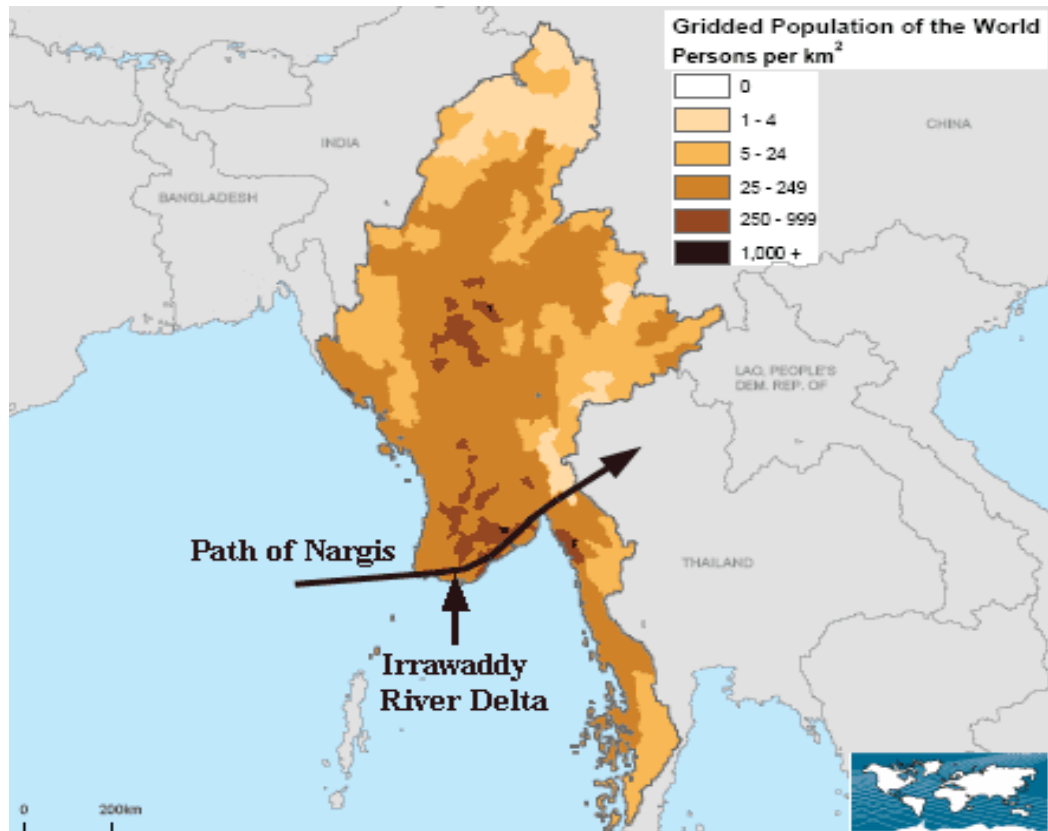
Figure 2.3: Myanmar and a pathway of Cyclone Nargis

Source: Dr. George Pararas-Carayannis (http://www.drgeorgepc.com/Cyclone2008Burma.html)
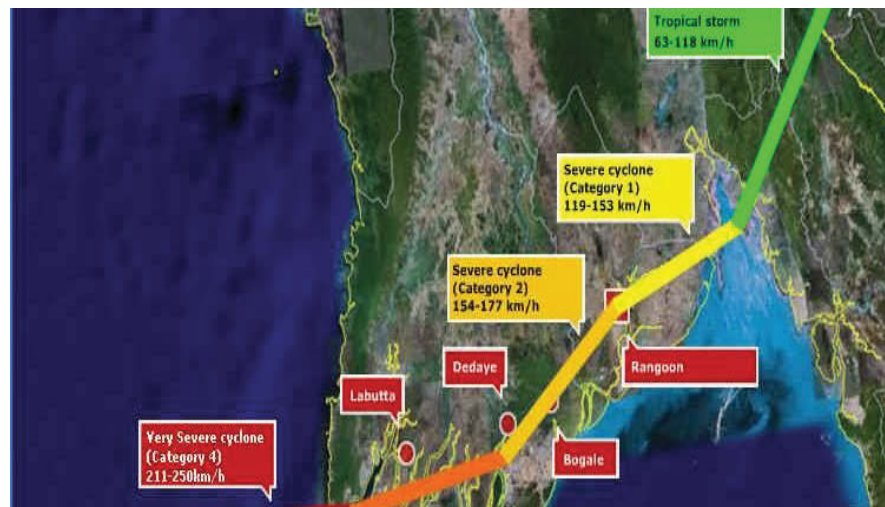
Figure 2.4: The magnitude of Cyclone Nargis
Source: Der Spiegel

As shown in Figure 2.4, Cyclone Nargis at landfall was Category 4 (211–250 km/hr.) –
'very severe' and it caused the most devastating damage in Asia since 1991 (IFRC
2012). Hays (2008) cites the Associated Press (dated May 8, 2008) assessment that the
cyclone's battering winds pushed a wall of water as high as 3.7 metres which reached 40
kilometres inland, causing damage to many villages in the flat areas of the Delta Region.
Almost 95 per cent of the houses and other buildings including belongings and
livelihood resources were destroyed by floods and strong winds (Lateef 2009), resulting
in the deaths of tens of thousands of people and many more injuries (Hays 2008a).Data
concerning the gender of the affected population, including the numbers of dead, were
not announced as the Myanmar government did not want to admit that Cyclone Nargis
was a major catastrophe (Lateef2009).

As a result of government embargoes on cyclone information, there were no definitive
sources of statistics regarding the death tolls or the magnitude of the devastation in the
affected areas of Cyclone Nargis. For example, the official government data differed
from that of the UN, INGO and local communities, but all agreed that the Irrawaddy
Delta Region was the worst affected area. More than seven million people were affected,
mostly farmers, labourers, fishermen and traders who constituted the majority of the
Delta population (Daly & Feener 2016; Junk 2016; Honda 2009; UNOCHA 2008).

The United Nations Office for the Coordination of Humanitarian Affairs (2008) and the August 2008 report of the Women's Protection Technical Working Group of Myanmar stated that 2.4 million people from 37 townships in the Delta Region were severely and significantly affected (Honda 2009; Lateef 2009); the missing or dead – mainly fishermen – were estimated to number more than 130,000 (Daly & Feener 2016; Junk 2016). Survivors needed psychological support when they lost their physical, livelihood and human resources (Lateef 2009).

The military regime's 48-hour early warning system allowed people who lived in cities limited time for preparation, while those who lived in the villages had no warning at all (Kelman 2008). For instance, Aung (2008) cites an *MSNBC News* report stating that many urban people in Yangon (the former capital of Myanmar) not only did not receive sufficient warning of the cyclone, its path and its magnitude to allow for preparation, but also had no knowledge of general emergency responses. In fact, the government misled the people by communicating 'storm news' advising that winds would be approximately 50 km per hour, whereas the actual wind speed was about four times that figure (Kelman 2008).The lack of cyclone preparedness in the communities was the main cause of the catastrophic outcome (Lateef 2009). After the cyclone, it was the Buddhist monks, not government staff, who moved branches from uprooted trees that were blocking streets in Yangon. They also led the volunteers in clearing the debris (Aung 2008). The following section presents the map and geographical situation of the Labutta Township where the cyclone occurred. The INGO project was implemented in the aftermath.

2.4 Labutta Township

As shown in Figures 2.3 above and 2.5 below, the Labutta Township is located in the Irrawaddy Delta Region, known as 'Myanmar's Rice Bowl' (Lateef 2009). It comprises 518 villages in 13 wards[1] (urban areas) and 64 village tracts[2] (Department of Population of the Union of Myanmar 2014). The 2014 census report indicates that Labutta is the most remote township in the Delta Region, with 10.6 percent of the population living in

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[1] A ward is a fourth-level administrative subdivision of Myanmar's urban cities and towns

[2] A village tract is a fourth-level administrative subdivision of Myanmar's rural townships

urban and 89.4 per cent in rural areas. The total population of the Labutta Township before Cyclone Nargis was less than 230,000 (UNDP Myanmar2014).

The official report stated that one third of the population of the Labutta Township – 84,454 people – were listed as dead or missing after the cyclone. Of these, 47,901 were females and 36,553 were males (The Tripartite Core Group 2010). The District and Township authority's offices are located in Labutta town, which is 125 kilometres (by tar-sealed road to the north) from the capital city of the Delta Region, Pathein. Due to the poor quality of the roads, it takes three to four hours by car to reach to Pathein. Ships take 36 hours and buses take eight hours (253 kilometres) to reach Yangon (The Tripartite Core Group 2010). Figure 2.5 shows the Labutta Township in red, situated in the central part of the Delta Region.

Figure 2.5: Labutta Township, including Labutta town (shown in red), and its villages

Source: UNDP Myanmar

As indicated in Figure 2.5 above, the waterways are a key means of mobility and communication in the region, and most of the villages were originally connected only by water transportation because of the poor roadways (UNDP Myanmar 2014). The Labutta

Township lies on the costal line with the coastal villages and is the most remote township in the Delta Region. It is a key location for trade with the coastal villages, where the local fishery, farming and sea salt businesses operate (The Tripartite Core Group 2010). Labutta's local products are famous and meet the consumption needs of the whole of Myanmar. There is a freezing facility for the fishery exports and work for large numbers of local and seasonal workers (Department of Population of the Union of Myanmar 2014). After Cyclone Nargis, 62 percent of the farming lands were covered by floodwater, and livestock ownership among the farmers dropped from 35 per cent to 4 per cent (UNDP Myanmar 2014), while fishery and sea salt businesses were completely destroyed (The Tripartite Core Group 2008).

2.5 Myanmar Government responded to the cyclone

The military regime failed to provide the cyclone-affected survivors with desperately needed food, clean drinking water, shelter, sanitation, clothes and health services in the aftermath (Hays 2008a). The cyclone-affected inhabitants in the remote villages did not receive any emergency aid, and were not evacuated from the area (Lateef 2009). Honda (2009) argues that the Myanmar government restricted foreign media so as to stop any news about the cyclone being communicated with the outside world. Both locals and UN agencies based in Myanmar were also restricted in rescues and emergency response by the military government and were unable travel to the cyclone affected areas to provide necessary assistance to the survivors (Johns Hopkins Bloomberg School of Public Health 2008; MacKinnon 2009; Martin & Margesson 2008). MacKinnon (2009) cites Chris Beyrer, Director of the Center for Public Health and Human Rights at Johns Hopkins stated it was a violation of humanitarian relief norms. These blockages caused great suffering, including serious physical and mental health problems for the disaster-affected population. For example, Aye Shwe, a 52-year-old survivor said, 'I have no hope aid will come' (*Associated Press* report, 3 June, 2008 cited in Hays (2008a) paragraph 1) as emergency assistance reached less than half of the affected population. Lateef (2009) cites the 2008 report of the World Health Organisation (WHO) in Myanmar, which recognised the Delta population's need for psychological and other support when all of their physical, livelihood and human resources were lost.

The psychological problems of another disaster-affected population were reported by the International Post-Tsunami Study Group (Grewal 2006; UNEP 2005). Their assessment of Sri Lankan villages affected by the 2004 tsunami indicated that affected villagers had psychological problems that were evident in their daily lives and work 20 months later. The key issue was that, while humanitarian aid was provided in tangible form, such as shelter and livelihood support, the psychological problems of affected individuals were not addressed (Tull 2009).

Although international emergency aid was not available for cyclone survivors, civil society and the private sector played remarkably important roles in the early days after Cyclone Nargis (MMRD 2011) through a 'camouflage movement' (Kingston 2009). For example, this entailed aid items being hidden by local donors who pretended that their relatives lived in the relevant villages or towns so that they could visit affected areas. As a result, Myanmar citizens who were volunteer aid workers, journalists and NGO staff were also arrested when they attempted to distribute aid and some were punished with 'unjustifiable sentences' (Honda 2009). Fines and five-year jail sentences were imposed on foreign nationals who tried to provide aid (Amnesty International 2008). For locals, the punishment was up to 65 years imprisonment for relief workers, including famous artists, writers, intellectuals, monks and others who engaged in relief activities in 2008 (Human Rights Watch 2010; Kingston2009).

MMRD (2011) indicates that Cyclone Nargis facilitated the solidarity of people who initiated civic responses to the disaster. This kind of civic movement and cooperative work for humanitarian assistance was the most significant change in the civic movement in Myanmar in five decades (MMRD 2011).Myanmar has experienced the longest ethnic wars across the globe (Barany 2016). In order to hold power and conquer, the military junta's 'divide and rule' tactics had operated since 1962 (Posner, Spier & Vemeule 2009). As a result, the Myanmar people were deeply divided along several different axes: urban vs. rural, elites vs. students vs. workers, Bamar (ethnic Burmese) vs. ethnic minorities, and so on (Barany 2016). Unexpectedly, Cyclone Nargis represented a way for people to be united through cooperative work and emergency assistance that enhanced the capacity and social cohesion of the community (MMRD 2011). Regardless of race, ethnicity, gender, religion and social class, the destruction of the socio-economic

fabric of cyclone-affected individuals and their communities facilitated collective work and led to stronger social cohesion between farmers, labourers, fishermen and traders, the wealthy and the poor (Lateef 2009).

2.6 The cooperative response action of international communities

This section outlines the response of the Myanmar government and international communities in relation to emergency aid and humanitarian assistance for the cyclone-affected population. International communities put pressure on the military regime to provide a humanitarian response to Cyclone Nargis. In addition, women's groups from the cyclone affected villages made demands to support their recovery when the then Prime Minister Thein Sein visited the cyclone-affected areas in the aftermath (Pender 2010).

The Myanmar Government thus highlighted the role of ASEAN as a facilitator of disaster relief, along with the involvement of wider international communities such as the Myanmar based UN agencies to form the Tripartite Core Group (TCG) (Haacke 2009). The Post-Nargis Joint Assessment (PoNJA) Committee (set up by TCG) operated in a comprehensive way to examine the issues of the cyclone survivors, particularly women, and to provide rehabilitation services. Ultimately, ASEAN played a vital role in humanitarian assistance for the affected areas of Myanmar, particularly in regard to the capabilities, interests and approaches of the implementers who were the key agents of change in the cyclone-affected population (Guilloux 2010). Specifically, ASEAN representatives raised funds from international bodies, entered into dialogue with the Myanmar government and liaised with them resulting in the provision of travel permits for relief workers and more (Guilloux 2010).

Survivors' trauma can worsen if physical, emotional and spiritual issues, particularly those affecting women, are not adequately addressed (Caprioli & Boyer 2001, 2003; Caprioli & Douglass 2008). Therefore, the Department of Social Welfare, Relief and Resettlement (DSW) and the United Nations Fund for Population Agency (UNFPA) decided to conduct an initial joint assessment of the women's situation in order to assist them as part of the cyclone recovery response (UNFPA2008).

As a result, the initial joint assessment by the Women's Protection Technical Working Group (set up by the TCG) and the DSW was conducted in the affected areas one month after the cyclone hit. The aim was to gain an overview of women's experiences, needs and challenges in regard to their physical and mental/psychological health, livelihood, food, education, safety and security, as well as changes in their social and cultural practices after Cyclone Nargis (UNFPA 2008). That draft report produced in early August 2008 proposed the setting up of rehabilitation programs for women to access resources and services. The 2008 initial assessment suggested encouraging the formation of community groups comprising women, and recommended that women's involvement in community work be promoted. While the guidelines on how to do this were not specific, skill development and leadership training were proposed.

Following the initial assessment in 2008, a second assessment of the cyclone survivors' situation was conducted by UNFPA in 2010 and examined various ways to improve women's capacity building and empowerment (UNFPA 2010). The second assessment indicated that '81.2 per cent of the female-headed households (FHH) were widows and that the women cyclone survivors were vulnerable, living without their families, livelihoods, homes, assets and income and with little or no access to psychosocial support services' (UNFPA 2010, p. 7). In addition, the shelters used by the women were unsatisfactory and insecure (UNFPA 2010).

Before the cyclone, women received moral support mainly from their own families (23.3 per cent) and from other women in their family networks (38.7 per cent), particularly older women such as mothers, aunts and grandmothers (UNFPA 2010). With regard to social and cultural practices after the cyclone, men remained in decision-making roles as local authority figures and religious leaders (Harriden 2008), just as they had previously. Women's participation was unchanged as they continued to take on the main support role for the family and community, although some took up the head of the family role if they had lost their breadwinner spouse. The 2010-second assessment report of UNFPA indicated that mental stress and depression were commonplace for the rural women survivors of Cyclone Nargis, with the same survey indicating 'many women had no desire to plan for the future' (UNFPA 2010, p. 19).

Access to financial resources was one of the challenges for women wanting to achieve economic growth and rehabilitation (UNFPA 2010). Having little or no education was a challenge for those women trying to secure a decent income from skill-based sources. Based on the findings of that second assessment, the UNFPA (2010) as a donor agency proposed to the Myanmar Government that they facilitate services to improve the engagement of women in community affairs. Drawing on the baseline data arising from the2008 and 2010 comprehensive assessment reports, the DSW and UNFPA set guidelines to ensure that rehabilitation actions met the needs of women survivors (UNFPA 2010). Findings from those two assessments conducted by the DSW and UNFPA became the foundation for a long-term recovery program for women in the cyclone-affected villages (UNFPA 2010). As a result, the 30-month project implemented by the International Non-Governmental Organisation (INGO) was implemented in the cyclone-affected villages - the key organization featured in this study.

2.7 The INGO (International Non-Governmental Organisation)

This section outlines the background of the INGO, which worked in the cyclone-affected villages of Labutta. According to the final report on its 30-month project, the INGO has operated different kinds of activities in Myanmar for nearly 20 years. For this partnership with the Myanmar Government, the INGO signed a Memorandum of Understanding (MoU), which stated that it was a non-profit, non-political and non-religious organisation (INGO 2011). The INGO's work in Myanmar covers four areas: recovery, rehabilitation, reintegration, and the development of vulnerable, marginalised, and abandoned populations, particularly women, girls and boys. The INGO's projects cover seven regions and the states of Myanmar. It has had four branch offices in the Delta Region since 2006 (before Cyclone Nargis hit), but none in the Labutta Township (INGO 2011).

2.7.1 The INGO project

As explained previously in sections 2.6 of this chapter, international communities such as ASEAN and the Myanmar based UN agencies provided funding to the Myanmar government as humanitarian aid for the cyclone-affected population. The Myanmar based INGO which is the primary focus of this study was selected to implement the project in the Labutta cyclone-affected villages in August 2008.

The Myanmar based INGO (referred to from now on as the INGO) worked with the Myanmar government to implement the rehabilitation project in the cyclone-affected villages - as per figure 2.6. To do this, the INGO liaised with the local authority figures (village leaders) situated in each of the 27 cyclone affected villages who constituted the governing body of the State at the local level. The authority figures disseminated the policies, rules, regulations, laws and legal practices of the government and were the 'middlemen' between the higher-level administrative staff and the villagers. The authority figures provided the INGO with access to the necessary government departments. Figure 2.6 shows the operational interlink ages among the international communities and the INGO project at the international level. The Myanmar Government and the country's policies, laws and practices are shown as the National Level. The INGO and the cyclone-affected areas are shown as being at the local level in Labutta for this study.

1. International Level
(Donor Agencies- ASEAN/UN)

2. National Level (Myanmar Government)
Policies, Laws and Practices

3. **3. Local Level**
The cyclone-affected population including local authority figures of Delta Region (Labutta town and its villages) & the INGO
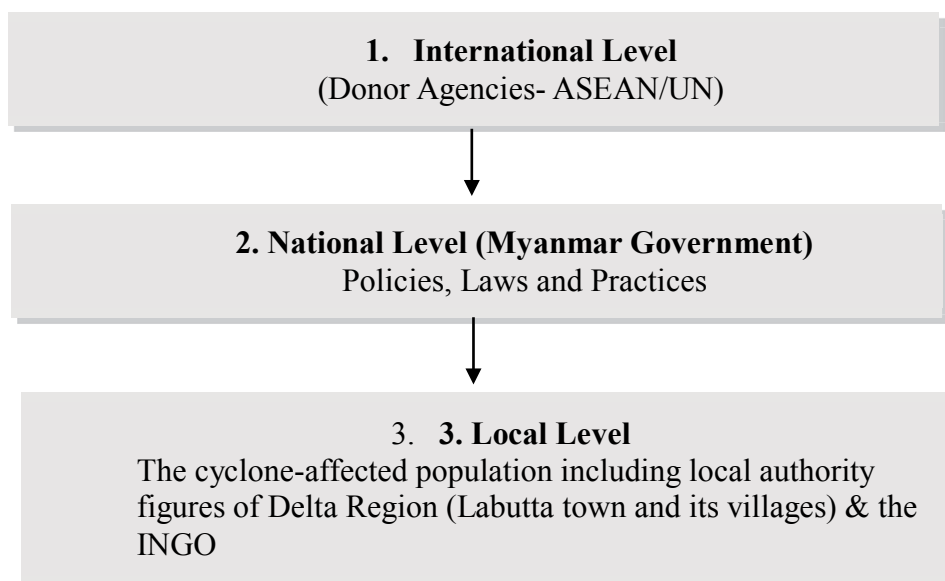
Figure 2.6: Three levels of analysis relevant to the INGO project

2.7.2 INGO project timeline

The INGO project comprised three projects and the duration of the three projects is shown in Figure 2.7.

The INGO began the pilot project in August 2008 over 5 months	→	The second project ran from February to December 2009 over 11 months	→	The third project ran from November 2010 to December 2011 over 14 months

Figure 2.7: The INGO's three projects spanning 30months

Although the three projects ran over different periods of time, the INGO considered all three as one project. This was because the aims, objectives and activities associated with each project were the same - it was only the donors that were different. The INGO conducted a commencement and exit assessment to determine the effectiveness of each project for the donors. In order to examine the situational changes of the women, their situations before and after the INGO project in the cyclone-affected villages were analysed in this study according to the three timelines shown in Figure 2.8 below.

First timeline Before the INGO's Labutta project (Prior to and after Cyclone Nargis until the INGO project started in August 2008)	→	**Second timeline** The 30-month INGO project from its commencement in Labutta in August 2008 until its completion in December 2011	→	**Third timeline** After the 30-month INGO project. From 1 January 2012 to the data collection in April 2014, which is 28 months

Figure 2.8: The three different timelines of the 30-month INGO project

The timelines in Figure 2.8 are divided into different periods: before, during and after Cyclone Nargis with some gaps in between. The third timeline covers the 28-month period beyond the INGO project, from the time the INGO left the villages until the data collection period for this study in April – May 2014. The intention of the third timeline analysis is to demonstrate the sustainability (or otherwise) of the capacity building, empowerment and different types of capital development of the women. The detailed lists of INGO activities are presented in Chapter 5 with the document analysis.

2.7.3 The structure of the INGO project

Six permanent staff and fifteen part-time staff who were Myanmar locals implemented the pilot INGO project over a period of five months. All the local staff were women and three senior staff were experienced in gender and development issues. Five international short-term consultants in administration, finance, health, media and gender also worked for three months at a time with the local project staff. The project involved other experts from different areas such as education (vocational education, monitoring, recording, etc.), life skills, human trafficking, gender-based violence, emergency preparedness and response, etc., economics (basic and advanced financial management, marketing, waste control, etc.) and health (HIV/AIDS, STI, water-borne diseases, water and sanitation, hygiene, etc.). In the second project, eight permanent staff and eleven part-time staff (both local and international short term consultants), including one external evaluator, worked together with five peer educators who were selected from three of the 27 villages. In the third project, five permanent staff and seven part-time local staff, including one external evaluator, worked together with seven women community educators/leaders and 54 peer educator women from the 27 villages. The INGO project structure is outlined in Figure 2.9.
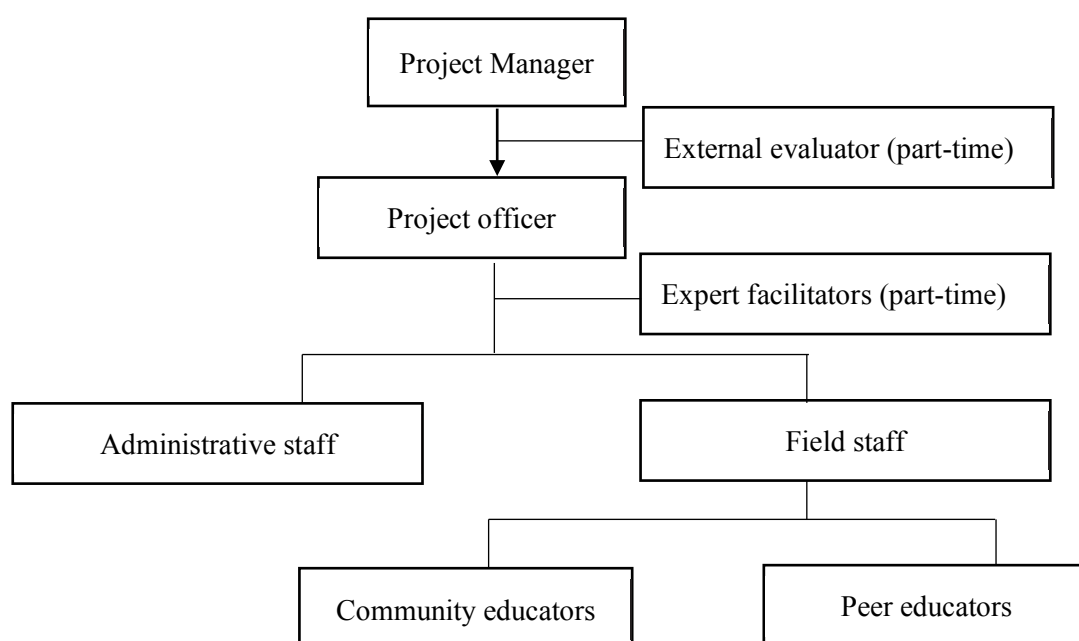
Figure 2.9: The INGO's project structure

All the INGO staff, both permanent and part-time were university graduates who lived in Yangon and other towns, including Labutta. They were local Myanmar citizens from different ethnic backgrounds, but their official language was Burmese. All local and international INGO staff had different levels of experience (ranging from 3–23 years) in social work, particularly in relation to rehabilitation and recovery. However, the community educators and peer educators were drawn from the women cyclone survivors who participated in the 30-monthINGO project.

2.8   Chapter summary

This chapter has provided background information on Myanmar, Cyclone Nargis, and the 30-monthINGO project for the 2,165 women cyclone survivors from 27 villages based in Labutta, in the Delta Region of Myanmar. The next chapter will present the literature review of this study.

CHAPTER 3: LITERATURE REVIEW

3.1 Introduction

This research thesis investigates how rural women living in Myanmar survived following Cyclone Nargis. In particular, it examines how they experienced capacity building and empowerment, and the roles of networks and social capital in the process.

The women from the Labutta cyclone disaster area received different kinds of assistance in their recovery by an International Non-Governmental Organization (INGO) over a 30-month period. At the time of data collection for this study, the INGO records indicate that no research had been conducted on the change processes the women experienced through the INGO project. In addition, the sustainability of those changes has not been examined thus far which led to my interest in researching these topics.

A World Bank study of disaster recovery indicated that natural hazards can have a ripple effect on the economy of a nation, affecting individuals first, then communities and lastly the state (Lall & Diechmann 2010). Aldrich (2012) proposes that the capacity building and social capital of affected communities in the aftermath of cyclones are key to the restoration of pre-disaster conditions. Thus, the selected literature focuses on the following: the association between disaster and resilience, women and their experiences related to capacity building, and social and other types of capital in relation to empowerment.

This chapter comprises two parts: the literature review followed by an introduction to the conceptual framework, which guides this study. Figure 3.1 indicates the organisation of the chapter. Part I of the literature review comprises the key components of this study: disasters, resilience, capacity building, empowerment, women, networks, social capital and other types of capital. The social capital literature is drawn from the seminal work of Bourdieu and Coleman (published primarily in the 1980s and 1990s). Both are prominent social capital researchers who focus on the interrelationships between

different types of capital, which is relevant to this study. Part II concerns the research framework of this study and the justification of its selection.

Introduction
Organisation of Chapter 3

I. Literature Review

Disasters
Capacity building
Resilience
Empowerment
Women
Social Capital
      o   Social capital and other types of capital
      o   Networks

II. Research Framework of this study

Conclusion
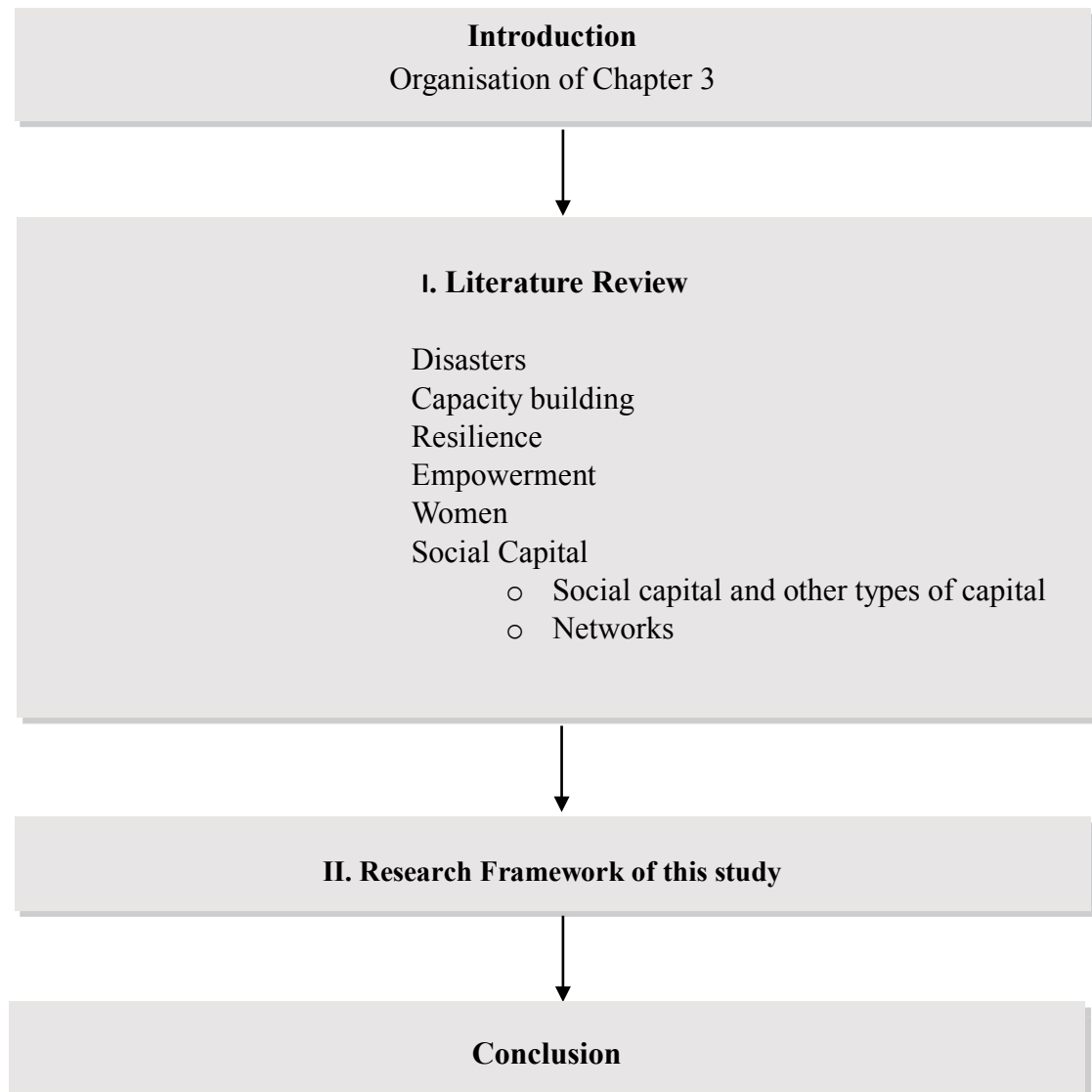
Figure 3.1 Organisation of Chapter 3

3.2 Disasters

This section focuses on various types of global disasters, responses and consequences. No person or place is immune from disasters or disaster-related losses. It has been argued that 'one way to reduce the impacts of disasters on the nation and its communities is to invest in enhancing resilience' (National Research Council 2012, p.1; Cutter et al. 2013), which is discussed later in this chapter.

According to the International Strategy for Disaster Reduction (ISDR) report, increasing numbers of natural disasters have occurred frequently across the globe since the beginning of the 21st century (UNISDR 2008). The International Federation of the Red Cross and the Red Crescent Society (IFRC) indicates that millions of people are unpredictably affected each year by various types of natural disasters (IFRC 2012). Such disasters represent global challenges as they result in damage not only to the livelihood of affected individuals, but also to the infrastructure of the State and the national economy (UNISDR 2008), particularly in developing countries in the most frequently affected areas – Asia, East Asia, Southeast Asia and Pacific Regions (Aldrich 2012; Edoun, Balgah & Mbohwa2015). Myanmar, the focus of this study, is situated in Southeast Asia (Sato & Tan 2015) and is the most disaster-prone country in the region (Phyo 2016).

Due to the frequency of disasters in recent decades, individuals in disaster-affected populations have developed significant psychological problems. A disaster assessment report was conducted by the International Post-Tsunami Study Group 20 months after tsunami-affected villages in Sri Lanka. It found that despite their receiving considerable emergency aid and rehabilitation assistance from local and international donors, the mental health of individuals in the disaster-affected population was still unstable at the time the assessment was conducted (Tull 2009). Tull (2009) maintains that the majority of the affected population were able to regain their pre-tsunami economic status with the assistance of multinational donors but they had profound difficulty resuming their daily lives, specifically their work-life stability, due to the high intensity of the psychological impact of the tsunami (Tull 2009).

A qualitative study of 56 Norwegian children and adolescent tourists who experienced the 2004 tsunami in Southeast Asia documented their psychological problems in the aftermath (Jensen, Ellestad & Dyb 2013). That study determined that the majority of the Norwegian survivors had little chance to network with other members of the affected population due to language and cultural barriers. Thus, the authors conclude that coping with trauma, psychological adjustment and resilience are key factors for the recovery of disaster-affected populations (Jensen, Ellestad & Dyb 2013), indicating that humanitarian aid needs to focus on more than just physical support for disaster recovery.

Other disaster studies show that survivors may take considerable time to regain their prior socio-economic status in the aftermath period (Becchetti & Castriota 2011; Gonzalez 2015). For example, the earthquake-affected population of the Marathwada region in India encountered challenges in their recovery process for seven or eight years after the disaster (Jigyasu 2002). Moreover, the mental well-being of disaster survivors, in particular women and children, can take longer to achieve than physical well-being (Jigyasu 2002).

Lall and Diechmann (2012) assert that ranges of recovery framework are required, and that the roles of the individual and considerations of sustainability are necessary for risk management policies and recovery projects. In order to examine the experience of affected populations in post-disaster periods, especially to develop effective risk management policies and recovery projects, it is necessary to include resilience as pointed out by Lusthaus, Adrien & Perstinger (1999). Aldrich's (2012) findings indicate that when survivors network and support each other, their psychological status is improved. He further points out that local networks can enhance the role of social capital through improving the collective action of survivors.

3.2.1 Resilience

This section concerns the concept of resilience, one of the key factors proposed for the psychological recovery of disaster survivors (as stated previously). The vulnerability of individuals exposed to natural hazards can be classified in three stages: exposure, resistance and resilience, according to Klein et al. (2003) and Pelling (2003a). Zhou, Wang, Wan and Jia (2010) propose that there are two different types of resilience – inherent resilience (concerning the ability to cope in familiar circumstances) and adaptive resilience (the ability to adapt to unfamiliar situations such as crisis situations). Robinson (2010) maintains that '…adaptive resilience is the capacity to remain productive and true to core purpose and identity whilst absorbing disturbance and adapting with integrity in response to changing circumstances' (p.14).

Resilience can be interpreted in different ways according to the context. In relation to disasters, resilience concerns the level of vulnerability of the individual in relation to their ability to 'bounce back' and restore their pre-disaster status (Klein et al. 2003). Resilience can also be determined according to four aspects - preparedness, protection, response and recovery - in regard to emergency and post-catastrophic events (Dribelbis, Delich & Kelly 2008). As stated in Chapter 2, however, there was a lack of emergency preparedness, protection and response from the state and communities when Cyclone Nargis hit, so in this study only the aspect of recovery is considered in regard to resilience (as suggested by Tuason, Guss & Carroll 2012).

Access to livelihood resources can help boost the level of resilience in local communities (Smith et al. 2008). Hence, when survivors possess resilience, they are generally better at coping with the negative impacts of disasters (Smith et al. 2008). Resilience can be influenced by a positive psychological status of individuals (Smith et al. 2008). In relation to positive psychology, resilience concerns the ability to overcome crisis and bounce back to a normal state of functioning (Nwiran & Pennock 2017). Adger (2000) defines social resilience as the ability of humans (individuals) in society to resist the negative impacts of natural disasters (cyclones, earthquakes and tsunamis) and man-made hazards (war, conflict and accidents).

Others have posited that 'resilience can be defined differently in the context of individuals, families, organisations, societies, and cultures' (Southwick et al. 2014, p.1). Southwick et al. (2014) maintain that multiple levels of analysis are necessary to understand the role of resilience. For example, a quantitative study of 241 survivors of the 2011 mega-earthquake and tsunami in Japan indicated that survivors exhibited different levels of Post-Traumatic Stress Disorder (PTSD), depression and poor general health (Kukihara et al. 2014). That study further identified that survivors with higher levels of resilience have a greater ability to cope with trauma, resulting in lower levels of PTSD, depression and general health problems than other survivors (Kukihara et al.2014). Hence, it appears that an individual's pre-disaster psychological status influences their recovery progress following a disaster (Fred-Mersah 2004; Wahlström 2010).

There are different methods for improving resilience - some focus on material issues and others on psychological assistance. Kukihara et al. (2014) propose that the provision of job opportunities and the revitalisation of pre-disaster status through building social networks is necessary in improving an individual's resilience threshold. Nwiran and Pennock (2017) state that a person with high levels of resilience can easily control the challenges with the help of personal resources (personality), strength and other positive attributes such as hope, optimism, and self-efficacy. Lightsey (2006) recommends that counselling may assist in enhancing the self-efficacy of an individual. Resilience can be measured through both quantitative and qualitative means (Wahlström 2010). Many studies that have focused on resilience following disaster have used quantitative methods to examine the psychological resilience of the affected population (Bonanno et al. 2007, 2010), whereas qualitative studies have been less common to date.

3.2.2 Women and natural disasters

This section concerns the role of women following natural disasters. Disasters can have a perilous effect on communities as a whole but the impact can be intensified for the most vulnerable in society, particularly women and children (UN Women 2015). The gendered division of labour, limited legal protection, fewer decision-making powers, and inadequate access to and supply of information and resources are some examples of gender discrimination that women often face (UN Women 2015).

Women in some societies face unnecessary obstacles in their daily lives such as their ability to network, share knowledge and experiences with others and thus build capacity and social capital (Grossman 2013; Lin 1999a). This is further supported by Grossman (2013) who stated that race, class and gender discrimination can determine the differences between men and women's development of social capacity.

Being occupied with domestic duties, many women in developing countries have little access to the information sharing, knowledge supply and exchange experiences, which are attainable through formal networking with others (Jigyasu 2002). On the other hand, men tend to experience convenient access to exchange of information and knowledge

through networking as they generally work together outdoors. As a result, limited information and knowledge in handling emergency situations can result in women and children being the most affected during and after disasters (IFRC 2012; Jigyasu 2002). For example, the 2007 Cyclone Sidr affected women in Bangladesh who had no prior knowledge of the cyclone as they were waiting at home for their husbands when it hit. This was in contrast to the men who worked outside the home (IFRC 2012).

Social bonds within communities and family networks can determine the disaster management capacity of individuals and communities when an unexpected crisis strikes in a particular society (Durant et al.2011). For example, research following the 2011 tsunami in Japan indicates that the pre-disaster capacity and social capital of the affected population led to effective community responses in the aftermath of the emergency (Aldrich 2012).Therefore they were not totally reliant on external assistance following disaster. In the case of Labutta there was no pre-disaster capacity training, hence, the limited capacity of individuals and communities was evident in terms of their lack of emergency preparedness and lack of access to weather/cyclone news (Daly & Feener 2016; UNOCHA 2008).

Harriden (2008) indicates that women's capacity and development are nurtured by their governments' policies, especially in the case of Myanmar where the economic, social and political status of women has declined significantly since the military government gained power in 1962.Since that time, Myanmar women have faced difficulties in accessing information and participating in their communities and political movements as the most of the women are encouraged to take passive roles in their homes and communities (Harriden 2008).

Putnam (1993, 2000) maintains that the central position of women in the family and their communities underpins the building of social capital in the community, particularly through their performance of voluntary social action and the generation of social trust and networks in a society where the norms of reciprocity and trustworthiness are set by volunteers. Putnam (1995) further argues that women are key players in the building and maintaining of community social capital.

In this regard, women's representation is important for family protection and the development of their affected societies after disaster or conflict (Sgoutas & Takseva 2015). In particular, women who have experienced trauma such as disasters, wars and conflict may network with other women to overcome various types of oppression, while comprehensive support is necessary to enhance their existing systems and local contexts (Sgoutas & Takseva 2015).

3.3 Capacity building

Women's capacity building following disaster is likely to depend on a number of factors. Capacity building has been defined by various scholars in various contexts. Brownson, Fielding and Green (2018, p.3-6), writing in the Annual Review of Public Health, argue that capacity building is multifaceted and often a difficult concept to define with 80 distinct characteristics of capacity building having been identified. They propose that across diverse disciplines, 'capacity building involves intentional, coordinated, and mission-driven efforts aimed at strengthening the activities, management, and governance of agencies to improve their performance and impact'. However, this study is more concerned with the capacity building of village women, than with the INGO that supported the process so it will focus on capacity building at the individual and community levels. Thus, the reference to capacity building as 'the ability of individuals, groups, institutions and organizations to identify and solve development problems over time' (Morgan 1996 cited in Lusthaus, Adrien & Perstinger 1999, p.3) is more relevant here and is adopted for this study.

Gonzalez (2015) proposes that capacity building is dependent on the social, financial and psychological support available from local communities and the state. He argues that while the support of the state is important for individual capacity building, an individual's capacity development can in turn be beneficial for local communities and nations (Gonzalez 2015).

The World Bank (1997) also proposes that individual capacity building can indirectly strengthen the capacity of the state. The United Nations Development Program (UNDP 1999) defines capacity building as the formation of human capabilities for the

development of people to enable them to tackle challenges and attain opportunities. UNESCO (2006) defines capacity building for development programs as:

> …the organizational and technical abilities, relationships and values that enable countries, organizations, groups and individuals at any level of society to carry out functions and achieve their development objective over time. Capacity refers not only to skills and knowledge, but also to relationships, values and attitudes, and many others. (p. 4)

The capacity building framework of the UN agency comprises three levels: the individual, organisation and environment, as shown in Figure 3.2 (Mak 2013; UNDP 1999; UNESCO 2006).
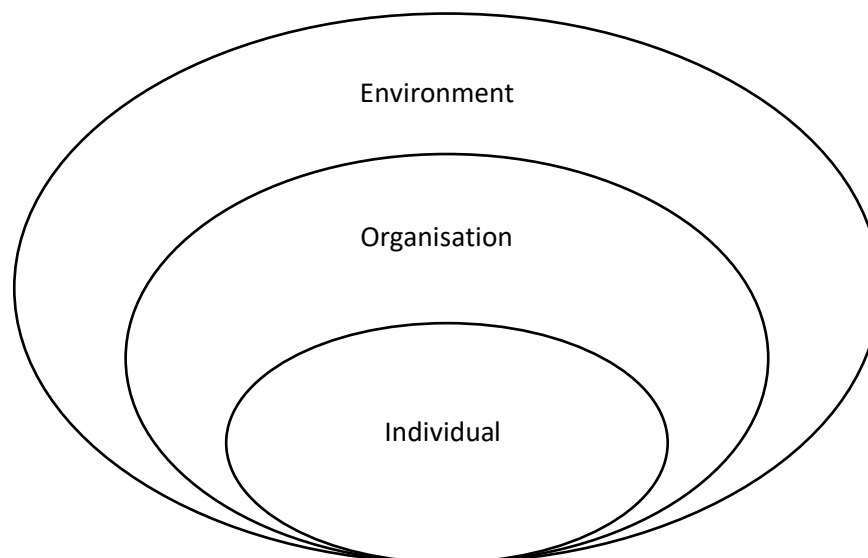
Figure 3.2: Levels of capacity

Source: UNDP 1998, p.7 cited in UNESCO 2006

As per Figure 3.2, at the individual level, community capacity building has a role in the development of the individual through enhancing their existing skills and knowledge, and engaging them in learning and progressive adaptation to change (UNESCO 2006). At the environmental level, community capacity building supports the establishment of an effective public administration that supports people's actions, together with the feedback mechanisms of a responsive and accountable system (UNDP 1999).

Nonetheless, the shared conception is that the capacity building of individuals is related to the state (Coleman 1988, 1990; UNDP 1997). In common with Gonzalez (2015), the UNDP (1999) argues that the state has a responsibility for the capacity building of its citizens through the provision of resources and the establishment of appropriate educational policies and institutions.

McNeil and Woolcock (2004) illustrate three definitions of capacity building used by the World Bank. The first two focus on the individual level and the third on the state level. The first is based on the work of Putnam (1993) and emphasises the nature of horizontal relationships comprising social networks and related norms that result in a community's productivity. Putnam posits that social capital includes trust, norms, and networks (Putnam1993, 1995) proposing that individuals and the wider community stand to benefit from social capital. He defined social capital as the 'features of social organizations such as trust, norms, and networks that can improve the efficiency of society facilitating coordinated actions' (Putnam et al. 1993, p. 167). The second definition derives from the work of Coleman (1988) and focuses on social structure as a whole including group interactions. The third definition includes both the state and society, and focuses on collective action for mutual benefit at both household and state levels.

Individual participation in the state's services through different institutions enables the poor in particular to take action as empowered individuals through capacity building. For example, in the case of potential entrepreneurs who were poor and needy, individuals reportedly formed a 'self-help' group to build social relationships and networks and thus gained collective power and access to the state's services for their capacity building and economic growth (Berner & Phillips 2005).

The level of individual participation in the state's institutions can create different levels of social capital between donors and the state in relation to disaster-affected areas (Fred-Mensah 2004). How to link the two levels (individual and state) in relation to capacity building is necessary to examine disaster-affected communities. As suggested by Gonzalez (2015) and the World Bank (1997), the capacity of the state can be

strengthened when effective and sustainable institutional policies support actors' capacity building processes through education and training.

For example, two studies conducted by the UNDP in 2002 indicated three key determinants of capacity building within the conflicted populations of Mozambique and Rwanda (Fred-Mersah 2004). Fred-Mersah (2004) states that it is necessary to focus on social capital in relation to capacity building as the two are interrelated. Further, it has been proposed that they are essential building blocks for building trust and gaining the confidence of affected people, influencing their post-disaster actions in conflicted or disaster-affected areas. This was the case in the 2011 tsunami-affected areas in Japan, according to Aldrich (2012), where the population, not only managed by itself, but was able to support and share basic necessities with each other because of the strength of pre-disaster social networks and the capacity for disaster response before the arrival of the State's official aid. Accordingly, for this study, in order to assess the capacity building of women due to the INGO's project, their situations before the disaster will be taken into account as well as their situation after the INGO's departure. Discussion will now turn to empowerment and its role in capacity building.

3.4 Empowerment

The term 'empowerment' was introduced by Rappaport (1981) and arose from the field of community psychology. When women are empowered it supports both their own and their community's development and can help to address poverty and gender inequality (Aguayo-Tellez et al. 2014; Chant 2016; UNDP 2016). Women's empowerment has been expressed as the need to '…encourage the women to take a stand for their own interest, gaining voice and taking actions as their right' (Fatima 2017, p.24). Kabeer (2012) proposes that women's empowerment concerns the ability to make choices and take chances, which is achievable only with the provision of three elements - opportunities, knowledge and capacity building. Moreover, providing chances through opportunities for women to apply their knowledge may enhance their ability and capability (Sen 1999).

3.4.1 Capacity building for empowerment

Education has been identified as the foundation for human capital development (Sen 1999). The interaction of education and capacity building can, of course, lead to the empowerment of women (Fatima 2017). However, Unterhalter (2003, p.7) argues that 'capability is acquired from several complex factors, which comprise schooling, learning, experiences chances and more'. Although referring to a clinical context, Holsbeeke, Ketelaar, Schoemaker & Gorter (2009) maintain that the terms 'capacity' and 'capability' have been used interchangeably in recent literature. This thesis focuses mainly on capacity building, which in some cases encompasses capability - as discussed in the next section. As pointed out earlier in this chapter the definition adopted for this study is that provided by Morgan (1996 cited in Lusthaus, Adrien & Perstinger 1999, p.3) which concerns 'the ability of individuals, groups, institutions and organisations being able to identify and solve development problems over time'.

Coleman (1988) asserts that capacity building is the antecedent of human capital development and is sustained when a person applies that capacity - such as knowledge, information and experience in his/her life as an empowered individual. He further claims that multiple resources such as financial income, human resources and social relationships are required for capability growth and the development of empowered individuals. Consequently, it is proposed that empowerment is the result of multiple factors such as capacity building (human capital), money (financial resources), social relationships (social capital) and the capability (experience and skill) of individuals (Coleman 1988; Robeyns 2006). In summary, Kabeer's (2012) definition of empowerment (adopted for this study) relates to empowerment requiring three elements – opportunities; knowledge and capacity building.

Women's human capital investment may enhance their capability to make decisions and gain control over their lives as empowered individuals. Coleman (1988) proposes that education is a basic investment for the development of every human being and that, as learning starts with the parent-child relationship; the home is the first site of capacity building. In some countries, parents make an investment in the form of school fees for their children's education in the hope that it will provide the 'return' of better incomes (economic benefit), higher living standards (social status) and social networks with others of 'high class' (Coleman 1988). This is intended to lead to capacity building

through learning and collective work with others, which helps to improve the capability of the individual (Coleman 1988; Nahapiet 2011). However, this view does not concur with a longitudinal study conducted in two villages in Bangladesh during the period 1996 to 2000. Arends-Kuenning and Amin (2001) argue that education for girls does not lead to an ideal situation for enhancing their capability and gaining power and control over their bodies. The social norms in Bangladesh favour marriage for women's well-being, and education is considered favourable as a resource to bargain with before marriage (Arends-Kuenning & Amin 2001). As a result, education is considered a resource for women's future security in these cultures but their empowerment is questionable.

3.4.2 Capability for empowerment

This section concerns the interconnections between capacity building, capability and empowerment. Capability has been defined as the ability of either individuals or groups to determine the quality of life that they can achieve (Coleman 1988). With a focus on the capability of the poor, Sen (1985) defines 'poverty' as a deficit in one's capability to live a good life. Sen (1987) further states that capabilities, functioning, and an agent are the necessary three foundations that will be useful when aiming to achieve improvements.

Robeyns (2006) proposes that empowerment for the enhancement of women's capability relies on various internal and external factors beyond training and capacity building, stating that there are three relevant domains: environmental, social and personal. Fatima (2017) recommends that supportive policies and a 'safe' environment are essential for women's empowerment as they are often oppressed psychologically, physically, socially, and economically under patriarchal societies. To convert knowledge to capability, practical applications of acquired knowledge and experience are crucial (Arends-Kuenning & Amin 2001). As per Robeyns's views on capability, the 2016 United Nations Global Compact maintains that gender equality and the empowerment of women rely on social, educational, economic and policy initiatives.

3.4.3 Women and empowerment

Gender inequality has been widely reported as one of the reasons why women are not empowered (Aguayo-Tellez et al. 2014; Juhn et al. 2014; UNICEF2007). Kabeer (2009, 14) defines empowerment as 'the ability to make choices', which she explains as follows:

> Poverty and disempowerment generally go hand in hand, because an inability to meet one's basic needs – and the resulting dependence on powerful others to do so – rules out the capacity for meaningful choice. This absence of choice is likely to affect women and men differently, because gender-related inequalities often intensify the effects of poverty.

Fatima (2017) proposes that women's empowerment concerns a 'bottom up' process of giving voice to vulnerable women. She further states that there are two possible ways to do this: promoting awareness of women's subordination at home and in the workplace, and building their capacity/enhancing their capability. Fatima (2017) does not clearly explain the empowerment processes from submission to empowerment. However, this issue will be discussed next.

Individual capacity building has been identified as key to the economic growth and empowerment of women (Kabeer 2012), while the concept of empowerment has been said to be changeable depending on the contexts and periods in time (Fatima 2017; Kabeer 1999). In addition, as pointed out previously, empowerment is said to exist at various levels – in relation to individuals and groups (Arends-Kuenning & Amin 2001; Fatima 2017). That said, Kabeer (2012) maintains that women's empowerment has a subjective element and, as it is related to '…the way they perceive themselves and their relationships with others… It thus begins with individual change'. (p 216 – 217)

Kabeer (1999) maintains that women's empowerment and their independence are determined by three key interrelated dimensions: access to resources, agency and achievement. For example, in India, family structures and traditional social norms hinder women in decision-making and in their access to education (Datta & Gailey 2012), which limits their ability to generate positive outcomes (Kabeer 2012).

Datta and Gailey (2012) maintain that women's empowerment extends beyond the ability to make decisions and informed choices. They propose there is a need to develop capacity and capability through education (human capital), promoting facilities to enhance women's participation in meeting their livelihood needs in a safe environment, and for supportive policies for women's development. They further argue that these are all challenges, especially for women in circumstances such as following natural disasters. Self-employment and social entrepreneurship are possible sources of women's empowerment, particularly in developing countries (Datta & Gailey 2012). Formal business networks, such as cooperatives, are often the best response to women's needs enabling them to network, both in terms of social relationships and to attain success in business through access to resources and sharing burdens and profits equally among individuals and/or network members (Farr 2004).

As this study examines the effects of a 30-month INGO project in relation to the situational changes of women following Cyclone Nargis, this section focuses on the context-specific definitions of different institutions. These include the United Nations Development Programme (UNDP) and the World Bank. Both projects focus on human capital development and capacity building for economic growth (UNDP 2016). For example, the UNDP (2008) states that there are three basic elements for women's empowerment - knowledge, resources and opportunity - offering economic growth and independence within their families and society. These elements are very similar to the empowerment concept proposed by Kabeer (2009) although she includes capacity building, which is outlined in the World Bank quotation below.

The World Bank (2016) definition targets empowerment at both the individual and collective levels as:

> … the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. Central to this process are actions which both build individual and collective assets, and improve the efficiency and fairness of the organizational and institutional context which govern the use of these assets. (p.1)

Although the concept of empowerment is not objective, fixed and measurable but subjective and open to interpretation, there does appear to be some agreement in the literature that it is related to agency. Sen (1985:206) associates agency freedom with well-being, specifically 'what a person is free to do and achieve in pursuit of whatever goals or values he or she regards as important'. Strotmann, & Volkert's (2018) study, which sets out to determine whether there were any missing dimensions in the Multidimensional Poverty Index, was based in India and included more than 2,300 participants. Analysis resulted in a statistically significant finding between agency and happiness. When measuring agency and empowerment they explained 'we find that villagers who say they do not have the opportunity to change things in their village community are significantly less happy than villagers who feel they do' (Strotmann, & Volkert 2018, p184).

Earlier work by Rappaport (1981, 1985) proposes that individuals become empowered when they gain control and mastery over their lives – this includes learning and utilising skills that may influence their life events leading to empowerment. Further research analyses empowerment in an organisational setting defining empowerment as when individuals 'perceive that they have power or when they believe they can adequately cope with events, situations, and/or the people they confront' implying enabling through the enhancement of self-efficacy (Conger, & Kanungo 1988, p. 473). Conversely, Conger & Kanungo (1988, p.473) argue that individuals feel disempowered when 'they believe that they are unable to cope with the physical and social demands of their environment'.

Consequently, empowerment appears to be defined by agency, the ability to make choices and cope with events and bring about change towards particular goals and/or outcomes. Specifically, the social structures, networks, and ability of individuals to interact within them are fundamental for capacity building and empowerment (Fatima 2017; Kabeer 2009, 2012).

In summary, the definition of women's empowerment appears to be embedded in local value and belief systems that illustrate its changing nature (World Bank 2002b). Thus, it is important for this study to identify whether and, if so, how the Myanmar women cyclone survivors involved in this study became empowered during their recovery process.

3.4.4 Networks and empowerment

As discussed previously, others have examined networks in relation to women's empowerment. Reddy and Manak (2005) explain the nature and objectives of networks and their benefits for women's empowerment.

Many poor women from Southern India voluntarily network and perform collective actions for collective economic growth, which in turn, is reported to result in their empowerment (Reddy & Manak 2005; Suguna 2006). Women volunteers formed small groups/networks known as 'self-help groups' (SHGs). These groups saved funds to operate their businesses (Datta & Gailey 2012; Reddy & Manak 2005; Suguna 2006). Six key factors were identified which promote women's' active participation in the SHGs: effective networking, communication, information and knowledge exchange, regular meetings, and supportive policies at the SHG, institutional or state level (Datta & Gailey 2012; Reddy & Manak 2005). Especially important are policies for a safe environment for women (Fatima 2017). A systematic review of SHGs found that economic, social, and political empowerment was embodied in familiarity with handling finances, independent decision-making in relation to financial matters, and 'solidarity, improved social networks, and respect from the household and other community members' (Brody, De Hoop, Vojtkova, Warnock, Dunbar, Murthy & Dworkin 2015, p.6).

This impact assessment shows that networks can assist the development of both the network itself (the group) and its members (the individuals) - women attain the ability to enhance their capacity through collective action with other members (Reddy & Manak 2005). Apart from financing and the network, the other three factors that were found to be important were financial management, governance and human resources in terms of network sustainability (Reddy & Manak 2005).

The World Bank (2002a) has suggested that horizontal connections of networks, both formal or informal, can produce more social capital in terms of commitment, mutual reciprocity and trust, and individuals can be empowered through the cooperation and social cohesion of the network's members. Thus, it appears that networks are pivotal in providing chances for social relationships as well as improving effective

communication, trust, cooperation, and social cohesion (World Bank 2002a). That said, although the empowerment of both individuals and groups may be supported by networks, the interaction and relationship processes of network members is not clearly evident in the World Bank's (2002a) study.

According to Bankston and Zhou (2002), the pattern of networks can be examined in terms of the levels of individual participation (frequency) in groups. They explain that social capital (comprising communication, trust, cooperation and social cohesion) is the social resource of an individual and can result in benefits. Moreover, it has been proposed that the possession of social capital can lead to agency (empowerment) (Carrasco & Bilal 2016). Network patterns are represented by the richness in linking bonds and through sharing value with individuals who have a role and responsibility to exercise actions as a member of the group (Achrol 1997; Bankston & Zhou 2002).

In order to examine the impact of women's networks, Kabeer (2012) proposes that it is the interaction amongst network members that delivers either success or failure. The quality and effectiveness of the networks thus indicates the nature of relationships among actors who are directly or indirectly involved in collaboration within the network groups (Fatima 2017; Hakansson & Ford 2002; Hakansson & Snehota 1995). Other scholars have measured networks by the different types of ties amongst members (Lin 1999; Porter 1998: Putnam 1995; Unterhalter 2003). Wuchty (2009) claims that two types of social ties exist within networks in society: formal or professional ties and informal or romantic ties.

Although Granovetter (2005) uses the terms 'interpersonal ties' rather than 'informal ties', he identifies how members carry information through networks in three variations – strong, weak or absent – which can affect the economic outcomes for their society. Others maintain that the ties reflect the relationship or connection between two or more actors to form wider and larger networks for both social and business purposes (Bankston & Zhou 2002; Fatima 2017; Hakansson & Snehota 1995). The next section discusses the various structures of networks.

3.5 Networks

Every institution or group of networks has its own structure for the organisation and operation of networks within and beyond the institutional or group structure, interlinking with its members and externally linking with members of other groups (Ritter, Wilkinson & Johnston 2004). The strategies and actions of individual members within each network represent the structure and position of each particular network (Hakansson & Ford 2002).

The community research connection of sustainable community development (2016) maintains that networks are vital foundations for building trust, facilitating the flow of knowledge and information, and empowering individuals to perform collective action. Nonaka and Takeuchi (1995) suggest that the aim of networks in relation to social capital is to reach more people for sharing information, knowledge and learning experiences, whereas Coleman (1988, 1990, 1994a) refers to two significant benefits of networks: the building of relationships, and the provision of access to the resources of individuals and social structures. Both functions are essential for the growth and sustainability of networks (Gadde, Huemer & Hakansson 2003) and will be examined in this study, in particular, how women cyclone survivors built relationships within networks and accessed tangible/intangible resources within their village structures.

Social capital refers to the social networks present in society (Batjargal 2003; Batt 2008; Lin 1999) to allow individuals to take actions as networks mobilise purposive actions for accessing opportunity (Lin 1999). Putnam (1995) highlights both the positive and negative potential outcomes of social capital. For example, Mafia groups in Italy created negative outcomes where an individual member's behaviour is influenced by sharing the knowledge and experience of others to build their social capital within their network. A positive example of social capital relates to local governance in Italy and the level of member interrelations in networks, particularly voluntary groups of women (Putnam 1995). Constructive networks influence the behaviour of individuals, and the advancement of network structures, which is adapted by sharing knowledge and experiences (Hakansoon & Snehota 1995; Purchase, Olaru & Vaaland 2006).

Lin (1999) argues that every individual may achieve better and satisfactory socio-economic status by mobilising social capital, as they are able to take action and make choices within networks while building social capital. Others have suggested that every actor participating in a network has the flexibility to adapt their relationships with other actors (Ferragina 2010; Wilkinson & Young 2002) with the choice of building a better, more cohesive society.

The role of individuals in networks in disaster-affected populations in Myanmar has not been widely researched in the social capital literature. Ford et al. (2010) state that individuals within networks make their own decisions about their networking approach and extent of cooperation with other members within or beyond the network. Wilkinson and Young (2002) indicate that the participation of individuals within networks is likely to be influenced by the aims and situations of the institutions or groups associated with them. In most networks, different ways of networking – active or passive, direct or indirect – are chosen by individual members based on whom they wish to cooperate with, thus the structure of networks may be changeable over time (Hakansson & Snehota 1995, Ford et al. 2010).

As Field (2003) explains, the central concept of social capital is that 'relationships matter'. That is why a number of authors have linked a lack of social capital with gender (Eagly & Carli 2007; McAdam, Harrison & Leitch 2018). McAdam, Harrison & Leitch (2018) posit that gender affects social capital accumulation so that women have less social capital than men. McAdam et al. (2018) emphasise the particular problems women face in networks with mixed genders as they do not or cannot invest in building their own social capital, largely due to their lack of influence thus leading to systemic disadvantage. However, the networks referred to in this study were for women only and took place in the Women's Friendly Space (WFS).

3.5.1 Communication, trust, cooperation and social cohesion within networks

Although networks can be defined from various perspectives, one common conclusion is that communication, the sharing of information and experience, co-operation (collective action), social cohesion, and trust are all common factors for building social relationships within them. Tsai (2001) proposes that the content of network interactions represents the relationships of the specific actors or groups when intangible resources (communication, cooperation, social cohesion and trust) and knowledge are the focus.

The individuals in a group grow their social relationships (social capital) when network structures expand and vice versa (Ahuja 2000; Batjargal 2003; Nonaka & Takeuchi 1995). For example, individuals can access information about work and employment, potential markets, and other opportunities through their communication from two channels: social relationships and networks (McDonald, Lin & Ao 2009); that is, when they access or mobilise social capital (Lin 2001). McAdam et al. (2018) maintain that women's networking tends to be centred at the intersection of work, family and social life. If they are not provided with access to other networks, women may face challenges when solely based in the home, as per many of the rural women in this study.

Trust is one potential outcome of social capital, which is likely to be generated from communication amongst members (Adler & Kwon 2002; Coleman 1988). Aldrich (2012) argues that trust among disaster survivors (and between them and others) tends to be developed through effective communication, for example at regular meetings, which generates social cohesion through cooperative work.

Cooperation, in common with social cohesion, plays an important role in binding and bridging people within a society in the performance of collective and cooperative work (either for profit or not), as was evident in the populations affected by the 2011 Japanese tsunami (Aldrich 2012). Cooperation and social cohesion interact as social ties with limited involvement of power (Lin 1999b); they are the glue that binds together members of groups to develop social capital (Aldrich 2012; Narayan 1999). Larsen (2013, p. 3) therefore defines social cohesion as 'the belief held by citizens in a given nation state that they share a moral community, which enables them to build trust with each other. Conversely, it is suggested that the opposite of social cohesion – social

erosion – may exist in networks where social structures cause failures in networking (Larsen 2013). Thus, he argues that social cohesion and trust are interlinked and act as a bond between citizens and their state at large (Larsen 2013).

3.6 Social capital

The concept of social capital has been popular since the 1980s (Fine 2007) and is applied widely across various sectors (Lin 1999b). Social capital theory emerged as parallel to but separate from social resource theory in the 1980s (Lin 1999b; Coleman 1988), with authors such as Blokker (2004) arguing that social capital is an approach, rather than a concept. Coleman's (1988) work on social capital refers to its underlying components as dimensions. Others maintain that the complex nature of social capital is reinforced when the underlying dimensions such as norms, obligations and social skills are examined closely (Alder & Kwon 2002; Grossman 2013; Lin 1999b, 2001, 2005). Focusing on social capital, women cyclone survivors is intended to provide a foundation for considering the women's capacity building and empowerment.

3.6.1 Concepts and definitions of social capital

Social capital has been defined as the shared knowledge, understanding, norms, rules, mutual understanding, collective actions and expectations related to a common goal of individuals or groups (Aldrich 2012; Ostrom 1994, 1995, 2003). It is said to constitute an individual's social relationships (agency), particularly in relation to their social structures for sharing resources (Adler & Kwon 2002). Even in disaster situations, individuals within social structures perform collective work within their particular societies to benefit individuals (Aldrich 2012). However, empirical studies conducted by entities such as the Department for International Development (DFID), the World Bank and the New Zealand Government identify the collective level of social capital development as being that of individuals or groups (Dudwick et al. 2006; Solesbury 2003; Spellerberg 2001). For this reason, Field (2003) proposes that individuals and their social constructs require more research in different contexts. To date, social capital has attracted a great deal of research attention, with Lin (1999a), suggesting that such

research can be conceptualised from various perspectives (Allahdadi 2011; Grossman 2013).

The theoretical perspective of social capital basically comprises two properties: structure and agency, according to Bourdieu (1984). Under the structural property concept, Lin (1999a) defines social capital as the networks and choices that, in turn, generate more meaningful results from social capital. In relation to agency, the empowerment literature indicates that the key components are resources and agency – in the form of control, awareness, voice and power (Malhotra, Schuler & Boender 2002). This supports the relevance of social capital for this study to analyse the empowerment of women disaster survivors as '…empowerment focuses on supporting disadvantaged people to gain power and exert greater influence over those who control access to key resources' (ICAI 2013, p. 1).From a sociological perspective, social capital has been defined as the social resources that occur in social relationships between individuals and groups to access resources or reach the common goals of society, which include individual and collective goals (Bourdieu 1986; Coleman 1988; Lin 1999b; Putnam 2000; Putnam et al. 1993). This perspective allows that the intertwining of social capital and economic capital (resources) are essential for the development of society (Grossman 2013; Lichterman 2006). Definitions of social capital according to various scholars are presented in Table 3.1.

Table 3.1: Definitions (and characteristics) of social capital

Author	Definitions and Characteristics of social capital (SC)
Batt (2008)	SC is identification of its context.
Bourdieu (1986)	Power, position, social class. Distinguishes between the accumulated three forms of capital: economic capital, cultural capital and social capital.
Coleman (1994a)	SC is how people interact with each other, and how social relationships exist at all levels of society.
Dekker & Uslaner (2001)	People's interactions with each other - as social relationships exist at all levels of society.
Durlauf & Fafchamps(2004)	SC has multiple interpretations and different conceptualizations.

Author	Definitions and Characteristics of social capital (SC)
Farr (2004)	SC includes networks, norms and trust. Networks display density and quality, norms represent social relationships and individual actions, and trust indicates the psychological result of interrelationships between and among people. SC has multiple interpretations and different conceptualizations.
Ferragina (2010, 2012, 2013)	SC concerns the free choice of individuals in society, while keeping together community networks to build the generalized trust that creates a more cohesive society.
Field (2003)	SC is referred to as trustworthiness.
Granovetter (1985)	SC is embedded in social networks.
Grossman (2013)	SC differs among groups according to context.
Jacobs (1961)	SC is merely the nature of networks.
Lin (1999b) **Lin et al. (2001)**	The social networks in society. SC means social ties.
Narayan &Cassidy (2001, p. 59)	SC has gained wide acceptability as a fruitful theoretical perspective for understanding and predicting the norms and social relations embedded in the social structures of society.
Portes (1998)	SC represents group solidarity.
Putnam	Understanding SC relates to the identification of its context (1995). SC is a universal concept that exists in society (2000). SC relates to either bonding or bridging (2000)

Table 3.1 indicates a range of different social capital definitions and characteristics proposed by various scholars. Portes (1998) proposes that social capital represents group solidarity, although it is argued that the role of social capital in society has changed in recent decades to include the free choice of individuals to create a more cohesive society (Ferragina 2010, 2012, 2013). Most scholars concur, however, that the concept of social capital is contextual and may change over time (Fine 2007). Thus, while the social capital concept may appear to be fairly simple, it may be complex in its application (Grossman 2013).

Some have defined social capital as the representation of society (Durlauf & Fafchamps 2004) or the result of social relationships (Coleman 1994a; Dekker & Uslaner 2001), while others define it as the process of social relationships (Narayan & Cassidy 2001). Adler and Kwon (2002) argue that to date, no single accepted definition of social capital has gained consensus. That said, the majority of scholars (see Table 2.1) acknowledge that social capital includes networks (Farr 2004; Granovetter 1985; Jacobs 1961; Lin

1999 a, b, 2001) and is related to context (Batt 2008; Grossman 2013; Putnam 1995, 2000).

Moreover, social capital is generally considered to represent an individual's social relationship within their society - reflecting their social structure and content (Adler & Kwon 2002; Coleman 1988). Alfred (2009, p.3) concurs, defining social capital 'as a determinant of an individual's economic growth and as a contributor to the well-being of communities and nations'. Knudsen et al. (2008) examined what shapes the meaning, definition and understanding of social capital in a particular context, concluding that membership is fundamental because people experience social capital differently as members or non-members of a group. Lin et al. (2001) and Grossman (2013) also argue that context-specific social capital, based on socio-demographics, is an under-researched area.

Context-specific social capital can be represented as the universal meaning of a particular society. This can relate to either networks or the social relationships of individual social actors, according to Coleman (1988). By contrast, Bourdieu (1986) focuses on the social interactions of elites and powerful groups, which enhance social capital to maintain their power and limit outsiders from joining.

Regarding context-specific social capital, Allahdadi (2011) claims that the study of social capital is mainly based on Western experience, and social capital in other diverse communities should be explored (Grossman 2013). The study of social capital, women and empowerment in Asia, particularly in India, Nepal, Bangladesh and Thailand, has been researched broadly thus far. However, the role of social capital in the development of disaster survivors in Myanmar from a local point of view (the researcher of this study is local) has not been represented sufficiently to date either in the social capital literature or in empirical studies.

In relation to disaster recovery, social capital can be created when local networks are built within disaster-affected communities to increase community resilience during recovery periods (Aldrich & Meyer 2014). Disaster survivors require various kinds of assistance for physical, psychological, educational, social and economic development (Tull 2009), as has been seen in the experiences of disaster survivors in Asia and Latin America (Aldrich & Meyer 2014).

Aldrich and Meyer (2014) acknowledge that disaster survivors can provide assistance and share personal resources in the aftermath of disasters, building local networks to share information and knowledge (social capital) during recovery. This indicates that networks for disaster survivors can play an important role by building social capital, and sharing information and knowledge, to generate resources (financial and physical capital) to restore pre-disaster status (Aldrich & Meyer 2014).

3.6.2 Theoretical perspectives of social capital

As shown in previous Table 3.1, the definition and concepts of social capital are varied. Those proposed by Bourdieu, Coleman and Putnam are commonly cited (Gauntlett 2011; Grossman 2013; Tzanakis 2013). Bourdieu (1986) and Coleman (1988) present social capital from a sociological perspective. Moreover, both Bourdieu (1986) and Coleman (1988, 1994b) recognise the accumulated patterns of social capital and social capital's capacity to produce other types of capital. In contrast, Putnam (1995) presents social capital from a combination of economic and political economic perspectives, and so his work is not considered appropriate for this study.

Portes (1998, p.3) proposes that 'Bourdieu's analysis is the most theoretically refined among those that have introduced social capital in contemporary sociological discourse'. The social capital concept of French sociologist Pierre Bourdieu (b. 1930 - d. 2002) is important for this study because he focuses on social class, resulting from the inequality of resources. Capital is considered as 'accumulated labour that is either in material form or its 'incorporated', embodied form' (Bourdieu 1986, p. 241). The significance of Bourdieu's social capital is in its emphasis on social interactions within social classes. He argues that the higher and middle classes consist of either individuals or elite groups which maintain their social capital, culture, power, wealth, and social class from generation to generation (Alfred 2009). Consequently, Alfred (2009) maintains that Bourdieu's definition of social capital is considered within an institutionalised relationship, with class distinction the most prominent feature in society.

As per Bourdieu (1986), social capital emanates from social relationships between and among actors in the group, 'focusing on the benefits accruing to individuals by virtue of participation in groups and on the deliberate construction of sociability for the purpose of creating this resource' (Portes 1998, p. 3). Bordieu's (1986) key concern is the resources that are associated with group membership and social networks. He argues that the volume and quality of a group's resources depend on both the number of members in the group and the effective mobilisation skills of the individual member as an agent. As explained by Portes (1998), Bourdieu's social capital definition comprises two elements: 'first, the social relationship itself that allows individuals to claim access to resources possessed by their associates, and second, the amount and quality of those resources' (p.3).

Further, it is proposed that social interactions can generate social capital or other forms of capital- social, economic, cultural and symbolic, which represent the context of social space and practices (Bourdieu 1986). Bourdieu (1986) further specifies that 'Economic capital is at the root of all other types of capital' (p. 252), and that all forms of capital operate together to reproduce inequality in the same or different forms between social groups.

Along with social capital, Bourdieu (1977, 1986) discusses the relationships between three other forms of capital: economic capital (which he divides into two: money, and physical properties that can be measured as aspects of resource ownership as tangible assets), cultural capital, and symbolic capital. These forms of capital are embedded in the groups that form the hierarchical social classes of society.

Class distinction exists due to resource ownership and represents particular social structures, as suggested by Bourdieu (1986). Consequently, class may hinder an individual's access to the group's resources thus limiting the development of social capital in particular societies (Bourdieu 1986). Societal structures of disaster-affected areas can be changed after a disaster because the population might either be decreased (when people die) or increased (because of migration away from the disaster area) (Aldrich 2012). For example, the majority of inhabitants moved permanently from New Orleans after the 2005 Hurricane Katrina (Aldrich 2012). Bourdieu's (1986, 1992)

concept of social capital is applied in this study as the most relevant because he acknowledges that social capital is related to other types of capital to generate either the same or different types of capital.

3.6.3 Social and other types of capital

As stated previously, Bourdieu (1986) acknowledges the interactions between and among social, economic (physical and financial) and cultural forms of capital, which are 'fungible', meaning these forms of capital essentially require interaction for their development. Social capital, for example, may be gained through the investment of material or financial resources and the possession of cultural knowledge by the individual. Group membership is said to facilitate a higher degree of social capital, with a multiplier effect on the influence of other forms of capital (Bourdieu 1986).

Economic capital is the ability of an individual to produce or reproduce resources for physical and financial gain (Bourdieu 1986). Physical capital describes infrastructure, equipment, and public goods required for further production and economic growth (DFID 1999; Goodwin 2003; Solesbury 2003). In this study, both physical and financial forms of capital are considered as tangible capital in relation to a participant's economic growth.

Bourdieu's concept of social capital focuses on the power and social class of particular groups from one generation to another. However, trust is ignored in Bourdieu's social capital concept although others have included it as integral to many network studies (Lin 1999a, 1999b; Lin et al. 2001). It has also been argued that Bourdieu's concept of social capital focuses on the elite and powerful social classes, allowing little or no space for other contexts, which are also required to understand issues related to inequality (Grossman 2013).

In common with Bourdieu, the American sociologist James Coleman (b.1926 – d.1995), discusses other types of capital in his concept of social capital. However, as pointed out by Portes (1998, p.1), 'he does not mention Bourdieu, although his analysis of the

possible uses of social capital for the acquisition of educational credentials closely parallels that pioneered by the French sociologist'. That said, Coleman does refer to the work of Loury (1987) which, according to Portes (1998 p.5), 'paved the way for Coleman's more refined analysis of the same process, namely the role of social capital in the creation of human capital'.

Coleman's (1988, 1990) definition of social capital concerns the relationship between social action among actors (agency) within particular social structures. In particular, Coleman proposes that social capital links agency and social structures, stating 'an institution or the State's social capital is also manifest in three forms: physical [which includes financial capital], human and social capital' (1988, p.101).

For Coleman (1988), the social relationships of both individuals and groups generate social capital as resources. Trust, reciprocity and social norms are included in social capital (Porter 1988). Trust is crucial in building social capital among people who are members of networks, and together with expectation and obligation it is important for long-term relationships between and among members because it underlies social norms (Coleman 1988, 1990).

Human capital, physical capital (financial capital) and social capital

Coleman (1986, 1988) emphasises the important role of social capital in the development of human capital in the next generation through education. He defines human capital as the intangible resources concerned with generating physical capital and social capital. Coleman argues that social capital is likely to be a catalyst and relates to social relations both within and outside of particular social structures. Social capital concerns interplay, is the intangible catalyst between the three forms of capital, and can help to create new capital. The building of social capital can lead to an increase in human and physical capital, and thus can generate other capital such as financial capital (Coleman1988).

Bourdieu and Coleman acknowledge that all material assets (financial, savings, physical assets), referred to as resources, constitute tangible capital (Roy, Singh, Burman & Singh 2012). Intangible capital, however, refers to knowledge (human capital) and social capital (Roy et al. 2012), which is embedded in individuals/social actors and societies as habit (cultural capital). Portes (1998) asserts that '…whereas economic capital is in people's bank accounts and human capital is inside their heads, social capital inheres in the structure of their relationships. To possess social capital, a person must be related to others, and it is those others, not himself, who are the actual source of his or her advantage' (p.7).

Unlike other scholars (e.g. Siisiäinen 2000), the main focus of Bourdieu's concept of social capital is power. Coleman's focus is on education and he ignores the inheritance of power, self- resilience and psychological capital. Neither Bourdieu nor Coleman discusses the empowerment of the individual. However, this is a main concern of the present study, which requires consideration of the effective contribution of social capital in non-elite groups (Bexley 2007; Grossman 2013), particularly given the context of a disaster-affected population (Gonzalez 2015). Both Bourdieu and Coleman stress the intangible character of social capital in relation to other forms of capital (Portes 1998). In this study, therefore, the terms 'tangible capital' and 'intangible capital' refer to these types of capital.

The scope of this study includes human and social capital (including networks), which are intangible capital. Financial and physical capital represents tangible capital, as defined by Coleman (1988, 1990), Carloni and Crowley (2005) and Solesbury (2003). However, the previous discussion concerning resilience and disaster survivors (see 3.2) indicates that positive psychological capital is required to integrate the other types of capital.

3.7   Dimensions of social capital

Scholars have identified various types and dimensions of social capital to date. Dudwick et al. (2006) suggest that studies and their contexts should be key determinants for choosing which types and dimensions can offer the best representation of social capital in a particular social structure. Table 3.2 below illustrates the work of a range of scholars and the various dimensions they have proposed in relation to social capital.

It is clear from the range of definitions provided in Table 3.2 that although social capital covers a wide range of dimensions, contexts and perspectives, many scholars perceive social capital in relation to networks (Bourdieu 1986; Jacobs 1961; Lin 1999; Nahapiet & Ghoshal 1998; Putnam 1995), while some perceive social capital in relation to social ties (Lin 1989; Tsai & Ghoshal 1998). Still others consider social capital in the context of class systems (Bourdieu 1986; Useem & Karbel 1986) or position (Brass 1994; Friedman & Krackhardt 1997). Culture, social practice (norms, values), groups and their relationships are also viewed as dimensions of social capital as suggested by Burt (1992), Fukuyama (1997), Kreuter (1998), Kreuter and Lezin (2002), Putnam (1995) and Woolcock (1998). However, in the 21st century, dimensions of social capital have shifted to include individual empowerment (Allahdadi 2011) and free choice towards the building of a better and more cohesive society (Ferragina 2010, 2012, 2013).

It is also evident that there are interrelationships among the various dimensions of social capital. For example, Putnam (1995) explains that a network can facilitate member communication through social interaction, and trust is generated to perform collective action through coordination, communication, social reputation, and the solving of social problems together within a community. Huemer (2004) suggests that there are interrelationships between three dimensions: networks, trust and identity (of the individual); however, the flow of interrelationship is not clearly evident. His view is that these three dimensions are required to balance both the stability and variety of relationships, and that regular member meetings within networks are useful methods of communication for exploring problems, sharing and exchanging opportunities, and to maintain understanding. Although the concept of social capital has attracted a number of critics over time in relation to both policy and its academic use, Tlili & Obsiye (2014, p. 569) argue that it 'can still claim a place in the sociological imagination and make a

contribution to theorizing and understanding the relational resources that people can mobilize to 'get things done' as per its reference in this study.

Table 3.2: Dimensions of social capital over time

Dimensions of social capital	Scholars
Empowerment	Allahdadi 2011
Networks	Bourdieu 1986; Jacobs 1961; Lin1999;
Access to resources through relationships	Bourdieu 1992; Lin 1999b
Class	Bourdieu 1986; Useem & Karbel
Effective social relationships	Bourdieu 1986, 1992
One's position in a society or social relations for information and support	Brass 1994; Friedman & Krackhardt 1997
Relationships	Burt 1997
Opportunity in a free society	Burt 1997; Lin 1999; Loury 1987
The productive structure of relations, social interaction, communication, expectations/ obligations, the norms of reciprocity, trust, information	Coleman 1988; 1990; 1994 a,b
Reciprocity	Coleman 1994; Hannerz1969; Woolcock 1998
Individual free choice to build a better, cohesive society	Ferragina 2010, 2012, 2013
Group	Fukuyama 1997; Putnam 1995
Norms and value	Fukuyama 1997
Culture and social outcome	Fukuyama 1997; Kreuter 1998; Kreuter & Lezin 2002; Putnam1995; Woolcock 1997
Social ties	Lin 1989; Tsai & Ghoshal 1998
Access to valuable resources through the networks of relationships	Nahapiet & Ghoshal 1998
Facilitation through norms and the social trust related to coordination and cooperation for mutual benefit	Putnam, 1995
Trust within that context	Tsai & Ghoshal 1998
Information, trust, norms, social networks, collective action for mutual benefit	Woolcock 1998

3.7.1 Dimensions of social capital for application

In addition to the different dimensions of social capital proposed by scholars, the dimensions of the social capital framework utilised by donor agencies have changed over time through continuous monitoring and evaluation (Harper 2002; Siegler 2014). For example, Table 3.3 below indicates the comparison of two social capital frameworks developed by the Office for National Statistics (ONS) and the Office for Economic Co-operation and Development (OECD). The OECD in 2001 applied five different dimensions when measuring social capital (Siegler & O'Brien 2004), but four in 2014, illustrating that the dimensions of such social capital frameworks are changeable over time.

Table 3.3: The dimensions of the OECD social capital framework

The 2001 social capital framework Dimensions	The 2014 social capital framework Dimensions
1. Social networks and social support	1. Personal relationships
2. Social participation	2. Social networks support
3. Civil participation	3. Civic engagement
4. Reciprocity and trust	4. Trust and cooperative norms
5. Views about the local area	

Source: The OECD social capital frameworks (Harper 2002; Siegler & O'Brien 2004, Siegler 2011)

Table 3.3 indicates that views about the local area was dropped in 2014 and the terminology used for some of the other dimensions changed slightly also. For example, social and civil participation are highlighted in 2001, however those are replaced by personal relationships (at the individual level) and civic engagement (social interaction at the group level) in 2014.

3.8 Three different types of social capital framework

The following section presents different social capital frameworks, in addition to those already discussed. The three social capital frameworks considered here are:

1.   the 1999 Sustainable Livelihood Framework of the United Kingdom Department for International Development (DFID) (Solesbury 2003);

2.   the social capital framework of Statistics New Zealand for central and local government in New Zealand (Spellerberg 2001) and

3.   the 2004 and 2011 social capital frameworks of the World Bank (Grootaert et al. c2004; The World Bank 2011a).

After considering these frameworks, the most appropriate for this study is selected to support the structure for data analysis.

3.8.1 Sustainable livelihood framework of DFID

In 2013, the United Kingdom spent approximately 0.7% of its Gross National Income (GNI), £11.3 billion, on humanitarian and development programs overseas, to assist the livelihood improvement of the poor through projects (Provost & Tran 2013). The Department for International Development (DFID) introduced the Sustainable Livelihood Framework (SLF) in 1999 based on the concept of social capital. The aim of the SLF was for stakeholders to apply the framework in the planning stages of new projects when measuring the sustainability of existing projects (DFID 1999) with the goal of helping to eliminate poverty in poorer countries.

The 1999 DFID SLF applies the social capital concepts of Bourdieu (1986) and is associated with five types of capital: human, social, natural, physical and financial as livelihood assets. Figure 3.3 has four main elements: vulnerability context, transforming structures and processes, livelihood strategies and livelihood outcomes.
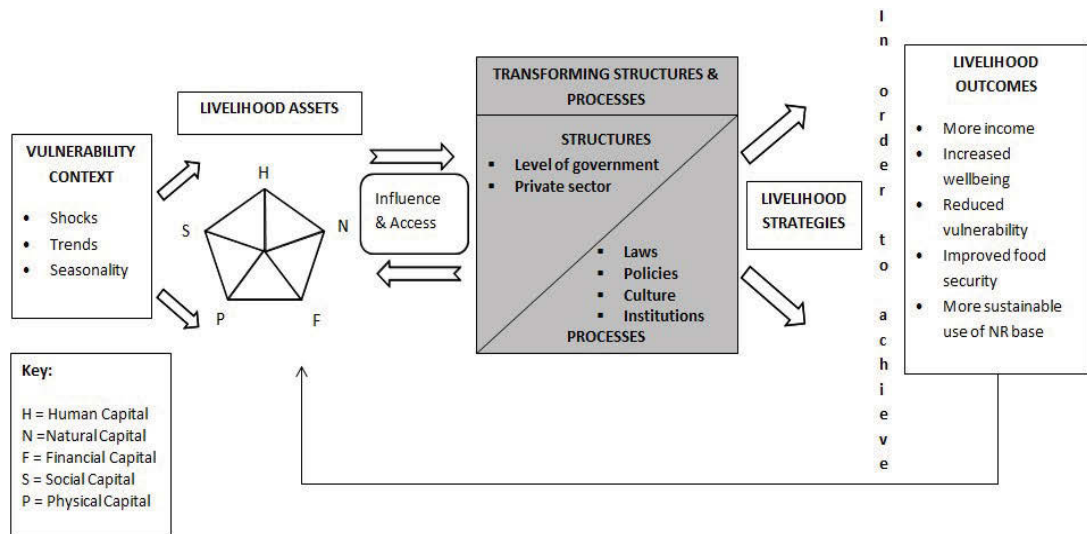
Figure 3.3: Sustainable Livelihood Framework of DFID

Source: The Sustainable Livelihood Framework of DFID 1999

The vulnerability context refers to individual's experiences due to natural and man-made causes: shocks (natural disasters, human factor health emergencies, and conflicts), trends (population trends, policies, resources and knowledge) and seasonality (markets, opportunities and labour).

The second element of SLF, transforming structures and processes, is divided into two parts: structures and processes. The first represents the public sector (levels of government) and private sectors as the implementers. Processes include laws, policies, culture and institutions as the norms of structured society. With the continuous two-way interaction between the input (the five types of capital as livelihood assets) and the process (within structure), the transformation of structures and processes are operational.

The influence and accessibility of these five types of capital within structures generates livelihood outcomes through association with livelihood strategies. These strategies depend on assets (various types of capital), policies, institutions and process. This indicates that for DFID, poverty elimination within targeted populations (the vulnerability context) relies on the input (livelihood assets) and the processes within a particular structure (which comprise the targeted population and the implementers such as government, donors, NGOs as institutions), and their approaches (the livelihood strategies of implementers) (Solesbury 2003).

The expected livelihood outcomes of the implementers are higher income, increased well-being, reduced vulnerability, improved food security, and the more sustainable use of natural resources (NR). Those outcomes provide a feedback loop to livelihood assets to form a continuous flow of input-process-outputs (IPO), which are intended to generate and regenerate the outcomes and accumulated livelihood assets (Solesbury2003). Figure 3.3 shows that the five types of capital can be integrated as input and the continuous action of processes to transform structures (both government and private) that generate livelihood strategies.

The DFID livelihood framework thus shows possible combinations of different types of capital that can also be examined when the IPO model is integrated. Consequently, it is proposed that this is a useful framework for empirical studies as it can evaluate the progress and achievement of vulnerable people according to the five types of capital outlined. The SLF is most suitable for this study; however it presents some challenges as it is intended for implementers and donor governments to measure the results-based outcomes of their projects. As such, it is a donor-driven framework, where the experiences of a targeted population are not considered. Specifically, this framework omits consideration of the psychological status of vulnerable individuals who have experienced natural or man-made disasters. Moreover, its inclusion of natural capital as a resource-based livelihood is not a focus of this study. The SLF of DFID was developed particularly for policy-makers to measure the achievement of the DFID's international policy and projects and, as the role of the targeted population is excluded, it is not considered to be suitable for this study although the IPO and integrated five-capital-approach framework are worthy of consideration.

3.8.2 Framework for the measurement of social capital in New Zealand

This section draws on the work of Spellerberg (2001). The concepts of social capital of Coleman (1988) and other researchers were applied to policy interventions by the central and local levels of the New Zealand government in the 1990s in the local context of the Mäori population. The draft New Zealand social capital framework was first introduced

in both the social and development sectors in 1997, and the 2001 revised version consisted of four structural components: behaviours, attitudes and values, population groups and organisations, as depicted in Figure 3.4 below.

Spellerberg (2001) reports that the policy makers in the New Zealand government noticed the broader effect of using the social capital concept in policy analysis as a tool to monitor economic development. The local culture in New Zealand is generally built on collectively, which, in common with social capital, is embodied in local and social structures as local's cultural capital (Spellerberg 2001). Instead of further investigation, the New Zealand social capital framework does not appear to be applicable to the Myanmar context of this study as it was specifically based on the local cultures of the Mäori population.
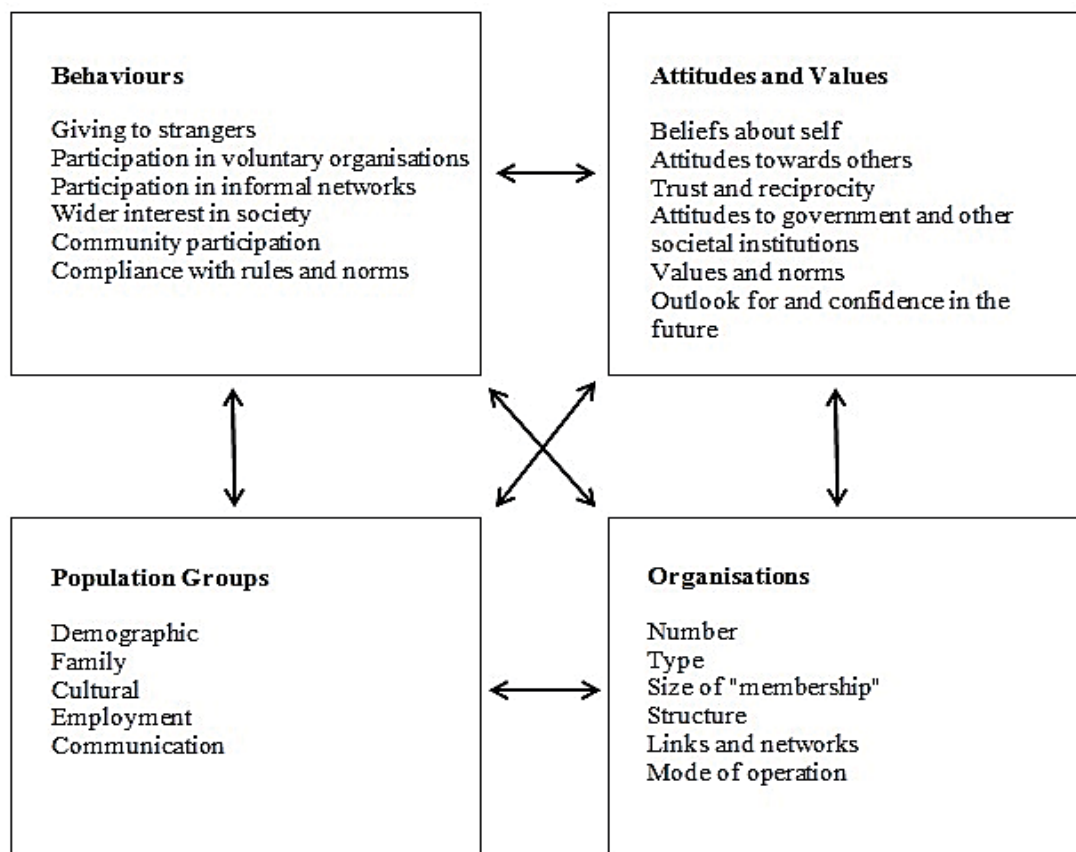
Figure 3.4: Framework for the measurement of social capital in New Zealand (2001) Source: Research and Analytical Report 14, 2001, p.20 by Spellerberg 2001

3.8.3 The World Bank social capital implementation framework

The World Bank is one of the most prominent institutions to have developed a framework to measure social capital for poverty alleviation and social development (Narayan 1999), producing a tool to assist the understanding of the recovery and development of disaster survivors. The World Bank's social capital framework was introduced in the 1990s and was intended to be used to examine the reduction of poverty, the provision of aid to poorer nations such as the least developed countries (LDC), and the recovery of disaster-affected populations. Primarily, the World Bank invests in two key areas. The first concerns the capacity building of the poor at the micro level, together with the associated action-changing rules and laws at the macro level. The second is intended to build bridges of social capital between those two levels (Narayan 1999).

Based on the work of Coleman (1988) and Putnam (1995), the World Bank firstly aimed to identify the nature of bonding and bridging the social capital of people in poverty to cover seven dimensions (Narayan 1999) as the 1999 social capital implementation framework (SCIF). The aim of using the SCIF in such operations is to examine the effectiveness of social capital developed through sustainable community action (Grootaert et al. c2004; Narayan 1999). Specifically, the SCIF is a tool to examine whether or not economic growth and social changes in the targeted populations improved (Narayan 1999). The 2004 SCIF has six dimensions (Grootaert et al. c2004). Both the 1999 and 2004 frameworks are shown and compared in Table 3.4.

Table 3.4: The World Bank social capital implementation framework (SCIF)

The 1999 Social Capital Framework for Poverty Reduction – Dimensions*	The 2004 Social Capital Implementation Framework (SCIF) - Dimensions**
1. **Information** 2. **Inclusive participation** 3. **Conflict management** 4. **Education and value** 5. **Economic restructuring** 6. **Governance and decentralizing** 7. **Demand-driven service delivery**	1. **Trust and solidarity** 2. **Groups and networks** 3. **Collective action and cooperation** 4. **Social cohesion and inclusion** 5. **Information and communication** 6. **Empowerment and political action**

Source: *Bonds and bridges: Social capital and poverty by Narayan (1999);
      **Measuring social capital by Grootaert et al. (c2004)

The World Bank's 2004 social capital implementation framework (SCIF) has been applied and evaluated in the field in various empirical studies (Dudwick et al. 2006; Grootaert et al. c2004; Vajja & White 2008). For example, when the 2004 SCIF was applied in projects in Malawi and Zambia, the results illustrated the effectiveness of social capital in promoting the economic development of poor communities, particularly in relation to women (Vajja &White 2008). Malawi and Zambia became LDCs in 1971 and 1991 respectively (United Nations Committee for Development Policy 2017).

According to Bigio (1998) and Narayan (1999), World Bank funding was allocated first through the national governments, and then the international and local organisations in order to promote local capacity in service delivery. For example, the World Bank and other donors provided funding to the national governments of Malawi and Zambia and then to local communities through local organisations (Vajja & White 2008). The operation has three levels: the international, the national government and the local levels. The SCIF interplays as the tool to monitor the operation, progress and achievement of projects at the local level (Vajja & White 2008), particularly applicable for rural development (Roy et al. 2012).

A pattern of development projects was created for this study using the 2004 SCIF based on the projects in Malawi and Zambia. It comprises six dimensions at the local level, as shown in Figure 3.5.

| International Level** (Donor Agencies - World Bank/UN*) |

↓

| Country Level** |
| . Policies, Laws and Practices of Recipient Government |

↓

| Local Level**- Communities (Provinces or Villages) |
| |
| The six dimensions of social capital*** |
| |
| Trust and solidarity |
| Groups and networks |
| Collective action and cooperation |
| Social cohesion and inclusion |
| Information and communication |
| Empowerment and political action |

Figure 3.5: Pattern of development projects and the 2004 SCIF

Note: UN*: United Nations
Source: ** The 1997 NGO-World Bank workshops (Bigio 1998);
       ***The SCIF based on projects in Malawi and Zambia (Vajja & White 2008)

At the local level, the six dimensions of the 2004 SCIF indicate that the World Bank's funded project concerned trust, networks, collective action, social cohesion, communication, the empowerment of targeted communities, and the social and work relationships between individuals. Dudwick et al. (2006) state that this social capital framework may be used for examining poverty reduction and for the building of social capital for community development. The focus of the current study is the local level, examining capacity building and social capital for the empowerment of individuals who participated in the group networks created in the cyclone-affected villages. The World Bank SCIF is considered a more appropriate framework to apply in this study than the other two social capital frameworks: DFID and New Zealand.

3.9 The conceptual research framework

This section comprises two preparatory headings: the integration of different types of capital and the input-process-output (IPO) model, concluding with the conceptual research framework of this study.

3.9.1 The integration of different types of capital

A study of the development of rural populations in India indicates that rural villagers require both tangible assets and intangible assets as resources to operate their businesses (particularly in farming) as empowered individuals and households (Roy, Singh, Burman & Singh 2012). Effective social relationships, motivation and capacity (through knowledge, money and market resources) to access community facilities (such as roads, transport and markets) are reportedly crucial for the achievement of individuals and society as a whole (Roy et al. 2012).

The earlier discussion outlined how the combination of physical capital (tangible resources) and human capital (intangible resources through training) affects how an individual's skill and productivity could be enhanced through networks (social capital) (Putnam 1995). Together with motivation, those different types of capital - tangible and intangible resources - are essential for women's capacity building to allow them to become empowered individuals (Roy et al. 2012).

Individuals build psychological capital by enhancing social capital and improving their own and others' individual well-being (Frey & Stutzer 2010). For example, the population affected by Hurricane Katrina in the United States faced difficulties in terms of their physical and mental health. An assessment conducted three years after the hurricane (Adeola & Picou 2014) indicated that the majority of the affected population moved to other places through their own arrangements, instead of staying together during the recovery period. Conversely, individuals affected by the 2011 Japanese tsunami supported each other before official aid arrived. They used their capacity to respond to the emergency: that is, the social relationships and networks (social capital) they had developed prior to the tsunami (Aldrich 2012).

Psychological capital is reportedly generated from the financial, human and social capital of a person and represents the self-efficacy, optimism, hope, and resilience that influence their positive psychological development (Luthans & Youssef 2004). With positive psychological capital, individuals in a group maintain higher levels of social relationships and are able to reproduce stronger social capital and financial capital through accessing improved human capital (Luthans et al. 2004). As noted above, both Bourdieu and Coleman disregard the psychological capital in their social capital concepts, however it is considered important for this study.

3.9.2 Input-Process-Output Model (IPO)

Research conducted by Aldrich (2011, 2012) and Griffin, Ellis, and Beavis & Zoleta-Nantes (2013) illustrates that natural disasters such as tsunamis and earthquakes devastate the lives and the resources of the individuals and the state. The impact of such disasters can be difficult to examine, but the situational changes and physical resources of individuals can be assessed using the input-output model (Okuyana & Santos 2014). It is claimed that this model was particularly developed for the impact analysis of catastrophic disasters when resources are destroyed, while the ordinary economic setting is not so easily applicable (Okuyana & Santos 2014).

Okuyana and Santos (2014) further argue that the input-output model can be used to help establish recovery plans, evaluate the physical loss caused by the disaster, and assess the disaster recovery at both the individual and the community level. Most empirical studies present the negative impact of disasters on the economy, which excludes or gives little scope for the psychological status of the individuals affected (Lall & Diechmann 2012).

According to Dietzenbacher and Lahr (2004), the input-output (IO) analysis is employed in qualitative economics to measure the economic growth and development of a particular business. The fundamental input of financial capital relates to two types of tangible inputs: assets (i.e. factories, buildings) and raw materials. These are, in turn, transformed into other tangible products as output through the production process (Standfield 2002). Nonetheless, instead of presenting only the input-output relationship,

in this study the process is identified in order to demonstrate how input is transformed into output in relation to capacity building.

Herre (2010) argues that the IPO model can be utilised to examine the social and economic development of groups in society. The IPO model demonstrates the continuous flow of output from one sector in relation to it becoming the input to another. It highlights the interdependence of the sector in these internal relationships, particularly in industrial areas (Fontela 2000). For example, as stated previously, the 1999 DFID social capital framework (see Figure 3.3) states that the input-process-output (IPO) model can be used to examine its five types of capital. The IPO-integrated DFID social capital framework has thus been used in developing countries for many years in relation to the poverty elimination of populations affected by disasters – either natural or man-made (Solesbury 2003). In summary, in common with the DFID social capital framework, the IPO model is considered to be suitable as a guide for considering the six types of capital in relation to the women cyclone survivors in Myanmar.

3.9.3 Conceptual framework of this study

As discussed previously, the aim of this study is to examine capacity building and empowerment of women cyclone survivors, and the roles of networks and social capital in the process. This study relates to three levels of capacity building as per Mak (2013); UNESCO (2008) and the World Bank (2008) – see Figure 3.2. For the examination of women's capacity building in this study, changes were made, which are illustrated in Figure 3.6. Specifically, the individual women cyclone survivors represent the individual level, the organisational level refers to women's group networks, and the environmental level represents the village.

Village level

Women's group networks

Individual level

Figure 3.6: Levels of capacity building for this study

Nahapiet (2011) points out that capacity building and the development of society results from positive relationships relating to the social and human capital of people. Thus, investing in the human development of individuals can result in the overall capacity development of societies and countries (Fukuda-Parr, Lopes & Mali 2002; Gonzalez 2015).

As stated previously, social capital has a multi-dimensional concept (Woolcock & Narayan 2000) so that the dimensions of social capital are reportedly changeable over time (see Table 3.3). The 2004 World Bank social capital implementation framework (SCIF) comprises three levels and has six dimensions: groups and social networks (networks), trust and solidarity (trust), collective action and cooperation (cooperation), social cohesion and inclusion (social cohesion), information and communication of the groups (communication), and empowerment and political action (as listed in Figure 3.5). Based on the changeable nature of the social capital concept, the empowerment and political action dimension is omitted in the SCIF of the World Bank in 2011. Thus, the five dimensions of the 2011 SCIF are groups and social networks, trust and solidarity, collective action and cooperation, social cohesion and inclusion, and information and communication of groups, which remain at the local level. However, the main research question of this study is: **How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis?** Therefore, this study examines the role of empowerment in women's situational change following Cyclone Nargis (as the expected output).

Based on Figure 3.5 of the 2004 SCIF of World Bank, the 2011 World Bank SCIF is adapted in this study with three hierarchical levels of social groups – international, national, and local. The international level concerned the donor community who funded the 30-monthINGO project (see Figure 2.6, Chapter 2), the national level refers to the Myanmar Government, and the local level represents the local communities which were affected by Cyclone Nargis in 2008. Using different types of integrated capital, the input-process-output (IPO) model and a modified version of the World Bank (2011 SCIF); the framework for this study was created as per Figure 3.7. The framework will be utilised as a guide for this study. With the Input-Process-Output (IPO) model at the local level, the tangible and intangible aspects of capital will be considered.
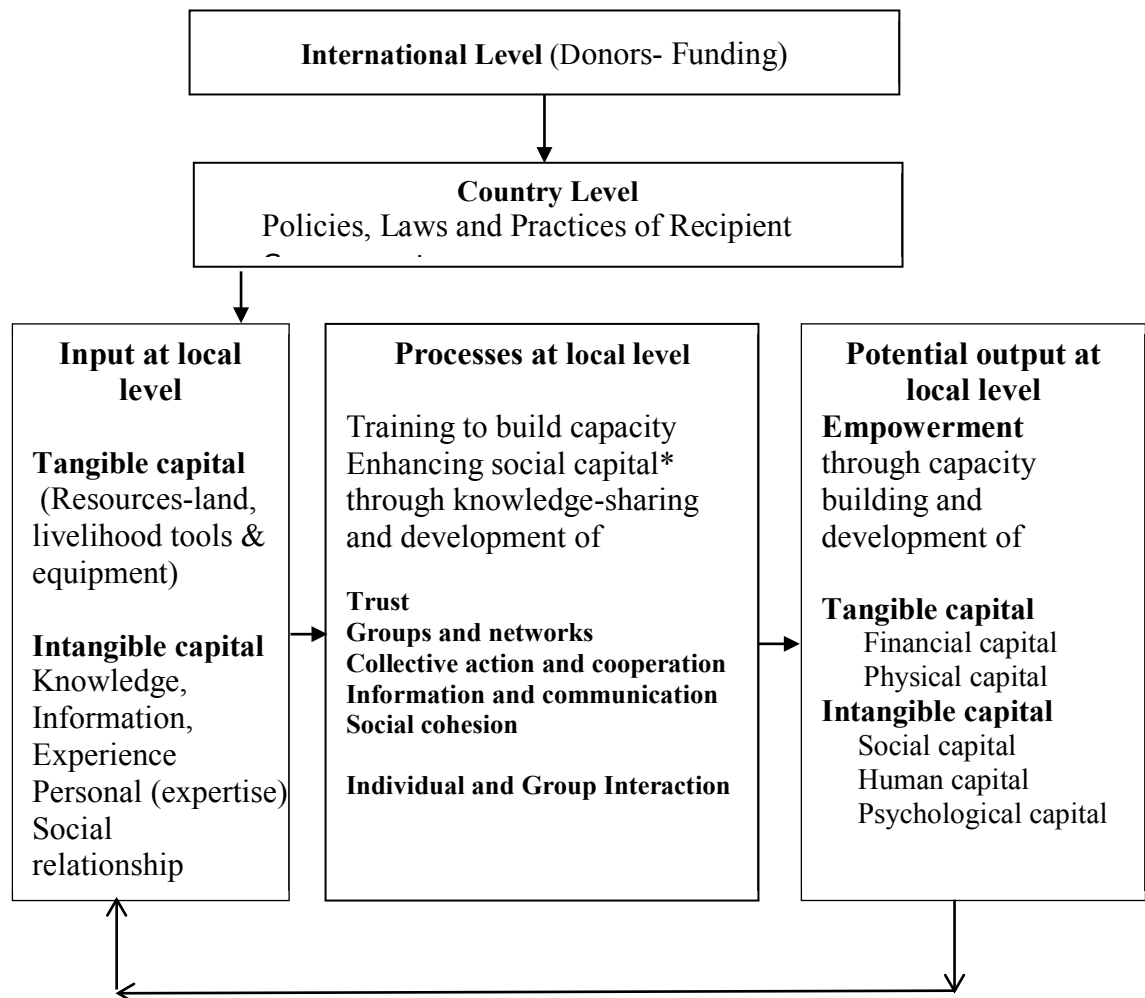
Figure 3.7: Conceptual framework of this study

As outlined in Figure 3.7, column 1 - 'Input' - comprises two main components: tangible and intangible capital, which have already been discussed in some detail in this chapter. Column 2- 'Processes' - concerns training and knowledge-sharing in relation to enhancing social capital. Finally, column 3- 'Potential outputs'-proposes improved capacity building and empowerment.

The output component of Figure 3.7 indicates that four types of capital – human (knowledge), psychological (experience), and social (information) are represented as intangible capital. It is proposed that both tangible and intangible outputs (capital) will become the inputs for the sustainable empowerment processes of generating further capital (as per Malhotra, Schuler & Boender 2002; Roy et al. 2012), thus achieving the common goals of the group.

As stated previously in Chapter 2, Figure 2.6, the 30-monthINGO project was funded by international donors through the Myanmar government for implementation in cyclone-affected villages in Labutta. Thus, the international and national levels of the proposed conceptual framework are not of concern here. The local level includes the role of the Myanmar-based INGO which implemented their project model in 27 villages in the Labutta area following Cyclone Nargis in 2008. Specifically, this study will use the conceptual framework to consider how the women cyclone survivors responded to the INGO's project and why it had differing effects on the capacity building and empowerment of the women concerned.

It is anticipated that, through using this framework, the outcomes of the research will help to elucidate how capacity building, social capital and networks can be utilised to benefit impoverished women in disaster-affected countries, enabling them to become empowered resource-owners. Moreover, the study discusses whether the capacity building process may be duplicated in order to 'Help yourself first to help others', which in the Myanmar language is "*Ko Htu - Ko Hta*".

3.10 Chapter summary

As outlined in Chapter 1, the focus of this study is 'Capacity Building in women's networks based in Myanmar: the role of empowerment and different types of capital'. It focuses on women cyclone survivors in Myanmar and their experiences and responses before, during and after a 30-monthINGO project. The social capital concepts of Bourdieu and Coleman were selected as the seminal social capital concepts for this study after considering a range of relevant literature.

The main research question posed is: **How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis?**
Three subsidiary research questions are:

1. *What were the drivers that assisted, and the barriers that restrained women's capacity building, and empowerment during and after the INGO project?*

2. *How did the women cyclone survivors perceive the role of networks and tangible/intangible capital in the recovery process?*

3. *How sustainable were the changes achieved as a result of the INGO project?*

From consideration of the scholarly literature outlined thus far, the five dimensions of the 2011 World Bank SCIF: networks, effective communication (in social relationships), trust, cooperation (collective work within networks) and social cohesion (through collective work) have been deemed relevant to assist an understanding of social capital inherent in women's networks and the role of members. Of these five dimensions, networks are examined in this study in more detail than the other four dimensions. This is because, as stated previously, the dimensions of communication, trust, cooperation, and social cohesion result from networking and relationships within the networks.

The framework of the World Bank (2011) SCIF developed for this study is shown in Figure 3.7 above and is the focus as a guide to analyse data and answer the research questions because the targeted population (the women who are the social actors in the study villages) and the INGO (the agency or institutional organisation) are based at this level.

At the local level, the input-process-output (IPO) model is integrated to assist analysis of the accumulated nature of social capital and other types of capital of the women cyclone survivors following the 30-monthINGO project. The five dimensions of the 2011 World Bank social capital framework are placed in the process section of IPO, whereas tangible and intangible capital are represented as resources in the input section. In the output section, the outcomes will be considered in relation to various levels of empowerment through capacity building and the development of tangible and intangible capital.

The two other levels – national and international – are not analysed in this study due to the limitations regarding time and resources. The next chapter will justify the research methodology and process, while outlining the research protocols and ethical considerations.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

This chapter outlines the research methods used for this study as well as the rationale for the method selection. As stated in Chapters 1 and 3, this study sets out to analyse the changes experienced by women cyclone survivors in relation to their capacity building while investigating the role of empowerment and different types of capital. The research timeline examines the situation before, during and after the INGO project in the cyclone-affected villages in Myanmar.

The chapter is structured in two parts: the research literature review and the data collection. The first part comprises a justification of the methods, the research design and the procedures, protocol, and ethical considerations, followed by a discussion of the limitations of the methods used**.** The research methods and tools, the selection process for field data collection, pilot study information; methods of analysis and the presentation of data are outlined in the first section. The data collection is discussed in section two.

The research objectives and research questions emerged from the literature review. They are intended to support the analysis of the experiences of women cyclone survivors who participated in the INGO project. With this objective, the main research question is:

How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis?

This main question is supported by three specific sub-questions:

1. What were the drivers that assisted, and the barriers that restrained women's capacity building and empowerment during and after the INGO project?

2. How did the women cyclone survivors perceive the role of networks and tangible/intangible capital in their recovery process?

3. How sustainable were the changes made as a result of the INGO project?

4.2 Research approach

Methodology refers to the methods selected by researchers to explore or examine reality and underlying facts, including knowledge (Berg 2004). This section presents the key philosophical assumption underpinning this research, which is embedded in the theoretical concepts. Later, I discuss the research design and implementation process – the data collection methods, the application process and the limitations of the methods.

The research objectives and research questions determine the selection of the research methodology and design (Patton 2005; Singh 2015). Scholars define the term 'methodology' as the philosophical framework (Singh 2015; Guba & Lincoln 1994). The aim of this study is to evaluate the changes experienced by women survivors in Myanmar after a cyclone. A qualitative research approach was used as it allows for the emergence of rich data and insights.

Creswell (2012) and Silverman (2011) maintain that qualitative research can explore how both social and cultural phenomena, as well as other complex factors, affect the research process. As Malhotra & Birks (2007) state, qualitative research methods seek insights to assist in understanding social problems. They help researchers to gain a greater understanding of the social constructions of meaning and to explain the conceptual processes underlying behaviour (Javalgi, Granot & Brashear Alejandro 2011).

This study investigates social capital and five related dimensions in order to assess the capacity building and empowerment processes of women cyclone survivors before, during and after they participated in an INGO project. As outlined in the literature review, capacity building is considered the foundation for women's empowerment through the development of capability and social capital within networks (Fatima 2017; Robeyns 2006). However, social capital scholars Bourdieu (1986) and Coleman (1995) maintain that other types of capital such as human, financial, and physical capital can provide a better understanding of social capital and its role in capacity building through the enhancement of those other types of capital.

I am a Myanmar citizen and I live in Yangon, Myanmar. As explained in this thesis, I used both Burmese as my native language and the English language for this research study so interpreters were not necessary. In order to explore the experiences of women cyclone survivors, I have used an exploratory approach in this study. As Miles, Huberman and Saldana (2014, 2015) state, experiences drawn from emerging data may range from descriptive to explanatory and from the concrete to the more conceptual and abstract.

4.3 Overview of research paradigm and analytical framework

This section outlines the research paradigm for this study. As explained previously, both the research paradigm and relevant research methods were chosen for data collection based on the research questions (Patton 1990, 2015). The research paradigm is a pivotal part of the research process, which contributes to knowledge of how researchers (as social actors) examine the world (Carter & Fuller 2015). The underlying assumptions and intellectual structure upon which research and development are based in a field of inquiry help define the paradigm (Kuhn 1962). That said, this study regards a research paradigm as a bundle of assumptions regarding the nature of reality (Goldstein 2012), the status of human knowledge, and the kinds of methods which can be applied to answer research questions (Guba & Lincoln 1994; Shenton 2004).

The three elements of a research paradigm proposed by Perry (1998) comprise the ontology, epistemology and methodology. He further maintains that ontology concerns what we know and epistemology how we know, while methodology refers to how knowledge is explored (reality). Carson et al. (2001) and Myers (2009) define epistemology as the relationship between the person (researcher) and the reality: it indicates how that person captured that reality.

Reality tends to be captured in social science by one of four paradigms - interpretivism, realism, positivism, and pragmatism (Creswell & Clark 2007; Mackenzie & Knipe 2006) - the interpretative paradigm is the most suitable for exploring the nature of reality and issues (Kuhn 1962, 1970, 2012) that are likely to be problematic in nature (Budd & Hill 2013) such as crisis and revolution. Kuhn claims that communities (such as the

women cyclone survivors, in this case) are the basic agents that help develop a new paradigm shift (Orman 2016). Hence, regarding the ontology for this study, it is proposed that the interpretative approach provides an appropriate paradigm to explore the changes in experiences of selected women cyclone survivors.

Interpretivism recognises the existence of multiple realities (Hudson & Ozanne 1988). These multiple realities are dependent on others' constructions of reality, however, so it is not easy to interpret one standard reality (Neuman 2014). Therefore, interpretivists adopt personal and flexible research structures that make sense of reality (Carson et al. 2001). For example, the researcher and participants involved in this study may interact with each other, but they will be both independent and interdependent during their interactions (Hudson & Ozanne 1988). Hudson and Ozanne (1988) further maintain that the key theme of interpretivism is that the researcher remains open to new knowledge arising from the reality that is examined in the study.

Through analysis of the data collected for this study, I set out to capture the motives and interpret the meanings of the participants' reality which in this case is related to the factors influencing the capacity building, and empowerment of women cyclone survivors in particular times and contexts (Hudson & Ozanne 1988; Neuman 2014). As such, the situational changes of the women participants before and after the cyclone, and during and after the 30-month INGO project are examined through the research questions posed.

As outlined in the Literature Review, I adapted the 2011 World Bank Social Capital Framework to guide the analysis. The input-process-output (IPO) model was used as a method of analysing the women participants' situational changes before, during and after the INGO project across the various timelines of the project. The IPO model was an additional component integrated with the 2011 World Bank Framework (see Figure 3.7). This type of analysis had not been undertaken previously by the INGO in the cyclone-affected villages, nor had they used any type of research in their 30-month project in the 27 villages.

For this research study, multiple methods of data collection were employed in order to reflect the different facets of women's experiences as suggested by Saunders, Lewis and

Thornhill (2012). Key informant and in-depth interviews were used as they support the analysis of in-depth human behaviour (Alshenqeeti 2014). According to Patton (2002), in comparison with quantitative methods, qualitative methods support richness of information. However, qualitative sample sizes tend to be smaller than those used for quantitative methods and this represents a limitation. So, although the depth of understanding is increased, the number of cases and situations studied reduces the ability to generalise (Patton 2002).

4.4 Research design

As stated previously, this study set out to examine capacity building and the role of different types of tangible/intangible capital in relation to the empowerment of women cyclone survivors following an INGO project. In order to conduct the research within the available resources and constraints - time, financial and human - it was necessary to select a particular number of study villages and research participants. Such sampling for data collection concerns the process of finding people or places to represent a specific population within the contexts that provide the required data for the study (Barbour & Schostak 2005; Creswell 2009). As stated previously, key informant and in-depth interview methods were used for collecting primary data from different groups of research participants in order to meet the research concerns of qualitative study (Patton 1990).

In order to elicit rich information, purposeful (purposive) sampling was used for the key informant interviews as it is said to enhance the credibility of the information obtained (Patton 1990). The INGO staff and the local authority figures were chosen purposively, however, as they were office holders who could be expected to share organisational information concerning the 30-month project and government policies influencing the women's experiences.

4.5 Data collection methods

Three types of data collection methods were used in this study as outlined below.

4.5.1 Document analysis

One of the aims of the document analysis was to examine the records of the 30-month INGO project and gain an overview of this INGO project in the 27 villages (see chapter 2). This was intended to provide background information on the project, the villages and villagers, and their situation before and after the project. It was expected that a systematic analysis of the documents relating to the INGO's activities would reveal information concerning the village women's participation, frequency of attendance, loan information and more. Another aim of the document analysis was to select three villages for this study from the 27 that were involved in the project.

Document research uses texts and documents as a data source. This can include government documents, newspapers, certificates, census publications, novels, films and videos, paintings, personal photographs, diaries and other written, visual and pictorial sources in paper, electronic, or other 'hard copy' forms (Scott 2006). In this case only the hard copies and website information relating to the 30-months INGO project was available for document analysis.

The INGO documents were analysed in accordance with the research questions developed for the study (as advised by Silverman 2006). Scott (2006) maintains that an advantage of document analysis is its effective utilisation of existing documents as evidence of a social world's history and experience. An advantage of document analysis is that documents can be checked and re-checked for reliability, which is not always the case with research informants or participants - although it could take time to access documents and there could be gaps in the documents (Robson 2002).

For disaster-related document analysis, Viswambharan and Priya (2015) report that their document analysis, which was based on newspapers and audio-visual data, among other qualitative methodologies, was found to be useful for exploring the post-disaster

situation of survivors of the post-Godhra riots in India in 2002. They suggest that document analysis provides an initial focus for understanding situations as a whole. Hence, document analysis may be conducted alongside data collection gathered using different methods to examine the reality of the survivors' social worlds (Silverman 2006). Consequently, research themes can be developed when the document analysis method is combined with other methods such as observation, interviews and focus groups (Atkinson & Coffey 2011). Therefore, this study also combines document analysis with other data collection methods such as interviews and focus groups.

4.5.2 Interviews

Schostak (2006) proposes that one-on-one interviewing is the most popular method in research, and is intended to examine the meanings and phenomena of interviewees. The main strength of interviews is to explore data that cannot be identified through other research methods such as questionnaires and observation (Blaxter et al. 2006, 2010). Kvale (1996) however, warns against a formal and tight methodology, saying that understanding the phenomena of interviewees can be broadened when the interviewer applies less structured and more natural methods for data collection.

Interviewing enables a snapshot of interviewees' experiences (Cohen et al. 2007) when they share their own thoughts and feelings (Berg 2004, 2007, 2009). However, the quality of the data is likely to depend on the interviewer's experience and skill in interviewing, conceptualising, analysing and reporting (Alshenqeeti 2014; Berg 2007, 2009). Such skills include a willingness to ask questions as well as listening skills (Patton 1990). Alshenqeeti (2014) maintains that challenges for interviewers and interviewees include developing good rapport. This is especially important for the disaster-affected women participants who have endured tragic experiences such as a family member's death, illness or physical disability due to the cyclone (Aldrich 2011, 2012). As well, in traditional communities, gender relationships may require that a woman researcher interviews women to overcome challenges.

Cohen et al. (2007) and Schostak (2006) claim that while interviewing is a simple tool, the challenge is in the selection and analysis of data, as well as the presentation of

findings. To guide this study, it is intended to follow the advice of Alshenqeeti (2014, p.41) who proposes that 'interviews should not only be illustrative, but reflective and critical'. This was assisted through the development of a research protocol and a research diary that I updated following each interview. Specifically, after each interview I listened to the recording and noted where there may be queries and/or gaps. Where this was evident I revisited the participant in order to ask or answer queries. In addition, each participant was provided with a transcribed copy of the interview so that they could provide feedback and critique if they wished.

In social sciences, four types of interviews are commonly applied in research - structured, semi-structured and unstructured (open-ended) interviews (Berg 2007; Fontana & Fay 2005), and focus group interviews (Alshenqeeti 2014; Barbour & Schostak 2005). Of these four different methods, I selected semi-structured interviews to collect the primary data for this study.

Structured interviews are considered more suitable for specific hypothesis testing and the rigorous quantification of results (Berg 2007; Maccoby & Maccoby 1954). They generally use a set of predetermined direct questions, with mostly 'yes' or 'no' responses, which gives very little flexibility for the interviewer and interviewee, and lessens the chance to develop rapport (Berg 2007). Unstructured (open-ended) interviews, unlike structured interviews, comprise informal conversations (Patton 1990, 2005). However, the aim of this study is to examine women's situational changes following Cyclone Nargis and the INGO project so neither structured or unstructured interviews were considered relevant for this study.

Semi-structured interviews provide a more flexible version of the structured interview, allowing the interviewer the opportunity to probe the interviewee's responses in a flexible and detailed manner (Rubin & Rubin 2005). One of the advantages of semi-structured interviews is in the use of a basic checklist while interviewing (Berg 2007) to ensure coverage of all the relevant research concerns and questions (Alshenqeeti 2014) and track the parameters while interviewing (Berg 2007). It is proposed therefore, that semi-structured interviews are most suitable for this study, comprising a simple purposive dialogue to collect specific information (Berg 2004, 2007).

Before undertaking the fieldwork for data collection, two sets of interview questions were prepared for the pilot interviews conducted with the village women. I planned to revise the interview questions after the pilot interviews had been conducted. Pilot interviews were especially important as the interviewees were disaster survivors, and as per Aldrich's (2012) advice, I had to be sensitive in my selection of questions and the wording of them. The interview questions (Appendix 1) focused on a specific time period, from January 2008 (five months before Cyclone Nargis) until the data collection period in late April-early May 2014, which including the 30-month period of the INGO project.

I aimed to conduct one pilot interview in each selected study village (three pilot interviews in total). As suggested by Creswell (2009) pilot interviews can assess interviewees' level of understanding related to the interview questions, they can indicate whether the interview questions need to be adjusted, and they can reveal the time needed for the interview. For the pilot interviews, the in-depth interview format was used once the interviewees had voluntarily agreed to participate in the research study.

4.5.3 Focus groups

As stated previously, focus group interviews (Alshenqeeti 2014; Barbour & Schostak 2005) could support themes from one-on-one interviews in this study. In relation to qualitative research, researchers maintain that research themes can be drawn from in-depth interviews with a relatively small number of interviewees, and the main themes arising can then be confirmed (or otherwise) with participants in focus groups (Rabionet 2009).

Focus groups are a method of collecting data during group discussion involving a small number of people with a focus on 'a particular topic or set of issues' (Wilkinson 2004, p. 177). They can be used as a stand-alone qualitative method, or they can be combined with other qualitative methods for multi-method research. For this study, a focus group method is combined with in-depth interviews.

Focus groups have been widely used by qualitative researchers in health and medicine (Kitzinger 1995) and in social and behavioural science research (Sagoe 2012). Cameron (2005, p. 156) points out that '…with the shift to more nuanced explorations of people-place relationships in geography, the focus group method has been recognised increasingly as a valuable research tool'. Accordingly, focus groups were conducted in this study following the one-on-one, key in-depth interviews as a way of complementing and confirming (or otherwise) arising themes.

One of the advantages of using focus groups is that more participants can discuss particular issues through sharing their insights with other members in the group (Acocella 2011). Researchers can also examine focus group members' interactions including complex behaviours among the group's participants (Acocella 2011; Kitzinger 1995). Kitzinger (2005) further proposes that an additional advantage of focus groups is applicable to people who may be reluctant to be interviewed on their own. Another advantage is being able to avoid discrimination in relation to people who may not be able to read or write (Acocella 2011). Illiteracy among the focus group participants (and the interviewees) is anticipated in this study as approximately 67 per cent of the Myanmar population live in rural areas where the school attendance is lower than in urban areas. This is due in part to limited accessibility to schools (Selth 2014).

It is commonly suggested that focus groups should include people from the same background and/or those with similar experiences so that participants feel more comfortable (Liamputtong 2010). It has been proposed that the size of focus groups can range from a minimum of five to a maximum of ten people who have similar backgrounds (Kitzinger 2005; Krueger 2002; Krueger & Casey 2014). Interviewers can participate as the focus group moderators (Krueger 2002), providing each participant with the opportunity to share their responses equally (Liamputtong 2010). In this study, the interviewer and the researcher were the same person and therefore undertook both roles. In summary, this study applied two interview methods: in-depth semi-structured interviews and focus groups.

4.5.4 The research participants

Rabionet (2009) argues that participant numbers are determined by the researcher's need to keep sampling until no new data emerges in relation to particular themes. In regard to sample size for interviews and focus groups, it has been argued that data can be saturated and major themes explored at, or following, six interviews (Guest, Bunce & Johnson 2006), and that no fixed number of participants is required as participant numbers are determined by the purpose of the study, participants' availability and the time and resources of the interviewer (Patton 2005).

As explained previously, in order to elicit rich information, purposeful (purposive) sampling was applied for the key informant interviews, thereby providing credibility regarding the information obtained (Patton 1990). In this study, the INGO staff and the local authority figures were chosen purposively as they were office holders and local authorities who were expected to share organisational information concerning the 30-month project and government policies influencing the women's experiences respectively.

I planned to interview five women from each village for in-depth interviews, to conduct 7-9 key informant interviews with local authorities and INGO staff, and to include approximately ten women from each village in the focus groups. I was aware, however, that the availability of INGO staff and participants from villages might affect these numbers. Table 4.1 indicates a total of 52 participants were only involved in data collection.

Table 4.1: Numbers of research participant

Sources	One-on-one in-depth interviews (women)	Key informants (local authority figures & INGO staff)	Focus groups (women)	Total number of participants
Village 1 (V1)	5	1*	10	16
Village 2 (V2)	5	1*	10	16
Village 3 (V3)	5	1*	10	16
INGO staff	n/a	4	n/a	4
Total	**15**	**6**	**30**	**52**

n/a- not applicable   * indicates the male authority figure for each village

Regarding the gender ratios, Table 4.1 indicates that all three-authority figures were male (the village leaders) from V1, V2, and V3 while the INGO informants were female. The data collection procedure and the data collection processes used for document analysis, interviews and focus group methods are discussed in the next section.

4.5.5 Demographic information of participants from the three study villages

As presented in Table 4.1 above, 52 people participated in the interviews and focus groups for this study. The three male local authority figures (one from each village) and the 4 INGO staff who were involved in the 30-month INGO project were selected as key informants. The three male authority figures had passed matriculation (11th grade at school). All the INGO staff were graduates and had at least 6 years' experience in rural development projects.

As per Table 4.1, 45 women from the three study villages volunteered to participate in the study in which, fifteen women (five from each village) participated in the one-on-one in-depth interviews and 30 women (10 women from each village) participated in the focus groups. The majority of the 45 participants had completed primary education up to fifth grade, and five had never attended school. Table 4.1 A below presents the demographic information from the 15 women interviewees and the 30 focus group women participants in terms of their age ranges.

Table 4.1 A: Age ranges of women interviewees and focus group participants

Age range	V1		V2		V3	
Types of data collection	**Interview**	**FG**	**Interview**	**FG**	**Interview**	**FG**
Between 18 to 24 years	1	n/a	1	n/a	1	n/a
Between 25 to 34 years	2	4	2	5	3	7
Between 35 to 44 years	2	4	2	3	1	1
Above 45 years	n/a	2	n/a	2	n/a	2
Total	5	10	5	10	5	10
Grand total	15		15		15	

(n/a- not applicable)

The above table 4.1 A indicates four different groups of participant where their ages ranged from between 18 to above 45 years. As per Table 4.1A, most focus group participants and interviewees were between 25 and 34 years old, with only six above 45 years old. Prior to the cyclone, only 12 of the 45 women participants were involved in any business operations – four from V1 were involved in their family businesses, two from V2 were fishmongers and six from V3 worked for daily wages.

Seven women participants had lost their husbands due to the cyclone (five women remarried after the INGO departed), 12 had lost their family breadwinner and three had a family member who had become disabled because of the cyclone.

4.6 Data collection procedure and sequence

This is the second section of Chapter 4 and outlines how the data was collected for this study. The research design and research procedures are outlined in three steps as follows:

1.   Step 1- The selection of study villages based on data from INGO documents
2.   Step 2- The primary data collection from the INGO staff
3.   Step 3- The primary data collection from the study villages

The flowchart in Figure 4.1 presents the data collection procedure.

Step 1
Document analysis to select study villages

↓

Step 2
Primary data collection from the INGO staff in Yangon Myanmar

↓

Step 3
Primary data collection (interviews and focus groups) from participants in the study villages
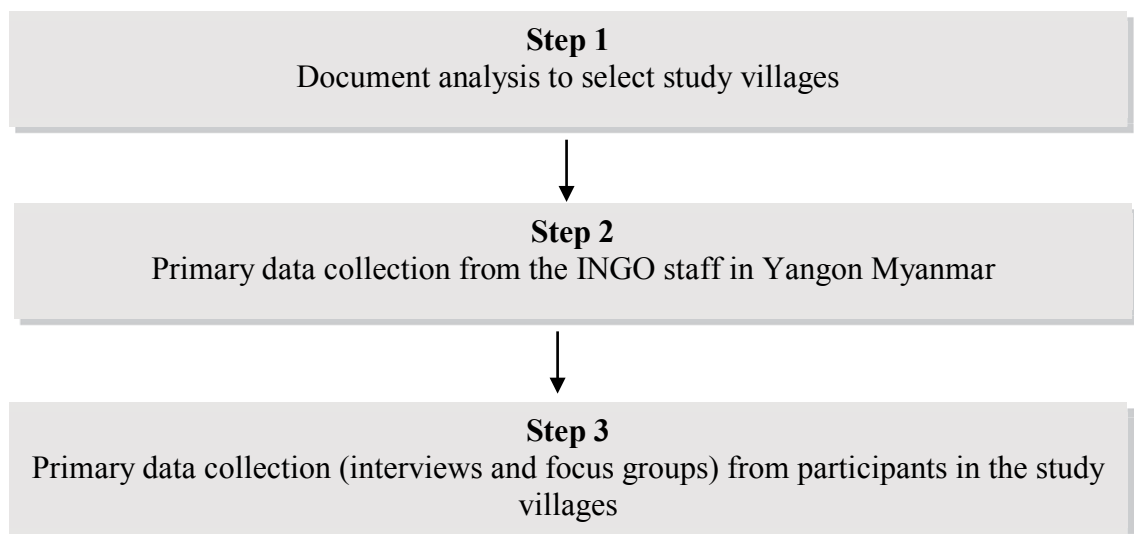
Figure 4.1: The research data collection procedures

Step 1- The study sites selection from the INGO documents

The main aim of document analysis was to support the selection of the study sites for primary data collection. I accessed, reviewed and analysed different types of documents (see Chapter 5). They were printed and published documents, including meeting minutes and reports pertaining to the INGO project in the 27 villages over the 30-month INGO project period (see Figure 2.6).

To determine the villages to be included in the study, two criteria were set. Firstly, the villages selected for this study were to have been affected by Cyclone Nargis in 2008, and secondly, women from those selected study villages needed to have participated in the INGO project for 30 months. Following the document analysis, three villages were selected for inclusion in this study to allow comparison of women's experiences. These are referred to as Village 1 (V1), Village 2 (V2) and Village 3 (V3). Thus, instead of using a random sampling method, the villages for primary data collection were selected purposively through document analysis. The details of the selection process are outlined in Chapter 5.

Because the INGO documents were created for operational purposes within the organisation (Atkinson & Coffey 2010), I did not expect that they would be sufficiently comprehensive to answer all of my research questions. Silverman (2006) also argues that the results of document analysis are not sufficient to investigate social worlds as they construct their own evidence of reality. As a result, it was necessary to employ other types of data collection methods (Viswambharan & Priya 2015) in order to examine women's capacity building, empowerment and different types of tangible/intangible capital development. Consequently, interviews and focus groups were conducted in addition to document analysis and these are discussed in the next section.

Step 2-The primary data collection from the INGO staff

After conducting the document analysis, I contacted the INGO staff who were involved in the 30-month project to conduct in-depth interviews. Particularly, the intention of these interviews was to examine the 30-month INGO project from the management point of view.

Step 3- Primary data collection from the study villages

As explained in chapter two, in the Myanmar context the local authority figure is a middleman who liaises between the Labutta Township Authority and the villagers. The local authority figure has position power and is the person who issues different kinds of approvals in each village (Nyo 2011). When interviewed the three local authority figures shared their insights and management views of the situational changes in their village that had occurred since the cyclone.

The intention of the one-on-one interviews was to examine the social world of individual women from the selected study villages before, during and after the INGO project. The expectation was that the reality of the women's experiences could be accessed through their social constructions – language, consciousness, shared meanings and instruments (Myers 2009).The ethics, interview protocols and procedures for the study are discussed in the next section.

4.7 Ethics, interview protocol and procedures

This section outlines the ethical considerations first and then the interview protocol and procedures used for the study.

4.7.1 Ethical considerations

The study protocols followed the Australian Code for the Responsible Conduct of Research (2007). Important matters included the participants' privacy, interaction during data collection, consent forms, and the participants' right to withdraw from interviews. All the interview questions and ethics forms were prepared in both English and the Myanmar language. Ethics approval was sought and provided by the Human Research Ethics Committee of Curtin University, Western Australia (approval number SOM 04-14, dated 7 April 2014). Following data collection, the researcher moved to the University of Technology Sydney to join her principal supervisor.

Anonymity and confidentiality issues were of primary concern during the data collection conducted in the rural cyclone-affected villages and in Yangon. For data coding, the names of research participants were changed into code numbers such as 'woman informant 1, V1', 'INGO informant 1', 'local authority figure, V1', and so on.

Reflexivity is recommended in qualitative research in order to ensure that ethical research generates knowledge with representation (Singh 2015). Reflexivity refers to the '…turning of the researcher lens back onto oneself to recognize and take responsibility for one's own situatedness within the research and the effect that it may have on the setting and people being studied, questions being asked, data being collected and its interpretation' (Berger 2015, p.220).

Singh (2015) further claims that reflexivity is used primarily in feminist research and methods. Reflexivity was a consideration because the majority of primary data was collected from women participants by a female researcher. In common with Berger (2015), Ward and Wylie (2014, p. 251-252) suggest that:

> '…reflexivity is also concerned with the positions of the researcher and the researched, and how the differences in positionality influence the research and what is produced as knowledge'… all factors that were borne in mind throughout the research process.

Scholars have also pointed out that there may be issues of power between the interviewer and interviewee (Blaxter et al. 2006) although natural and socially acceptable ways of collecting data in interviews may help to reduce this (Dörnyei 2007). For this reason, I considered what may be a culturally appropriate way to reduce the potential power differential between myself and the interview participants. In this way, my demeanour, my dress, and the way I communicated with participants during the data collection in the field, were key to conducting ethical research.

In order to respect local practices during the field work and data collection period, I familiarised myself with the local culture, women's dress and any other sensitive issues with the assistance of the local authority figures and the community educators. I am from Yangon so I shopped locally to buy clothes that would enable me to 'fit in' when

visiting the villages and bought local food to take with me to the various focus groups and interviews with the aim of creating a comfortable atmosphere.

This study applies conventional qualitative methods and I took one position throughout the research study: '… to be reflexive about how the position works in the production of knowledge' (Singh 2015, p.73). Familiarity between the interviewer and interviewees can enhance the process of data collection in interviewing (Ward & Wylie 2014). This is contrary to the point made by Pillow (2003, p. 192) who proposes using reflexivity to push us 'toward an unfamiliar, towards the uncomfortable': she further refers to the 'reflexivity of discomfort'.

Ethical concerns relating to this study were foremost throughout the process of data collection, analysis, presentation and the storage of data. Interview questions and data were collected in the Myanmar language, allowing the authentic voices of interviewees to emerge.

Translation/interpretation was not outsourced - it was undertaken by me. Here, the role of the researcher is representative of all interviewees or participants who shared their stories and insights. As Singh (2015, p. 73) suggests 'ethics is also involved in how we produce ourselves as subjects - as the knowing 'researcher'- and more importantly, in how we produce others'.

4.7.2 Interview protocol and procedures

The processes concerning the interview procedures, protocol, ethics and so on were disseminated before the interviews and focus groups were conducted, and consent was obtained from each participant. As per the ethics requirements, before conducting the interviews and focus groups, I provided information about the research background and asked for consent from the key informants/participants in relation to recording and note-taking.

In order to gain trust and avoid misunderstanding about the data collection process, I invited the local authority figures to the initial briefing meetings. They clarified some issues and assisted women with their written permission in relation to their informed consent to participate to this study. Thus, the written consent of all research participants was given, and those who could not write made an X-mark as a signature. Thus, research participants were also made aware of their rights and the confidentiality of their input/data. All interviewees and participants were also made aware of their right to stop the interview, withdraw from the study or refuse to answer any questions during the interviews and focus groups. Written permissions were kept and stored securely (as per the ethics requirements).

The confidentiality and anonymity of the interviewees was of primary concern in this study. Only my supervisors and I had access to the data throughout the processes of collection, translation and analysis. Note-taking and recording was used to document the interviews with key points and themes being manually recorded in written form immediately after the interviews and focus groups - as per DiCicco-Bloom & Crabtree (2006). The data collection process was recorded daily. Data verification with interviewees was requested in some cases to ensure the validity and accuracy of the interview data.

4.8 Data collection process using different methods

This section presents the data collection processes used. As per Figure 4.1, three types of data collection methods were used and the following sections outline the details.

Briefly, the preparatory process for data collection is explained as follows. Before travelling back to Myanmar from Australia for data collection, I engaged in discussion with the INGO to obtain permission to conduct this study and to gain access to the documents pertaining to the 30-month project. With the INGO's approval, the document analysis was conducted at the main office in Yangon over a two-week period in April 2014.

4.8.1 Document analysis

As per step one of Figure 4.1, document analysis was conducted at the INGO office in Yangon. The key purpose of conducting the document analysis was to select three sample villages for the primary data collection from the total of twenty-seven villages that were involved in the INGO's 30-monthproject. As explained in Chapter 2 (the context chapter), the project comprised three consecutive projects funded by different donors. All three projects maintained the same mission, objectives, approaches, targeted population and staff for the same twenty-seven villages in Labutta, Myanmar. The INGO counted all three projects as one project for 30 months (see Figure 2.7), and this study did the same.

Following discussion with the INGO's project manager and the signing of consent forms (as per ethics requirements), I was taken to the INGO's offices in Yangon where the documents were kept in order to begin the document analysis. All of the documents from the entire project were kept under the completed project section in the INGO main store in Yangon. The document analysis included only publicly available documents and reports related to overall village assessment and project activities.

The office shelving was labelled by year along with the planned year to destroy the documents. The documents pertaining to the 30-month project were kept in closed paper boxes and big plastic bags. Each container was tagged with the project name, completion date, audit date, lists of documents in that particular bag or box, and the last date to destroy the documents. With the help of the storekeeper, I signed the record book to note which documents I had removed for analysis. I conducted the analysis in a room next to the store and as the key to the room was kept by INGO as they opened and closed it each day for me.

The activity documents were kept in plastic bags. These related to meeting attendances, registrations for training, attendance lists and more. In order to answer the research questions related to this study I categorized documents according to the research themes. The document analysis focused on three main areas: capacity building, the enhancement or development processes concerning different types of tangible/intangible capital and social relationships (social capital), and loans (financial capital). Later, different types of activities were categorized again within each research theme to form sub-themes.

The process of document analysis began by scanning and skimming (speed reading) in the first instance. Then, detailed information was sought and recorded. Referring to part of the analytical framework, the input-process-output (IPO) model was applied (see figure 3.7, chapter 3 of the literature review) to analyse the INGO documents. A detailed explanation of the document analysis process can be found in the following chapter (5).

According to the INGO's data storage policy, all printed documents relating to the completed projects had to be kept for at least two years, providing time for the donors to complete an audit process. Under the policies and practices of the INGO, all printed documents of completed and audited projects were then required to be destroyed before the end of the next fiscal year, which was 30 April 2014 for this 30-month project. In line with this policy, all of the 30-month project's documents were due to be destroyed by the end of April 2014. Hence, the document analysis for this study was conducted and returned to the INGO before that due date.

This document analysis provided an overview of the 30-month INGO project and information related to the selection of the three study villages. The INGO had ranked each of the 27 villages as a poor, medium, or best performing village based on how villagers managed/repaid the small loans they had been given. As one aim of this study was to determine what factors underpinned the different levels of village performance (factors that were not investigated by the INGO), three villages were thus selected from each of the different groups, referred to as V1, V2 and V3 respectively in this study. The detailed document analysis guided by the input-process-output model, including the village profiles and related information, is presented in Chapter 5.

4.8.2 Interviews

As per step 1 of Table 4.1, following the document analysis, I then interviewed the INGO staff (step 2) who had been involved in the project for the 30 consecutive months. Through this process I was able to check facts from the document analysis and clarify anything that was unclear. Moreover, the INGO staff provided inside information about the project, participants and more from their management perspective.

As stated previously, I planned to conduct interviews initially with key informants such as INGO staff and local authority figures from the selected study villages, then with the women cyclone survivors in one-on-one in-depth interviews and focus groups. The key informant interviews were conducted with the INGO staff at their offices in Yangon at the times they were available.

As stated in step two, Figure 4.1, in-depth interviews were conducted with the purposively selected INGO staff and the local authority figures from the three study villages. Four INGO staff participated as key informants of this study. While I was in Yangon undertaking the document analysis and with the help of the INGO staff, I gained official approval to contact each local authority figure in the selected study villages for the purposes of primary data collection. Following the key informant interviews, the first two INGO informants provided the contact details of the local authority figures from each selected study village.

The INGO staff also spoke to the local authority figures from those three selected study villages over the telephone and firstly asked on my behalf for verbal approval to conduct the research. Based on personal introductions provided by the INGO staff key informants, I contacted the local authority figures and explained the study in advance (using both verbal and written communication) before the field trips. The written request for approval was sent to each local authority figure in the three villages as a necessary part of the procedure to conduct research. Following their verbal approval, I departed Yangon to conduct the field research. This was earlier than had been planned due to the monsoon weather from May onwards which would have made travel to the villages difficult.

This began the process for step three where I began the field research. I had planned to stay in each village during the data collection period in order to help build rapport, but permission was not issued on time by the local authority figures. This was because that kind of application had to be submitted at least three months in advance to gain approval from the township; district and regional authority and this had not been possible.

Although a request letter for data collection was sent in advance to each local authority figure in the three villages, they were hesitant about the research process. They had no prior experience with research interviews and they did not understand what was likely to happen. In order to overcome their concerns and promote knowledge regarding interviews, I began the interviews with three or four general questions about Cyclone Nargis, and their life before and after the cyclone. Later, when they were at ease and more comfortable, I explained the planned interview processes and procedures concerning the women participants and the expected research outcomes. Once the local authority figures understood the data collection process, they agreed that the interviews and focus groups with the village women could go ahead and they also agreed to participate as key informants in this study. I planned to conduct interviews and focus groups in the Myanmar language, which is the official and common language of all the research participants and the researcher who are all Myanmar natives.

Following the interviews with the local authority figures, they used their loud-speakers, (which were local practice of the local authority figures to organise gathering with or disseminate information/news to villagers), to invite the women to their office. They then introduced me and explained what I was intending to do. At the first meeting, I explained how the data would be collected for the interviews and focus groups, why it was being conducted, and what the expected impact of the study would be. The ethics and research protocols were explained, together with the forms and format of data collection.

After the presentation, all of the women cyclone survivors were invited to participate in the study. Many came forward voluntarily and gave their names for the interviews and focus groups. Next, a number of women who were trained peer educators and community educators in each study village introduced themselves to me and explained their roles. They offered their voluntary assistance to help with the data collection process in their respective villages. To overcome the challenges of choosing only 15 women (five for in-depth interviews and ten for the focus groups) from the many self-nominated women, the volunteer assistants suggested we use 'a musical chair game'. This game was widely used by the INGO previously so the village women were used to it and it helped with the selection of the women who would go on to participate in the interviews and focus groups.

After receiving approval for data collection I collected primary data from the women living in each selected study village. In order to respect local practice during this period, and with the assistance of the local authority figures, I familiarised myself with the local culture, women's dress and any sensitive issues. This resulted in one woman volunteer voluntarily accompanying me during the data collection period to assist with introductions and to help make the women participants feel more comfortable with the research process. The data was collected via interviews and the focus groups in each village in early May 2014. Lunch, tea and snacks were served during the selection processes, the focus groups and the interviews.

The local authority figures from V1 and V3 showed their support for this study by participating as key informants (interviewees) at the beginning of the data collection process, whilst the V2 local authority figure participated later. The results indicate that each of the three authority figures had different leadership styles, which affected the village women's capacity building, empowerment and social capital development.

As per the ethics requirements, before conducting the interviews and focus groups, I provided information about the research background and asked for consent from the key informants/participants in relation to recording and note taking. With the permission of research participants, all one-on-one in-depth interviews and focus groups were recorded using a tape recorder and notes were taken during interviews. Transcripts of the interview data in the Myanmar language were translated into English. Key themes were extracted when the data was analysed and translated. The details are outlined later in this chapter.

4.8.2.1 Pilot interviews

As proposed by Patton (2005), no fixed rule dictates which research questions should be asked first in interviews. However, when rapport between the interviewer and interviewees is built, it can help to overcome some of the challenges that may be present in interviews (Rabionet 2009). To help interviewees feel at ease, the researcher began with non-controversial, straightforward questions in relation to their current experience and activities (the interview questions are included in Appendix 1).

Prior to commencing the three pilot interviews, consent was obtained and the nature of the interviews was explained along with a sample question. During the first pilot interview of an interviewee based in V1, the participant was reluctant to talk at first and was clearly nervous. She disclosed that she had never taken part in a research interview before. As a consequence, she invited five of her family members to help her remember information so that she could answer the questions accurately. The first interview took three and a half hours and generated large amounts of data (Alsheiqeeti 2014). As a result, I knew this would be very difficult to transcribe given Dörnyei's (2007) observation that a one-hour interview may take up to six or seven hours to transcribe.

After reviewing the audio data, it was evident that the interviewee had repeated herself on many occasions and lost track on her responses. Furthermore, rather than the intended one-on-one, face-to-face in-depth interview, the uninvited guests from her family caused some disturbance. Creswell (2009) suggests that interviewees should have the chance to summarise and clarify the points they have made during interviews and this was not possible during the first pilot interview. As a result, it was necessary to revise the data collection approach and the data collection method for the second pilot interview and ascertain whether or not the interviewee had a good understanding of the research questions.

The second pilot interview was conducted in V3. This time the interviewee also invited three of her family members to join her and the interview took three hours to complete. Again, the reviewed data was found to be repetitive. Following the two pilot interviews, the interviewees' feedback indicated that they did not have any problem communicating with the researcher and answered the research questions in the Myanmar language. However, both pilot interviewees felt nervous about being interviewed alone and this suggested the need for some kind of support to improve the interview process. As suggested by Qu and Dumay (2011), a task for the interviewer is to be able to facilitate the most conducive environment for interviewees to be able to speak comfortably and freely.

It was also evident that some of the interviewees were not able to read and write, so to overcome their literacy challenges and attain a sense of ownership it was considered that using a visual representation might be the best way forward for the women to reflect on

their experiences before, during and after the cyclone. Alsheiqeeti (2014) recommends that a sense of ownership is necessary when interviewees share their life experiences. The intention of using a visual method was to assist the women in recalling their experiences. It is proposed that the non-linguistic aspects of interviews such as visual methods can represent valuable 'unsaid' information in research (Moses 2010). As a result, a method of supporting interviews with a visual representation of interviewees' experiences was designed and is discussed below.

4.8.2.2 Participatory Process Maps (PPM)

Following the challenges discussed in relation to the two pilot interviews conducted in V1 and V3, I conducted the third interview (with a participant from V2) with the creation of a visual map. This helped to represent the situational changes that had occurred in her life before and after Cyclone Nargis and I referred to this as a 'participatory process map (PPM)'. Following the pilot interviews, the PPMs were used with all of the 15 women participants (5 from each of the 3 villages) for the remaining in-depth interviews.

The items needed for drawing a PPM were two sheets of A4 paper, glue, a ruler and coloured pencils. As indicator categories of the PPM, the different types of capital drawn from the social capital literature of Bourdieu (1986, 1992), Coleman (1988, 1995), and the empirical studies of the World Bank (2011) were represented. Specifically, the five different types of capital: human capital, financial capital, psychological capital, physical capital and social capital were each allocated a colour on the PPM as shown in Table 4.2.

Table 4.2: PPM indicators (colour codes relating to different types of capital)

Code-Colour	Different types of capital	PPM indicators
Blue	Social capital	Communication within networks–social relationship, group relationships and interaction within networks
Black	Social capital	Trust within networks
Pink	Social capital	Group – collective/cooperative work
Purple	Social capital	Social cohesion
Brown	Social capital	Empowerment (Decision making)
Yellow	Financial capital Physical capital	Economic status – income and resource ownership
Green	Human capital	Capacity building training/knowledge sharing within networks/peer education/on-the job training (knowledge transfer)
Orange	Psychological capital	Confidence, hope, esteem, happiness, resilience Well-being (physical/mental health)
Red	Social capital	Social status

Procedures

Listed below are the six steps it took to complete the PPM for each of the 15 women interviewees from the three study villages (five women from each village).

1.   Colour coding – select indicators (types or dimensions of capital) as per Figure 4.2 below.

2.   Set the interval – period of time referred to.

3.   Mark the indicators (see Figure 4.2) by drawing symbols on paper (i.e. house or money vs. yellow colour, etc.) - those who could not read could understand the meanings of the different coloured pencils.

4.   Add notes and symbols in different coloured pencils by using double tape. For example, they picked a yellow pencil when they wanted to mark their physical and financial situation because that yellow pencil has a sticker paper with a drawing of house, money, cows, livelihood resource etc.

5.   Give coloured pencils (attached with notes and symbols) to the interviewee and ask her to use only one colour at a time in each interval for all intervals of all time periods. A sample PPM is shown in Figure 4.2 below where the interviewee uses each colour to create their personal PPM.
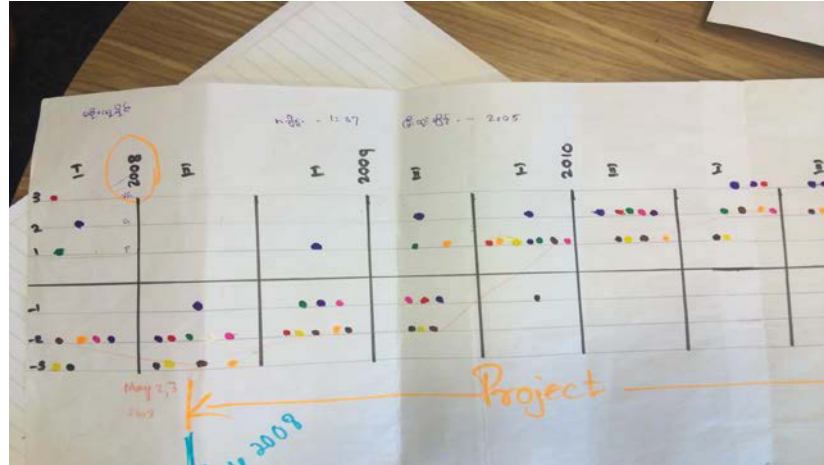
Figure 4.2: An example of a completed PPM

Figure 4.2 illustrates one of the interviewee's PPMs. It is set across seven scales:

1+   Satisfactory

2+   Good

3+   Very Good

Neutral – Don't Know or Not Sure

-1   Unsatisfactory

-2   Bad

-3   Very Bad

The intervals were set at every six months on the X-axis. The various indicators were represented by different coloured dots as shown in Table 4.2.

The development literature states that participatory mapping (PM) has been used widely for rural development in particular. Thus, PM has previously been recommended as a way of collecting data together with local people in the development field (IFAD 2009). It is intended to be used with local communities where participants draw maps to portray their community's concerns (IFAD 2009) and was developed as a method to bridge gaps between scientific and local understanding (Piccolella 2013). PM has been utilised globally in the development sector for more than 20 years and is also used for topics such as climate change (Piccolella 2013), town planning (Warner 2015), indigenous studies and community empowerment (Gessa 2008). The maps are said to 'provide a valuable visual representation of what a community perceives as its place and the

significant features within it' (IFAD 2009, p. 4). Two different types of data collection may be used in the participatory mapping method approach – participatory listening and observation – along with visual tools such as maps, daily activity diagrams, Venn diagrams, flow diagrams, livelihood analysis, semi-structured interviews and focus group data (United Nations 2006).

The strength of the PM research method is that it can provide authentic information from individuals and communities in relation to areas of concern (Panek & Volk 2013). Additionally, a sense of ownership can be achieved through the drawing of maps (IFAD 2009). A limitation of PM is that it is likely to capture a snapshot of a point in time, for example, a village map (Panek & Volk 2013). Thus, although other researchers have utilised participatory mapping (PM) research methods, none are quite the same as the participatory process map (PPM) used in this study. The PPM was designed to provide a longitudinal perspective of the situation studied as it was considered important for this study, rather than just providing a snapshot perspective.

4.8.2.3 Lessons learned from the third pilot interview

Once the PPM was introduced the third pilot interviewee spent approximately 25 minutes creating her map. She was able to map 'her journey of life' from January 2008 (which was five months before the cyclone hit) until early May 2014. She marked a dot for each indicator with the related colour pencils that represented her situational changes relating the different types of tangible/intangible capital.

After creating her PPM, the third pilot interviewee answered the research questions easily and comfortably while the researcher was able to monitor the map that she had created. She did not invite her family members to join the interview, even though they were waiting nearby. The third pilot interview took 80 minutes to complete, which was only one third of the duration of the two previous pilot interviews as the PPM helped the interviewee to focus when answering the interview questions.

Another unexpected positive outcome was that the interviewer and researcher were able to break down communication barriers (including power) when the PPM was developed.

Singh (2015) suggests that power between an interviewer and interviewee needs to be reduced when an interviewee thinks the interviewer is an educated woman from a city (based on her study with rural Nepalese women). Barbour and Schostak (2005) also advocate that it may be necessary to reduce power in communication between the interviewer and interviewee to enable relevant information to emerge.

The third pilot interviewee was asked for her feedback on the PPM and she stated that she was satisfied and surprised to look back on the progress she achieved over the relevant timeline.

> I was not aware of my capacity of such kind of achievement to overcome the problems and the down situation after the cyclone. I want to keep this map to show to my elderly parents who are living in another village. I am sure they will be very happy about my upward trend in life. (V2 interviewee, third pilot interview)

Based on the effectiveness of the third pilot interview using the PPM, it was also introduced for the next 15, one-on-one in-depth interviews with the village women (five from each of the three study villages). The findings of PPM analysis for three villages are outlined below. As stated previously, the PPM was not used with the other interviewees: the local authority figures, the INGO staff and the focus group participants.

4.8.2.4 Participatory Process Map (PPM) analysis

This section concerns the latter part of data analysis outlining the findings from the PPM analysis in order to understand the general patterns and situational changes of the village women. The PPM was applied during all the one-on-one in-depth semi-structured interviews with the 15 women participants (five from each of the three villages). To assist the interview process, each interviewee created their PPM before the interviews. This involved them sharing their situational changes and experiences in the form of mapping across a timeline from the pre-cyclone period until the data collection for this study in late April- early May 2014. This kind of visual map allowed the women participants to more easily refresh their memories.

As a consequence, the interviewees were comfortable in mapping their past and present situations across different interval periods. The situational changes of the women were signposted in different colours regarding different types of capital such as human capital (school dropout, never went to school, training, sharing, whether they were peer educators), financial capital (money, loans, savings, business investment), physical capital (the status of their resource ownership), social capital (loneliness, isolation, insider roles, social relationships, participation in women's network groups, village networks), psychological capital (satisfaction, happiness, belief, hope, resilience, depression, sadness and so on) and social capital (social class and status- dependent, follower, listener, active participant, runs own business, decision-maker, peer educator, community leader, community fund committee member).

Although the PPM was intended as a data collection tool, it was also a monitoring tool as it enabled the interviewer to easily follow the life changes of the interviewees. It also allowed the interviewer to raise any forgotten issues and to ask questions according to each PPM. The interviewer also had the chance to clarify facts while interviews were being conducted and the PPM was also useful in assisting the primary data analysis of the 15 women's interviews.

A general analysis of the PPM of 5 women interviewees from each village is presented below. The associate PPM of the 5 V1 women can be seen in Appendix 2. The other PPMs can also be found in Appendix 3 for V2 and Appendix 4 for V3. Only one PPM analysis (woman participant 1, V1) is shown in detail (see Appendix 5).

PPM analysis of V1

The general findings from the PPM activity indicate that three of the five women interview participants from V1 considered themselves as being from a higher social class than their fellow villagers. This was attributed to their comparative wealth and level of resource ownership in the pre-cyclone period. However, after the cyclone, all five women stated that they believed they had the same social, health, and economic circumstances as each other. The achievements of each woman were different and varied throughout and beyond the INGO intervention period.

All five women indicated they experienced an upward trend with regard to their situational change, which started 12 months after the cyclone hit, although two of the five participants found they fluctuated throughout the period. All women indicated the importance of their network group. All but one of the five women indicated that their full recovery started after the departure of the INGO.

PPM analysis of V2

The general findings from the PPM activity indicate that two of the five women interviewees from V2 considered themselves to be from a higher social class than their fellow villagers. In common with the V1 women, this was attributed to their status (and resource ownership) in the pre-cyclone period. However, except for two women, the interviewees indicated that after the cyclone, all of the villagers had the same social, health, and economic situations as each other because all of their resources had been destroyed by the cyclone. Three V2 women indicated that their recovery started 12 months after the cyclone (in common with the V1 women).

Three women had experienced improvements in their situation from 12 months after the cyclone and considered themselves to be fully recovered at the time of this data collection. The other two women were not fully recovered then, as they indicated that they did not fully participate in the collective work and cooperative actions undertaken by the women's network groups and the other village activities although their PPM indicators did illustrate some improvements in economic growth and their participation in networks. Their interviews also supported the illustrations shown in their PPMs.

PPM analysis of V3

The general findings from the PPM activity indicated that all of the V3 women had experienced similar situations regarding their physical, financial, human, cultural and social capital before and after the cyclone. However, their journey to improvement began later than V1 and V2 women and their full recovery did not occur until the end of the data collection period for this study (late April-May 2014).

The achievements of each of the V3 women participants were different and varied throughout and beyond the INGO intervention period. It is proposed that this was because of their level of participation in activities and engagement with members of the women's network groups. Active participation and engagement were found to be the key determinants to capacity building to become empowered and develop social capital.

Summary of the PPM analysis of three villages

All of the 15 women interviewees who participated in the PPM process clearly outlined the situational changes that took place in their lives before and after the cyclone, and before, during and after the INGO project. It was demonstrated that the PPM can assist in overcoming barriers in relation to illiteracy, memory loss and transparency. The 15 PPMs indicated that all the 15 women participants had, as might be expected, undergone a range of situational changes since the cyclone. These concerned changes in their economic status (income, physical and financial assets), health and wellbeing, psychological status, education, interaction within the women's group networks and more.

4.8.3 Focus groups

As explained previously, focus groups were conducted in each selected study village with ten women sharing their experiences regarding women's capacity building, empowerment and different types of tangible/intangible capital development. It was determined that themes, challenges, supporting factors for women drawn from in-depth and key informant interviews are confirmed by women participants of focus groups in each village. This study confirmed that focus groups only indicated social interaction of women participants who discussed the common issues within groups.

4.8.4 Summary of data collection methods

The three women who participated in the pilot interviews were not included as research participants because, as explained under the detailed section on pilot interviews (4.8.2.1), it was not until the third interview, when the PPM were introduced, that any of the collected data was considered suitable for analysis.

In total there were 52 participants involved in the study. This comprised four INGO staff and three local authority figures, all of whom were key informants, five women from each of the three villages who participated in the in-depth semi-structured interviews and ten women from each village who were focus group members.

4.9 Data analysis, coding and data interpretation

In this study, data from two different types of research methods are analysed as explained previously. Firstly, document analysis was utilised within the context of the INGO project. In relation to the primary data, in-depth, one-on-one interviews and focus groups formed the different data sources with the intention of providing internal validity (Barbour 2001; Patton 2015). The primary data sources are outlined in Figure 4. 3.
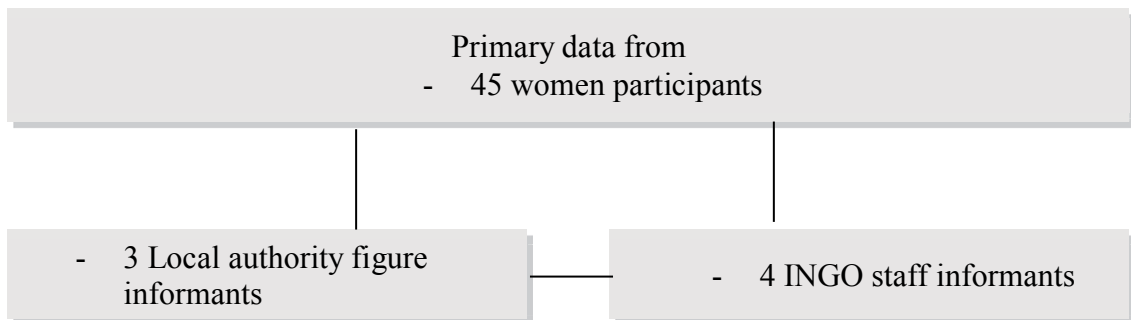
Figure 4.3: The different primary data sources used for this study

Starman (2013, p.30) argues that qualitative research is characterised by an interpretative paradigm, which emphasises subjective experiences and the meanings they may have for an individual. As this study adopted an interpretative paradigm, it was important to allow the research participants to speak for themselves. This is why most of the research questions (see appendix 1) were open-ended, for example: What does the term 'empowerment' mean to you?

4.9.1 Data analysis timelines

As indicated previously and in Figure 2.6, Chapter 2, the 30-month INGO project comprised three consecutive projects supported by different donors although the project was treated as one large project. Therefore, for this study, Table 4.3 outlines the events, the study timeline, and the corresponding thesis chapters. As per Table 4.3, the primary data analysis includes pre-cyclone, first timeline, second timeline and third timeline.

Table 4.3: Timeline for data analysis and corresponding thesis chapters

Event	Pre-Cyclone*	Pre-INGO	During INGO project	Post-INGO project
Periods	January – 2nd May 2008	2nd May- mid-August 2008	Mid-August 2008 – December 2011	January 2012 – April 2014**
Study timeline	**Pre-cyclone**	**1st Timeline**	**2nd Timeline**	**3rd Timeline**
Thesis chapters	6	6	5, 6	7

* Cyclone Nargis hit to the villages on 2 May 2008
** Primary data collection was started in late April 2014

4.9.2 Coding and data interpretation

For this study, all of the data collected, including tape-recordings and field notes created in Myanmar, were transcribed first. Using the transcripts, firstly the patterns emerging from the primary data were examined. Next, both common and unique themes were identified, firstly as data units from the patterns of all interviews and focus groups and secondly, groups were classified from the common and unique data units. Analysis concerned both the known and new knowledge required to answer the research questions of this study.

'Coding is a process used in the analysis of qualitative research, which takes time and creativity' (Stuckey 2015, p.7). As it was quite a complex process to examine the situational changes of the women cyclone survivors due to the external issues, three steps of coding were applied in this study (Stuckey 2015). They concerned reading through the data and creating a storyline, categorizing the data into codes, and using memos for clarification and interpretation (Stuckey 2015).

As suggested by Stuckey (2015), all data from the one-on-one interviews was read and 'storylines' from each interview identified, together with each PPM. Later, as indicated in Table 4.2, data was categorised into groups as per the coding. Memos were used to clarify how the codes were categorised and themes developed through data analysis. As per Miles and Huberman (1994), coding concerns a type of categorisation of the transcripts into groups to allow for the identification of themes. In this study, coding was 'concept-driven' as the themes were developed based on the conceptual framework used (Ritchie & Lewis 2003). The final codes were translated into English and the qualitative data analysis software; NVivo10 assisted the data management and analysis (Stuckey 2015; Welsh2002).

Creswell (2009, p.153) argues that 'no study reports actual reliability data' and it can be particularly problematic in relation to qualitative research, given the concepts of validity and reliability are generally associated with quantitative research. From the qualitative researchers' perspectives 'reliability and validity are conceptualized as trustworthiness, rigor and quality' (Golafshani 2003, p. 604), which may be achieved through validity procedures '...where researchers search for convergence among multiple and different sources of information to form themes or categories in a study' (Creswell & Miller 2000, p. 126).

Convergence was sought in this study where, for example, the pilot interviews were intended to trial the interview questions and the development of the PPM became a way of supporting interviewees in recalling their previous experiences and reduced the possibility of bias in research. As per Cohen et al. (2007) advice, the importance of the interviewer regarding their attitudes, views and expectations of perceived responses was considered.

4.10 Data triangulation and presentation

Denzin (2006), Golafshani (2003) and Patton (2015) recommend that qualitative researchers use triangulation techniques to ensure that their accounts are rich, comprehensive and well developed. Among the four types of triangulation suggested by Johnson (1997) – data, methods, investigator and theory – this study mainly applied data and method triangulation.

As discussed previously, the data was drawn from a variety of sources (see Figure 4.3) including document analysis; semi-structured, open-ended and in-depth interviews; and focus groups. Data was triangulated according to three interrelated approaches. For example, data from the document analysis indicated the types of services provided during the INGO project and the different levels of village achievement. This data was used for triangulation with the data collected from the in-depth interviews and focus groups. Moreover, the interview data and focus group data of women cyclone survivors were triangulated with the data collected from the INGO informants and the local authority figures.

This type of multiple data crosschecking and triangulation (Johnson 1997; Patton 2015) can enhance the validity and reliability of data gathered from different data sources. Consequently, when interpretative results emerge, they are better able to reflect the interviewee's reality. In particular, it was intended that bias be eliminated and trust built with interviewees in the process of data collection, because one of the challenges of qualitative research concerns data validity (Creswell & Miller 2000). Data validation is the main means to ensure research rigour (Kidd & Parshall 2000; Patton 1990; Tuckett 2005).

As stated previously, the interpretivist paradigm was selected for this study. The data used is interpretive, open-ended and contextualised, which is intended to reflect the reality (Creswell & Miller 2000) of the women cyclone survivors' experiences. The presentation of the data in this study was determined by the nature of research methods used - as per Alshenqeeti (2014) and Bell (2005, 2014). The findings and analysis from the document analysis is presented in Chapter 5 and the findings and analysis relating to the primary data is presented in Chapters 6 and 7.

4.11 Research limitations

The themes of women's capacity building, empowerment and different types of tangible/intangible capital development emerged from the data provided by the key informants and research participants. The number of research participants was limited to 52 people and three villages, which limits the potential for generalisation of the results to women who have experienced disaster followed by a project. However, it is proposed that the findings should prove useful to future researchers and practitioners concerned with women's capacity building, empowerment and different types of tangible and intangible capital development and to those who are involved in broader NGO work.

4.12 Chapter summary

To summarise, this chapter outlines the research design, methodology, data collection methods and analysis intended to answer the research questions. As stated previously, this study uses a qualitative research approach to explore the insights and experiences of women cyclone survivors.

The study utilises three types of data collection: document analysis, in-depth interviews and focus groups. The primary data was collected from three study villages selected following the document analysis of the INGO's project documents. The research methods comprised focus groups, in-depth one-on-one interviews and key informant interviews. Participatory process map (PPM) was developed following the difficulties arising from the first pilot in-depth interview. As PPM was found to be effective, it was applied during all the one-on-one interviews with women cyclone survivors from the three study villages. Interview data was transcribed and coded using version NVivo 10 qualitative software. The anonymity of the informants was prioritised during this process. The next chapter 5 outlines the document analysis process.

CHAPTER 5: DOCUMENT ANALYSIS

5.1 Introduction

As explained in the Methodology Chapter (4), this study employs two methods of data analysis: document analysis and primary data analysis. The aim of the document analysis is to analyse documents related to the 30-month INGO project in order to select the study villages where the primary data will be collected for this study. The background concerning Myanmar and the INGO project was presented in Chapter 2, the Myanmar context. Chapters 6 and 7 will present the primary data analysis.

5.2 Document analysis - timeline and analytical framework

In relation to the analytical framework, for the document analysis, the input-process-output (IPO) model was applied (see Figure 3.7, see Chapter 3- the literature review) to examine the INGO documents and select the study villages for the primary data collection. The methodological process used for the document analysis was presented in Chapter 4. This chapter presents the findings from that process.

Prior to commencing the document analysis, a review was conducted via the internet of the publicly available documents related to the 30-month INGO project including the INGO's annual reports. This provided some basic understanding of how the INGO operated and the scope of their project in the aftermath of Cyclone Nargis. Following the University's Ethics Approval, the document analysis was conducted at the INGO's Head Office in Yangon in mid-April 2014 over a period of two weeks.

In accordance with the INGO's policies and practices, documents (including any kinds of paper and forms) relating to any completed projects are stored for two years, then destroyed before the end of next fiscal year. For these documents, that was April 30 2014. Hence, the researcher ensured that the project documents were accessed before this date, as explained in Chapter 4 (also see 4.5.1).

5.3   Categorisation for document analysis

As proposed by Scott (2006), document analysis is an appropriate method to collect data from various kinds of organizational documents in relation to a particular topic. For this study, the activity concerned documents such as publicly accessed reports and the INGO's internal records and proposals. According to Silverman (2006), the details of documents are not commonly described in document analysis; only the documents related to the research questions are used for analysis. The financial documents relating to the INGO project such as vouchers, payments, invoices, and quotations were thus excluded in this analysis because they were not related to this study's aims and research questions. Table 5.1 categorises the type and number of each document examined in this process.

Table 5.1: Analysed INGO documents

Serial No.	Description	Number of documents
01	**The preliminary assessment report compiled in 2008**	1
02	**Project proposals (pilot, second & third project)**	3
03	**Sets of detailed implementation plans for each project d project-end reports**	3
04	**Monthly reports**	30
05	**Sets of mid-term and year-end evaluation reports for each project**	3
06	**External evaluation reports**	2
07	**Final report of the 30-month project in 2011**	1
	Total number of documents analysed	43

As per Table 5.1, a total of 43 INGO documents relating to the INGO's activities across the 27 villages were examined and analysed. From the document serial numbers 02 and 03 of Table 5.1, it was found that three different donors funded each project across the different timelines. That said, all three projects maintained the same targets, objectives and approaches for the capacity building of the women cyclone survivors. For this reason, the INGO considered all three projects as one 30-month project as per serial number 7 in Table 5.1.

5.4   General observations

This section discusses the general findings from the document analysis. The majority of documents were prepared in Myanmar and the donor reports were written in English. Generally, the INGO documents were not well organised due to the documents being prepared for the purpose of internal recording only. The INGO reporting followed the particular approaches designated by each respective funding body, which is in line with Robson's (2002) observations that documents should naturally be recorded for their own purposes, not necessarily for research.

During the document analysis processes, some data was found to be incomplete and recorded unsystematically. The majority of the INGO's field data comprised handwritten documents in paper format, although donor reports were stored in the computer system. The amount of field data stored on the computer was limited because the electrical supplies and telecommunications had been cut off in the cyclone affected areas since the cyclone hit (Hays 2008b). The preliminary INGO report, serial number 01 (see Table 5.1) shows that the INGO project villages had no electrical installations and required a generator for their office purposes. Data from that report formed the base line information for the 30-month project.

Serial numbers 02 to 06 (Table 5.1) comprise the detailed activities of the 30-month project such as the plans, activities and services provision (the input), operations (the processes) and achievement (the outputs) of each village. Document serial number 7 (Table 5.1), which is the final INGO report following the 30-month project, ranked each of the 27 villages as either poor, medium or best performing villages. The three study villages for primary data collection in this study were selected from the 27 villages, one from each ranking, following in this document analysis.

5.4.1 INGO project activities

The different types of INGO project activities are listed in Table 5.2, which comprises three columns as per the INGO project timeline (see Figure 2.7, Chapter 2).

Table 5.2: The INGO project activities

Description of INGO activities (30 months)	The pilot project (5 months)	The second project (11 months)	The third project (14 months)
Held advocacy meetings with donors, DSW, different levels of authorities in the Labutta Township/Town & villages	X	X	X
Feasibility study – baseline data before the INGO project	X	N/A	N/A
Entry level assessment of both women beneficiaries and villages for each project	X	X	X
Advocacy meetings with women	X	X	X
Counselling for individuals	X	X	N/A
Counselling for groups of women	X	X	X
Meeting places created for gatherings	X	X	X
Library established at the meeting place	N/A	X	X
Formation of women's network groups	X	X	X
Informal gathering of women for social, cultural events in each village	X	X	X
Formal gathering for different types of INGO training	X	X	X
Peer Educator (PE) training	N/A	X	X
PE activities in community work	N/A	X	X
Leadership training	N/A	N/A	X
Individual loan disbursement	X	X	X
Self-monitoring system	N/A	X	X
Collective loan disbursement	N/A	X	X
Group-monitoring system	N/A	X	X
Social funds made available in each village	N/A	N/A	X
Community monitoring system	N/A	N/A	X
Women's involvement in business	X	X	X
Women in decision-making	X	X	X
Women's participation in the women's network groups	X	X	X
Women's participation in communities	N/A	X	X
Women's management of the social fund as committee members	N/A	N/A	X
Women's involvement in financial management and sharing knowledge with other women	N/A	N/A	X
Women leading community action	N/A	N/A	X
The project-end assessment	X	X	X
The final assessment of the 30-monthproject	N/A	N/A	X

Note: X = completed; N/A = not applicable

Among the various INGO provided activities the document analysis focused on three main areas of provision: capacity building, processes that may have supported the enhancement or development of different types of tangible/intangible capital - particularly social relationships (social capital), and financial resources in relation to the key research themes. The following section discusses the INGO activities shown in Table 5.2 with a focus on the three key areas of study

Capacity building

The INGO conducted three levels of capacity building training for the women cyclone survivors. Their teaching toolkits were prepared by the INGO in pictorial form so that the women could easily follow them for training, particularly those who were illiterate or who had low educational attainment.

The three different levels of capacity building training were: basic, intermediate and advanced (which were peer educator and leadership training as explained later). Basic training was targeted to all of the women villagers who voluntarily attended in each village. Its intention was to promote basic knowledge of health, social, economic and financial management, education, and disaster preparedness and response action for different types of disasters. Without any cost involved, 2,165 women from the 27 villages who were involved in the INGO project accessed various kinds of basic training.

Limited numbers of women participated in the intermediate training as their inclusion was based on their results achieved following the basic training course. For example, after the basic training, selected volunteers were then invited to attend the intermediate training for peer educators, who became unpaid volunteers to provide social and educational services for their communities. Peer educators received lunch and a project uniform when conducting voluntary work in their villages.

The trained peer educator women (TPEW) provided assistance to other women as guides and mentors in their respective villages. Selected peer educators were attended the advanced leadership training and were later appointed by the INGO as community educators. This group led the peer educators and other village women and were provided

with a salary by the INGO. One community educator was responsible for leading 15 peer educators and other women in the village.

In order to overcome these psychological problems, the INGO added two types of counselling sessions, which had not been included in their original project proposals. Individual counselling was mainly conducted in the pilot and second project stages, whereas group counselling was offered during all three projects. As a consequence of the counselling services, the number of women attending training was greater in the second and last projects than that the numbers of participants in the pilot project.

From the document analysis, capacity building appeared to comprise a pyramid shape. Larger numbers of participants attended basic training, less attended the intermediate training (to become peer educators) and the least number of women participated in the advanced leadership training (to become community educators). The experiences of the community educators were not recorded in the INGO documents, as the documents only recorded names, numbers and the frequency of training and numbers of attendances.

Network groups

Apart from capacity building, the INGO also identified a need for stronger networking through social relationship development in the villages for the women cyclone survivors. To support this process, the INGO organised different kinds of activities to enable the women survivors to adapt to their situation. For example, the village women held both formal and informal social gatherings for the women in their own or in nearby villages. Through these social gatherings, the INGO noticed that communication and social relationships also assisted the women in reducing the pain and psychological problems that they had experienced since the cyclone. Examples of social gatherings included religious activities; cultural events - including religious activities; simple celebrations such as birthdays, weddings, funerals and so on. To further enhance social networking, the INGO facilitated the formation of small, voluntary network groups comprising a minimum of five women from the same village. The purpose of the small network groups was to encourage the village women to gain collective power through supporting

each other. The outcomes from the network groups are discussed further in the section on primary data analysis. The INGO reports noted that the formation of the women's network groups led to greater numbers of informal gatherings than before which included families and communities (as briefly outlined in table 5.1). Various INGO evaluation reports (see table 5.1 – documents 04 - 07) record that family relationships were enhanced by the strengthening of social interactions of the women in the network groups. By the end of the third project, the majority of women who participated in the INGO project were both formally and informally networked with other women, both within and across the 27 villages. What is not able to be determined from the documents is the development processes concerning different types of tangible/intangible capital, including social networking patterns (i.e. positive or negative social relationships), the intensity of relationships (strong or weak ties), the reasons or choices for networking (social or business cooperation) of the women within the small network groups (of five women) and across the groups within the village networks.

Loan provision

Various types of resources such as housing, livelihood and financial resources including the cash and jewellery belonging to the women cyclone survivors were destroyed due to Cyclone Nargis (see Chapter 2). Lack of financial resources was thus referred to in the preliminary assessment of the INGO documents as the major issue for survivors in the post-cyclone period. However, the INGO considered the provision of cash was not the sole solution to the women survivors recommencing their income generating activities or to support their economic development. They indicated that it was important for the women villagers to also be provided with financial knowledge for recovery. Therefore, the compulsory requirement for loan recipients was to complete two sessions of financial management training before and after accessing a loan.

The INGO planned to introduce three types of loan: individual, network group loans (collective loans) and social funds (a lump sum amount) to each village. At the individual level, every loan recipient was required to attend two stages of financial training - basic and advanced. Basic financial training concerned the management of

basic debit and credits, including a self-monitoring system which taught the women how to keep financial records, the differences among sale prices, costing, profit and so on. The INGO disbursed individual loans when 2,165 women completed two sessions of financial training. The individual loans varied from (Myanmar currency) Kyat 5,000 to 10,000 (approximately AUD $5.00 to $10.00). Following the commencement of pilot project, women received individual loans and were able to run own businesses to generating income. These small businesses included the raising of poultry and growing vegetables which were later sold.

The group level loan was granted to the women's network groups. The women's network groups applied for collective loans from the second INGO project onwards. The collective loans enabled the women to form small co-operatives and join together to work and sell their produce and share the profits. The collective loan amounts ranged from Kyat 100,000 to 700,000 (approximately AUD $100 to $700). When the village women conducted their collective businesses in the network groups, the INGO taught them how to pool individual funding with the group as a group resource, how to allocate money in the collective business, and how to share both costs and profits while keeping the reserve funds for emergencies.

Once loans were granted the INGO staff continued to closely monitor the individual loans. Later a group monitoring system was introduced among the women's network groups in relation to the collective loan system. This involved each of the five members of the group consulting, discussing and advising each other in relation to group purchases, processes and profit sharing. The individual and group monitoring systems were designed to support the development of individual women's capacity, skill and capability in relation to their social, psychological, human and financial situations by the completion of each project.

The third loan system of the INGO concerned the social funds. Social funds were provided to each of the villages to sustain the individual and group loan systems once the INGO had departed. The amount of the social fund allocated depended on the collective village achievements, which were assessed according to the village rankings as explained earlier. Social fund allocations ranked from US$1,000 to $5,000 accordingly.

Sustainability

From the second project onwards, the INGO introduced a new method of self and group monitoring, even though this was not included in their planned proposal. The INGO trained all of the women to use the two monitoring systems – both as individuals and as members of the women's network groups – in order to measure the development of individuals and groups. As a result, three different results were attained for the women, which were listed and grouped under one of the poor performing, medium performing and best performing villages.

Monitoring led to further project funding and the self-sufficiency of the village women. The monitoring training meant that the village women were able to self- monitor their financial management at the individual, group (network) and community levels. The INGO closely monitored the progress of each individual after the funding was awarded, as the majority of loan recipients were new to business operations. The results were varied and records show that the INGO provided special support to those women who might have failed in their business ventures due to lack of skill and/or personal reasons. The group monitoring system was then practiced by the women in the network groups.

The third system concerned the INGO social funds. The INGO transferred social funds and taught the women how to use the loan monitoring system. They monitored the social funds at first, but once they departed the trained peer educators and the community educators took over that process. The monitoring system was found to be effective in most of the 27 project villages. For example, the trained peer educator women (TPEWs) facilitated meetings with other women loan recipients and shared their basic knowledge. With these three types of monitoring systems in place, the village women were able to measure the development.

5.5   Selecting the three study villages

The study villages were selected based on the INGO documents listed in Table 5.1 and 5.2. The feasibility assessment report and the final INGO reports were some of the main resources that supported the document analysis. That report evaluated each of the 27

villages and their achievements throughout the 30-monthINGO project. The villages were ranked into three groups by the INGO - the poor, the medium and best performing villages according to three areas. Rankings concerned the effectiveness of training, the number of gatherings and meetings and the management of social activities and social funds.

Those three groups were ranked according to INGO criteria; this included the percentage of village women who attended training sessions, levels of participation in meetings and social activities and the percentage of INGO loans that were repaid by the end of the project. As stated above, those three groups of achievement ranking of 27 villages were particularly varied based on the capacities of women beneficiaries whereas the INGO's criteria involved the provision of different kinds of training in health, social, economic and disaster recovery; facilitating any form of development or enhancement of social relationships to help build the women's networks within the villages and beyond; and any preparatory work for different kinds of loan disbursements and management with the purpose of income generation and individual economic growth.

As discussed earlier, document category serial numbers 01 and 07 of Table 5.2 comprised two documents that were key to this document analysis as they indicate the situational changes of the women cyclone survivors. The preliminary assessment report (serial number 01, Table 5.1) indicates each village's situation in regard to the women villagers' health, social matters, education, skill and finances according to an assessment that was conducted in mid-August 2008 in relation to all of the 27 project villages.

The final INGO report (category serial number 07, Table 5.1) outlines the achievements of the 27 villages by the end of the project. In that final report, each village's ranking was based on the collective work of the women's network groups in each village. The ranking was particularly focused on two areas: financial growth, including resource ownership; and the number of training workshops/meetings attended by the women and members of the women's network groups. A particular focus for the ranking was the repayment of loans which included any profits made by individual women and their network groups. In this regard, the related difficulties, challenges and positive experiences of the INGO staff in each village were also documented.

Three villages in the same geographical location were selected as the study villages (one village from each ranking) for the primary data collection for this study. The poor performing, medium performing and best performing villages are referred to as V1, V2 and V3 respectively for the purpose of detailed document analysis.

5.5.1 Analysis of three study villages

The demographic and population details of all of the three study villages: V1, V2 and V3, particularly the numbers of women villagers who were involved in the INGO project, are presented in Table 5.3. All of the data shown in Table 5.3 was drawn from the INGO documents held in the INGO's main office in Yangon. However, the data was rechecked with the local authority figures (one male in each village) when the primary data was collected. Documents (serial numbers 05, 06 and 07, Table 5.3) indicate the number of women participating from the V1, V2 and V3 villages across the three projects.

Table 5.3: Profiles of the three study villages and women's participation

Sr.	Description	V1 (poor)	V2 (medium)	V3 (best)
01	Village household	193	210	390
02	Total population	747	775	1,638
03	Males	369	349	808
04	Females	378	426	830
05	Females involved in the first pilot project	25 (6% of total females)	19 (5% of total females)	n/a
06	Females involved in the second project	212 (56% of total females)	426 (100% of total females)	427 (51% of total females)
07	Females involved in the third project	306 (80% of total females)	355 (83% of total females)	533 (64% of total females)

Table 5.3 indicates that V3 had the highest number of people in their households and a larger population than V2, whereas V1 had the least number, both in terms of the household and population size. Significantly, the female population was higher than that of the males in all three villages. This was because most of V2 males were fishermen

before Cyclone Nargis hit Labutta, which resulted in a number of deaths. In the first project, the pilot project was implemented in V1 and V2 and only five to six per cent of the women cyclone survivors participated. However, the numbers of women participating greatly increased for the second and third projects. For example, participating women from V1 increased from 6 per cent to 56 per cent in the second project, then to 80 per cent in the third project. Conversely, although 100 per cent of the V2 women were involved in the second project, fewer V2 women were involved in the third project, The document analysis did not indicate why this occurred although the primary data analysis (Chapter 6) outlines the underlying causes of the fluctuating participation.

5.6 Analysis using the Input-Process-Output (IPO) model

Input analysis for the three study villages includes the situation of the women cyclone survivors and the INGO. Table 5.4 refers to the preliminary assessment by the INGO in August 2008 as the base line situation of the three study villages, including the women's situation.

5.6.1   Input analysis of the three villages

According to the INGO documents, firstly the villages and then the villagers in each village were evaluated according to various criteria, which is outlined in the description column of table 5.4. These criteria comprised both tangible and intangible aspects relating to the 'input' section of the IPO model used in this study. The input of each village varied according to their geographical location (i.e. land and water availability), resource availability, and population size – all factors that were taken into account for the data analysis as shown in Table 5.4.

Table 5.4: Input analysis of the three villages

Ser. No.	Description	V1 (poor)	V2 (medium)	V3 (best)	Remarks
01	Location and road ways of villages	On main road, the nearest to Labutta town	Off-road, the remote village	Off-road, the remote village	Rural roads in poor condition*
02	Physical resource of village's availability (farming land, water)	Lands near a stream	Much land, near two streams	Much land, near two streams	V2 and V3 had more uncultivated fertile land than did V1 which also had limited water supplies.
03	Physical resource availability of the individual villager	Impoverished	Depleted	Depleted	Due to Cyclone Nargis
04	Cash availability of the individual	None	None	None	Due to Cyclone Nargis
05	Knowledge, news, information and experience	Limited	None	None	Traditional old knowledge, limited information, dependent women
06	Knowledge and money to enable local business start up	None	None	None	Lack of money limited to enable local business start up
07	Women's involvement at home and society	Unemployed since cyclone	Previously dependent housewives	Previously dependent housewives	Some from V1 had own businesses in pre-cyclone period
08**	Confidence, happiness, hope, esteem (positive psychological status) in women	Not apparent	Not apparent	Not apparent	V1 women in pre-cyclone period exhibited positive attitude.
09**	Sadness, lost hope in women, depression, (negative psychological status) in women	Highly visible	Less visible	Least visible	V1 women in particular felt they lost everything after the cyclone.
10	Active communication among women	The lowest among the three villages	Not as high as V3, but higher than V1	The highest among the three villages	The V3 women communicated more than V2 and V1, where the strongest social barriers existed
11	Interested in participating in the INGO activities	Less interested	Not high as V3, but higher than V1	The most interested women	The V3 women's expectations of assistance were higher than those of the V1 and V2 women
12	Number of women who attended the first group meeting	10	14	36	A negligible number of women voluntarily attended the INGO's first meeting in each

*Meaning roads in such poor condition that pregnant women were prone to miscarry when they tried to cycle to hospital in the pre-cyclone period

** Data from document serial numbers 8 and 9, Table 5.4, were collected from the feasibility studies

In relation to the physical resources of the three villages, the surrounding areas of V2 and V3 comprise uncultivated fertile lands, whereas no land records were available for V1. The land associated with each village was shown as 'input' for each village. This is because although the land was owned by the government, the land was available to the native villagers who were able to bear the cost of farming and thus it was an available resource (input).

Specifically, serial number 01 indicates the geographical situation of each study village. Among the three villages, V1 is the nearest village to Labutta town and is situated on the main road, whereas V2 and V3 are remote villages. All villages are surrounded by streams meaning that inhabitants can access water easily, but this also means that they are flood-prone, hence the devastating damage when Cyclone Nargis hit.

Other resources such as equipment and tools (physical capital) and financial resources (financial capital) were shown as depleted in all three villages. For example, few physical resources such as houses, schools, rural health clinics, monasteries, rice mills and tube wells remained in undamaged condition in V1, and all of the physical resources of V2 and V3 were ruined completely due to the cyclone, as indicated in serial number 03 - Table 5.4. Therefore, V1's resource situation was recorded as impoverished as they were the land/farm owners, while the other two were shown as depleted.

The INGO classified the village women's knowledge and experience in three key areas: 'traditional knowledge'; 'limited or no accessibility to information' and 'out-dated local experience'. Traditional knowledge refers to knowledge transferred through villagers' ancestors and other villagers. Limited or no accessibility to information refers to villagers who have no means to update their knowledge and information. Out dated local experience is similar to limited information as it refers to villagers who were undertaking the same tasks for many years with no changes.

According to the INGO documents the women villagers identified themselves as unemployed/jobless and/or dependent housewives. Even those who had previously run their own business (primarily women from V1) said they had only money-lending experience. For instance, as indicated in the document serial numbers 07, V1 women were recorded as jobless or unemployed.

Based on the INGO's assessment records, the focus areas of concern for the village women was psychological, financial and social. However, as per document serial numbers 10, 11, and 12 - Table 5.4, the V3 women (from the best performing village) experienced higher levels of social communication and were generally more interested in the INGO project than were those in V1 and V2. The input and process aspects of the IPO model are discussed in the following section.

5.6.2 The process analysis

This section discusses the INGO's processes in regard to the three villages. The input of the women from the three villages (Table 5.4) and the INGO's input (Table 5.2) generated the processes. The INGO's processes are drawn from the project documents - category serial numbers 02 to 07 (see Table 5.2).

As per category serial numbers 01 to 11of Table 5.5 below shows different the achievements of the three study villages as the processes. Table 5.5 indicates these comprised skilled and experienced staff who performed various activities. Activities included conducting meetings with local authorities and women from each village, providing counselling for both individuals and groups, different types of training for capacity building(human capital), disbursing loans (financial resources) and facilitating meetings to help build women's social relationships within and amongst the villages. The INGO also transferred social funds as community loans to all three villages.

The INGO processes-Table 5.5 (serial numbers 01 to 09), were equitable for all three villages throughout the 30-month period. With the focus of the women's capacity building, the main process comprised different types of training (see 04, 06, and 07 of Table 5.5) and financial assistance (numbers 05 and 08 of Table 5.5) was provided to all three villages after the various meetings and counselling sessions.

Table 5.5: INGO processes and village achievements

Sr. no.	Description of INGO provided activities over 30 month period	V1 (poor)	V2 (medium)	V3 (best)
01	Number of meetings conducted with village authorities and groups of women during the project	32	32	32
02	Number of individual counselling sessions conducted for women by INGO	120	80	75
03	Number of group counselling sessions conducted by INGO	14	14	12
04	Number of financial management training sessions conducted by INGO for loan beneficiaries	12	12	12
05	Individual loans disbursed by INGO to women	yes	yes	yes
06	Number of training sessions conducted by INGO on health, social, environmental issues	32	32	32
07	Number of peer educator training sessions conducted by INGO for outstanding women	3	3	3
08	The INGO transferred the community funding to the women's committee of each village	yes	yes	yes
09	Facilitated establishment of the Women Friendly Space (WFS) including library services	1	1	1

5.6.3 Individual/group process analysis

The process analysis of the three study villages is presented in Table 5.5. In this section, the details of the individual/group processes and analysis are presented in Table 5.6 below. Table 5.6 indicates the differences in training and participation rates between the villages by the end of the project.

The document analysis identified the levels of women's participation in the INGO project, particularly the differences between the beginning and end of the INGO project. Clearly, there were different levels of participation and interest (serial numbers 01 to 05, Table 5.6). For instance, as per serial number 05, Table 5.6, all the women from V3 participated voluntarily in work at the WFS and library, whereas only 65 per cent of the V1 women participated and 90 per cent of V2 women.

Table 5.6: INGO Supported Processes

Sr. no.	Description of INGO supported processes	V1 (poor)	V2 (medium)	V3 (best)
01	Number of women attending each meeting (on average)	28	45	60
02	Number of women who attended group talk (on average)	8-15	8-15	8-15
03	Number of women who attended each financial management training (on average)	10–12	12–15	12–15
04	Number of knowledge-sharing sessions conducted by women before loan disbursement	2	4	8
05	Number of women who volunteered for WFS** and library (based on all women members)	65%	90%	all
06	Number of months between the first disbursement of the individual loan and the community funding to the women's networks groups*	24	15	7

* The community management was started by women from each village.

** WFS- Women Friendly Space

The level of women's participation in the three villages made a difference to the results (outputs). As stated in the Context Chapter, Chapter 2, the INGO followed certain rules for the transfer of funds to each village. The first recipient of the social funds was the V3 women's committee because individual women and the V3 women's groups demonstrated their capacity to effectively manage business and participate actively in community work. The capacity of the V3 women and women's network groups was thus ranked the best by the INGO among the three villages. For example, as per serial number 06, Table 5.6, their women's committee received social funds from the INGO within seven months of the first loan disbursement, whereas the loan for V2 took 15 months. Of the three villages, the V1 women's committee waited the longest for their loan, receiving it 24 months after the first loan disbursement. Table 5.4 (the women's input) and Table 5.2 (the INGO's input) show that the processes led to differences in the women's output. The next section discusses the output analysis relating to the women of the three study villages.

5.6.4 Women's output analysis

As stated previously, the aim of this study is to examine the capacity building of women cyclone survivors in Myanmar. With this focus, the number of trained women, and their participation in their own community within each village is analysed in relation to their capacity development (output). Among the findings of the document analysis, apart from training and participation rates other areas considered are their livelihood resources, voluntary work in the community and social relationships within the networks.

This section discusses the output analysis and data was drawn from the final report of the 30-month project (see category serial 07 of Table 5.2), which was prepared by December 30, 2011. The data presented in Table 5.7 below shows the different levels of achievement amongst the three villages and represents the four main areas focused on by the INGO: capacity training, livelihood resources, voluntary work in the community and social relationships within the networks.

Table 5.7: The output according to women's training and participation rates

Sr. No.	Description	V1 (poor)	V2 (medium)	V3 (best)
01	Number of trained peer educator women (TPEW) who participated community work	8	15	15
02	Number of cascade training sessions conducted by TPEW	4	12	25
03	Number of women who attended each cascade training session run by TPEW	10	10	10
04	Number of women who attended the cascade training sessions by TPEW in each village	40	120	250
05	Number of women volunteers who attended the fund management training	10	10	10
06	Number of trained women who worked as the fund board members	6	10	10
07	Women Friendly Space (WFS) established and maintained by the women's committee as a Community Centre	Yes	Yes	Yes
08	Library service operated by volunteer women	Once a week	Twice a week	Every day
09	Regular meetings organized at WFS by TPEW and members of the community fund	Once a month	Twice a month	Weekly
10	Livelihood status of women and income	Limited income as daily wages (60% of project population)	Higher income farming (80% of project population)	Highest income from farming and trading (100%)

Note: As of December 30, 2011 when the 30-month project ended

Serial numbers 01 to 05 (Table 5.7) indicate the women who self-nominated for voluntary work in the community and who were trained as peer educators – referred to as Trained Peer Educator Women (TPEW). Serial number 01 shows that eight women from V1 and 15 women each from V2 and V3 were trained as TPEWs. Once the TPEWs were trained, they then trained other women in a process referred to as 'cascade training'. The V2 and V3 women also participated more in community work than did the V1 women.

Of the cascade training sessions (serial numbers 02, 03, 04 and 08), the TPEWs from V1 conducted four sessions, which included 40 women from the same village. Fifteen TPEWs from V2 conducted twelve sessions for 120 women, whereas fifteen TPEWs from V3 conducted 25 sessions for 250 women from the same or neighbouring villages. These achievements show the different levels of women's participation in knowledge sharing. The V3 women contributed the most, followed by the V2 women, and with the least contribution were from the V1 women.

Additional training was offered to those women who volunteered to manage the social funds provided by the INGO. As indicated in serial 03, Table 5.7, ten women from each village (a total of 30) attended this training. Serial numbers 05 and 06 show that, although ten women from each village completed the social fund training, only 60 per cent from V1 went on to manage the social funds as volunteers, with the others dropping out from the volunteer activities. However, all the women from V2 and V3 continued to manage the social funds allocated. The INGO documents indicate that as a result of the social fund training and the transferred community social funds, the previously dependent housewives or jobless/unemployed women managed to change their social position as they gained experience and confidence as fund board members and peer educators, thus moving their status from unemployed to volunteers. As mentioned previously some also became community educators and were paid for these roles.

In Table 5.7, serial numbers 07 and 08 relate to the community meeting places (Women Friendly Spaces-WFS and library), their initiation and the taking of responsibility by individual women as peer volunteers (building physical capital) occurred. Serial number 09 indicates the number of regular meetings attended by the women and the collective

management and utilisation of the INGO-provided social funds. The INGO reports also indicate the growth in some women's capability as a result.

Serial number 10 of Table 5.7 shows that 60 per cent of V1, 80 per cent of V2, and 100 per cent of V3 women improved their skills and income, based on their capability, capacity, and social relationships in each of the women's networks, as well as their resource accessibility (financial capital). As shown in Table 5.3, the number of women in V1, V2, and V3 were 378, 426, and 830 respectively. Of this number, 80 per cent of V1 (306 women), 83 per cent of V2 (355 women) and 64 per cent of V3 (533 women) participated in the 30-month project. In addition, category serial number 10, Table 5.7 shows that 100 per cent of the V3 females, 80 per cent of V2 females, and 60 per cent of V1 females generated income from farming and daily wages. Among the three study villages, the V3 women earned the highest income and the V1 women the lowest.

A limitation of the document analysis is that it only indicated the types of activities, numbers and frequency of women's attendance at meetings as a guide to the selection of the three study villages. The underlying reasons why women changed, built capacity and were empowered, including the supporting or blocking factors involved in this process, were not identified.

The input of the women at the beginning of the INGO project, as shown in Table 5.5, and their output by the end of 30-month INGO project shows that most underwent significant changes. These changes were primarily attributed to the women's network groups and concerned their financial situations, social changes in relationships and human capacity to manage their own businesses throughout the project period.

In summary, the findings from the document analysis indicate that the INGO facilitated capacity building sessions through formal and informal meetings for networking, building social relationships, increasing communication, promoting better understanding, performing collective work for social cohesion, and social capital building. This occurred by supporting the women's participation in group counselling (for reducing cyclone trauma and increasing positive psychological capital), and through the generation of income due to the INGO's loan assistance scheme, thereby increasing the women's financial and physical capital.

5.7 Chapter summary

In this study, the document analysis represents the first section of data analysis and is a preparatory step for the primary data collection. Consequently, to meet the aims of the document analysis, a general understanding of the 30-month INGO project was achieved and three study villages were selected systematically through analysis of the INGO's key documents (presented in Table 5.2).

Although the documents show lists of activities and women's participation rates related to each type of INGO project activity, the document detail was not comprehensive. For example, there was no information concerning the challenges, or the reasons underlying why women changed, built capacity and were (or were not) empowered, as these details were not recorded systematically. This was mainly because the INGO did not expect to conduct research; instead their goal was to document the project progress and meet the donor requirements in terms of reporting.

Overall, the document analysis indicates that even though the INGO staff provided the same contribution and inputs to each village, they could not guarantee the same results, largely because of the different levels of women's participation in the project processes. A limitation was that the INGO documents did not identify what supported and what blocked the women's capacity building throughout the 30-month project. The documents only recorded who attended what type of training, on how many occasions, who earned money from what kind of business, how much they saved within 12, 24, and 30 months, what kinds of things they bought from their savings and so forth. This illustrates that, in this case, the document analysis was intended to support the reporting of tangible outcomes but did not support the data collection or reporting of intangible outcomes. Issues relating to the women cyclone survivors' capacity building and empowerment are identified from the interviews and focus groups through the primary data collection process as outlined in the next chapter.

CHAPTER 6: PRIMARY DATA ANALYSIS

6.1   Introduction

Chapter 6 represents the second section of data analysis – the primary data analysis – conducted for this study. The intention of this chapter is to explain the experiences of the women cyclone survivors and ascertain the level of their capacity building following the 30-month INGO project. In addition, it is anticipated that the data analysis will assist understanding of what factors led to the three village classifications (poor, medium and best performing – according to the INGO).

As explained in Chapter 4, the method chapter, data was collected from a total of 52 participants through interviews and focus groups (see Table 4.2). However, among the forty-five women who participated in the study, the data gathered from the fifteen women for one-on-one interviews is considered vital for this analysis. The data gathered from the other thirty women who participated in the focus groups is expected to assist in either confirming (or otherwise) the findings from the one-on-one interviews.

6.2 The analysis timeline and the research framework

This section discusses the analysis timeline and research framework. As indicated in Table 4.3 (Chapter 4), this chapter covers the pre-cyclone period. Specifically, the 1st and 2nd timelines answer the main research question '**How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis'.** The pre-cyclone period applies to a 5 month period (from the beginning of 2008 up until Cyclone Nargis hit the villages on 2 May 2008). The INGO project took place over 30 months (from mid-August until the project end in 2011, i.e. 30 December 2011) and comprises three projects (see Figure 2.7, Chapter 2).

The research framework used for this study is outlined in Figure 3.7 (Chapter 3, Literature Review) and serves as a guide to analyse the data for this study. As noted, this study also uses the Input-Process-Output (IPO) model, to examine how the women of the three villages were supported in their capacity building and empowerment as well as the role of social capital in the process.

INPUT AT LOCAL LEVEL	INDIVIDUAL/GROUP PROCESSES AT LOCAL LEVEL	POTENTIAL OUTPUT AT LOCAL LEVEL
Tangible capital Physical capital (Resources -land, equipment) Financial support **Intangible capital** knowledge, information, experience, personnel (expertise), social relationship	Training to build capacities. Enhancing social capital through knowledge sharing and development of trust, social networking, effective communication, cooperation, social cohesion, and **Individual and Group Interaction**	**Empowerment through Capacity building and Development of** **Tangible capital** Financial capital Physical capital **Intangible capital** Social capital Human capital Psychological capital

Figure 6.1: The framework used to analyse the primary data

With the focus on the local level, as shown in Figure 3.7 (Chapter 3), the IPO model comprises the following three areas:

6.2.1 Input: The components of the input section comprise tangible and intangible capital. Resources (land and equipment – physical capital) and villagers' financial situation (financial capital) are considered as tangible capital (Coleman 1988). Knowledge, information and expertise, personal (expertise), social interaction and relationships (social capital) comprise the intangible capital (Coleman 1988; DFID 1999).

6.2.2 Process: Individual and group interactions (social capital) are key to the process section. The intended focus of this section is training to build capacity through knowledge sharing and the enhancement of social capital. There are five dimensions to this section: the development of trust, social networking, effective communication, cooperation, and social cohesion for empowerment (see Chapter3).

6.2.3 Output: The potential outputs are capacity building and the development of intangible and tangible capital. This capital comprises five different types: social capital, human capital, financial capital, physical capital and psychological capital. The five different types of capital (output) form a feedback loop to the input section and contribute to building different types of capacity throughout the dimensions of the IPO model. The following

section presents the primary data analysis procedures using the analytical framework outlined in Figure 6.1.

6.3 Primary data analysis procedures

To help understand the situational changes of the women cyclone survivors and to answer the research questions, the primary data analysis is presented in three sections. The first section indicates the women's situation before Cyclone Nargis hit. Section two refers to the women's situation in the period after the cyclone and until the INGO commenced its 30-month project in the three villages. Section three identifies the women's situation during the 30-month INGO project. The women's situation after the INGO project is discussed in Chapter 7.

I. Section 1 - primary data analysis

This section identifies the women's situation in the pre-Cyclone Nargis period. Although, this study focuses on the situational changes of women cyclone survivors during and after the INGO project, the pre-cyclone period is included in this analysis based on the recommendations of Fred-Mensah (2004) and Aldrich (2011, 2012). They argue that the examination of precondition situations of post-conflicted and disaster affected areas regarding existing social capital and local capacity tends to correlate with recovery achievement. These claims are based on the findings from both the UNDP's 2002 action in two post-conflicted countries, Mozambique and Rwanda (Fred-Mensah 2004) and the 2011 tsunami affected areas in Japan (Aldrich 2012).

6.4 Prior to Cyclone Nargis

The timeframe for this section focuses on the pre-cyclone period (see Table 4.3, Chapter 4). As explained in Chapter 5, the INGO's preliminary assessment identified many areas requiring attention for the women cyclone survivors' recovery. However, three main areas were selected for the document analysis and primary data collection (see Chapter 5). These three areas are: resources (knowledge and information), financial resources and social relationships and networking as the foundation for women's capacity building.

6.4.1 Resources (input analysis) in three study villages

As stated in Table 4.1 (see Chapter 4), the primary data from 45 women and 3 male local authority figures from three study villages are considered relevant to this section pre-Cyclone Nargis. In relation to the resources (input), 48 participants (45 women and 3 male authority figures) perceived that land (a physical asset), knowledge (human capacity), information and experience (human capacity to assist others) as physical, social and educational resources.

Based on the participants' perceptions of different types of resources, it was determined that their definitions corresponded with different types of capital (as shown in Table 6.1). All the 48 research participants perceived that psychological capital, human capital and social capital related to intangible assets, while financial capital and physical capital were referred to as tangible assets. This definition also aligns with Batt and Purchase (2004) who claim that land, labour, machinery, raw materials – are tangible assets accessed easily by groups or f i r m s , whereas knowledge is an intangible strategic asset.

Table 6.1: Resources status (input analysis) pre-cyclone

Components of input as per the IPO Model	Sub-components of input	Villagers' interpretation of sub-components	Villagers' perception of factors contributing to each sub-component	Categories as per different types of capital
Resources	Land, equipment	Physical assets for livelihood resources	Resources for generating income, gaining control and power	Physical capital (tangible assets/capital)
	Knowledge	Education (Human capacity to assist others)	Schooling, socialization from elders or peer workers or society	Human capital, social capital (intangible assets/capital)
	Information	Communication (human's capacity for sharing information with others)	News, gossip, social relationship, conveying information through communication	Human capital, social capital (intangible assets/capital)
	Experience (abilities that embedded to person's skill)	Qualifications	Wealthy/poor, educated/school dropout, high class/lower class, decision makers/followers	Social capital (intangible assets/capital)

Components of input as per the IPO Model	Sub-components of input	Villagers' interpretation of sub-components	Villagers' perception of factors contributing to each sub-component	Categories as per different types of capital
Financial resources	Cash, loans, savings, gold/jewellery	Essential and powerful tools for livelihood and income generation	Wealthy or poor, loan lenders/borrowers, defaulters - blacklisted (continues over the generations)	Financial capital (tangible assets/ capital)
Personal (expertise of individuals) Sharing knowledge through social relationships	Knowledge, experience, learning through practice	Experienced and knowledgeable champions related to any kinds of learning/ Education (human's capacity and identity)	Social status - Monks, military/local/teachers/ authorities, dependent housewives, mentors, teachers, farmers, fishermen, traders, fishmongers, vendors	Human capital psychological capital, social capital (intangible assets/capital)

The following quote indicates that some participants may have placed more value on their resources than they did on education.

> Money, houses, cows, tractors, farms and paddy fields, and all sorts of livelihood equipment and even gold chains are the indicators of my wealth and social status as who I was in the pre-cyclone period while no one cares about education for their livelihood (Woman participant 1, V1).

Although another participant pointed out the importance of other factors in their daily living:

> Materials and money are pivotal in our daily living. 'Being a good person' is more related with psychological and social issues: acts and interactions but not with money and materials (Woman participant 2, V2).

In relation to the availability of their resources or assets, all 48 participants explained that they considered land; equipment and gold/jewellery could be transformed easily to cash- tangible assets. However, they stated that knowledge, information, and experience (ability) are embedded in relation to each individual as their own resources and capacity, (intangible assets).

The tangible and intangible assets related to the social status of individuals in society, which is also related to their potential for control and power. For example, one interviewee (woman participant 1, V1) explained her position in the family business before Cyclone Nargis. She indicated that job sharing was not undertaken by her other sisters as her own unpaid position in the family business gave her some power amongst her family members:

> Before Cyclone Nargis, our family business was the biggest in this village. My position was a cashier and bookkeeper in my family business. I didn't share any task with my younger sisters. Hence, I was the only one who knew about our income and expenditure and the situation of our family business. Though, my job was unpaid, I was a key player and they (my father and brothers) came to me when they wanted to know some information about our business (Woman participant 1, V1)

The perceptions of the 48 participants concurred with the categories shown in Figure 6.1 (drawn from the scholarly literature and empirical studies). This comprises the IPO section of the analytical framework. In Figure 6.1, input was categorised into different types of capital such as knowledge (human capital), information (human and social capital), experience (human capital), and personal (expertise– human and psychological capital).

As a result, Table 6.1is a guide to analysing the primary data in the form of the input-process-output model by using different types of capital in this study, the primary data analysis in particular. The input component of the IPO model in the pre-cyclone period, shown in Figure 6.1, is analysed in the next section, based on each of the categories-either tangible or intangible inputs - in terms of the various types of capital in relation to output amongst the three villages (as per Table 6.1).

6.4.2 IPO analysis in relation to tangible assets (pre- cyclone Nargis)

This section focuses on the analysis of tangible input in relation to the input-process-output (IPO) model. The 48 participants from the three study villages perceived land, equipment and financial resources as tangible assets.

6.4.2.1 Resource ownership and social groups

According to the 48 participants, three social classes co-existed in the three villages. It was determined that the different types of social groups were based on an individual's level of resource ownership in relation to their tangible assets/capital (physical capital and financial capital). The three different groups in each village were *Ngwe-Shin* (the wealthy), *Thar-hman* (the middle class) and *Sin-Ye-Tha* (the poor). The *Ngwe-Shin* were educated and comprised wealthy people who possessed various kinds of resources such as houses, land, farms, livelihood equipment and money. The *Thar-hman* were not wealthy and did not own farms, but they did own houses or some minor equipment, such as bicycles and household items. The *Sin-Ye-Tha* comprised groups of native poor (people that were born in that village) or seasonal migrants who undertook temporary work, such as physical labour in the local businesses of the *Ngwe-Shin*. They did not own any tangible resources, including houses.

Table 6.2: Status of participants in the pre-cyclone period

The pre-cyclone social status of women participants to study in Myanmar language	V1 (poor performing village)	V2 (medium performing village)	V3 (the best performing village)
Ngwe-Shin (the wealthy villager)	8	1	0
Thar-hman (the middle class)	3	5	1
Sin-Ye-Tha (the poor)	4	9	14
Total number of women participants	**15**	**15**	**15**

Table 6.2 concerns the 15 women who participated in the in-depth semi-structured interviews from the three villages. Before Cyclone Nargis hit the three villages, the highest number of wealthy participants (8 women) came from V1, one wealthy woman lived in V2, and no women from V3 perceived that they were *Ngwe-shin*. The highest number of poor participants came from V3. The majority of the V2 participants were somewhere between the other two villages. Those three social groups controlled the women's social relationships determining who they associated with, and they were also a key determinant of social differentiation in all the three villages pre-cyclone.

6.4.2.2 Social class and power

Based on the ownership of livelihood resources (lands, agricultural tools and equipment), there were two main types of social classes – the owners (the wealthy villagers) who mostly lived in V1 and the labourers who were either middle class or poor villagers living in V2 and V3. In relation to the inputs and related outputs of the women before Cyclone Nargis, the ownership of tangible resources enabled wealthy villagers to attain higher social status. Further identification of these tangible inputs equated to the different social classes of the individuals. Hence, the tangible capital became a powerful tool for the wealthy villagers to manipulate the poorer villagers, as indicated by the following quote:

> I can give jobs to the people I like. Not necessary to give jobs, lend loans, and rent livelihood resources if I don't like that person. All are only up to me. (Local authority figure male participant, V2)

The above quote indicated that the owners of the livelihood resources possessed the control and power to make decisions in relation to jobs for a person that they like or dislike. The resource owners also gained more control and power when they were appointed as the local authority figure in each village. All 45 women participants stated that the resource owners were the official power holders when they were elected as the local authority figure (a position only held by men). Despite some village women owning resources they would never achieve the same level of power as the men who could be elected in formal jobs as the local authority figures. Two women participants from V1 said that they possessed significant family records because five generations of their families - either their father or brothers - were elected as theV1 local authority figures due to the wealth they created, thus excluding the poorer villagers from accessing such opportunities.

> The position of local authority figure was appointed by the Myanmar King and known as *Thu-Gyi (a village head)*. Since then, as my ancestors were rich and were respected by others, they were elected to manage in our village as *Thu-Gyi* for five generations (Woman informant 1, V1).

The local practice of appointing the village leader favoured the wealthy, male villagers. For example, nowadays the Regional and Township Authorities appointed wealthy and educated villagers, known as *Ya-Wa-Ta* in the Myanmar language. A previously poor woman said:

> Only the wealthy people are used to being elected as the local authority by the State because it is an unpaid job. So, the wealthy people become the powerful authority – the rich gain better positions to control other poor villagers and are able to help other powerful, wealthy people. (Woman participant 3, V1)

Basically, the local authority figures have a middle management position and can access all the services of the government body (see Chapter 2 for more information on this role). These local village leaders referred to as authority figures were involved in this study as key informants. Participant 3 from V1 stated that the powerful villagers have control and power and that helps other powerful people, whilst the poor villagers are used to being powerless as they do not get a chance to be elected.

6.4.2.3 Gender and power

The findings from the 48 participants indicated that all three male informants worked as local authority figures before Cyclone Nargis and were wealthy compared to other villagers. The owners of the land, equipment and money possessed considerable control and power over the other villagers, as the resource owners were the ones who set the minimum daily wages and were responsible for the welfare and safety of the poor labourers in their local businesses. This indicated that the wealthy male villagers gained more control and power than did the women of the same social status.

> My younger brother was elected as *Ya-Wa-Ta* though he was not interested to do so at the beginning. None of us (all five sisters) were considered suitable for that position. Consequently, he became an influential person in our family because of his *Ya-Wa-Ta* position (Woman informant 1, V1)

In addition, the two male authority figures from V1 and V3 highlighted the association between resources, money and power in the pre-cyclone period:

> Only water attracts water. Likewise, the wealthy people are attracted to other wealthy and powerful people and vice, versa. When you own land and money, you can hire or fire people who need jobs from you. You can stop lending agricultural equipment at any time if you don't like that farmer who needs your equipment for farming. So, you become a powerful person and can make any decision as you like. (Local authority figure, male informant, V1)

The above quote illustrates the relationship between resource ownership and the authoritative power to control their fellow villagers.

6.4.2.4 Women and citizenship policies

Another consequence of lacking resource ownership was the limitations related to ownership of citizenship documents. All 48 participants from the three villages (45 women and 3 male authority figures) noted the importance of official citizenship documents – such as the national registration card (NRC) or Citizenship Scrutiny Cards (ID cards) and the permanent resident document (Form 10). The Myanmar Government issued these documents only to the natives who hold a birth certificate from hospitals, or who owned a house with a permanent address. These documents were essential for buying any kind of tickets associated with travel, for school registration and to access resources (such as private loans).

As per a study of Myanmar Centre for Responsible Business (MCRB), these citizenship documents verified age, sex (male or female), religion, ethnicity and 'whether individuals have the right to work in Myanmar' (Guest et al. 2017, p. 5). For example, 16 research participants (15 women and one male authority figures) from V3 disclosed that the majority of V3 villagers were seasonal migrants. This group were not generally born at the hospital and did not have birth certificates due to their migration patterns nor did they own any physical resources in V3. As they did not have any official citizenship document, these Myanmar migrants had limited access to work in formal work places,

public loans (from banks) or private loans (frequently gained from V1 villagers), school registration and travel within Myanmar.

> As a private loan lender, I just lent loans to villagers who hold the NRC or ID cards and the household documents such as the form 10. When they borrowed money from me, I kept those two documents like a mortgage because no one can travel without the NRC. The form 10 is a basic document in the NRC application and vice, versa. There is no way to provide loans to the migrants. (Woman participant 1, V1)

The above statement indicates that the migrant women, particularly the majority of the V3 women, were limited with regard to schooling (a foundation of capacity building for human capital development), joining the formal workforce and loan accessibility (financial capital) as they lacked official documents according to the State's policies, whereas the majority of V1 and V2 villagers did not face this kind of barrier.

Hence, this part of the IPO analysis, regardless of gender differences, based on the tangible assets (input), indicates the influential role of physical capital and financial capital in social relationships. Such assets provide the resource holders with the opportunity for more power and control concurring with Bourdieu's social capital concept - 'economic capital is at the root of all other types of capital' (1986, p. 252), where economic capital is divided into physical and financial capital.

6.4.3 Analysis of the intangible assets (input) pre-cyclone

This section discusses the input analysis of intangible assets in relation to the women villagers' capacity building pre-cyclone. As per Figure 6.1, intangible input comprises knowledge, information, experience and personal expertise. All the 48 participants proposed that knowledge, experience and expertise are intangible factors that are embedded in an individual as their attributes, while information relates to communication and social relationships (social capital). It can also be considered an intangible asset/form of capital (see Table 6.1).

As stated previously, the ownership of tangible assets such as physical capital, financial capital and the citizenship documents (fundamental to access physical, and financial capital) were influential to the educational attainment and social relationship of villagers, particularly the women from the three villages. All 48 participants disclosed that a lack of tangible assets could limit access to schooling because school fees, uniforms and lunch boxes have to be provided by families in Myanmar. As a result, poorer families did not always gain the same access to human capital and opportunities to form networks at school either formally or informally.

Nonetheless, lack of financial resources, school availability and accessibility meant that the majority of the 45 women participants had either dropped out of school early or in some cases had never attended school before the cyclone. They also indicated that they had not been offered any other opportunities for learning, other than informal learning. This took place through family members and the monastic education offered at the Buddhist monastery where men and boys are able to learn through Lord Buddha talks that are disseminated by Buddhist monks (who are males).

> I left school after second grade and stayed at home. So, I didn't have any close friends from school to disclose my private issues and didn't work anywhere. As a result, my social skills are very low and my elder brother always helps me to communicate with outsiders, especially strangers, as I am so afraid to deal with them. (Woman participant 4, V2)

The above quote provides an example of some of the limitations of the participants 'learning. Consequently, the women's social capital and capacity building was hindered as school is considered a basic foundation of building social capital with others as well as human capital for each individual (Coleman 1988).

Evidentially, lack of resource ownership, including financial capital, poor educational achievement and limited job opportunities meant that most women from the three villages did not gain any experience in the social and business sectors in the pre-cyclone period. However, 90 per cent of the 45 women participants did not consider those limitations as challenges for their development and their capacity building in day-to-day living. They perceived that the capacity building of local people grew from a combination of knowledge, understanding and work experience arising from the local practices of their ancestors.

> Like my aunts who were also early school dropouts, I cooked and did domestic work for my family. So, I didn't have any problem for food and shelter when I was living with my family. I always get at least one new dress that my father bought from (Labutta) town every April to celebrate our Myanmar New Year (Woman participant 4, V2).

That said, all 45 women and the two local authority figure informants (from V1 and V2) affirmed that prior to the cyclone; they believed that their existing knowledge was sufficient to operate local businesses. However, the V3 local male authority participant shared the following opinion regarding the need to enhance the capacity building of the local villagers:

> We had old local knowledge from our ancestors and no new knowledge existed pre-cyclone. I knew that further knowledge and the latest news from experts might enhance our skill in production and increase income. But, not many people thought that way. (Local authority figure male participant, V3)

Based on information from the 45 women research participants and the 3 male local authority figure participants, education was not a prioritised concern pre-cyclone. This was because everyone could get different kinds of physical jobs easily from local businesses such as farming, fishing and collecting sea salt, all of which were popular local products across Myanmar whereas Labutta town was a business hub.

6.4.3.1 Social capital development pre-cyclone

This section of the analysis concentrates on intangible assets and social capital pre-cyclone. In relation to individual and group social relationships pre-cyclone, all the 48 participants said that women and girls accepted the traditional local culture and practices which tended to result in gender inequalities. Women and girls were concerned about not interacting with outsiders, despite women's social relationships not being officially restricted due to religious and social expectations in Myanmar. The women interviewees reported that they did not want to relate with others for formal and informal matters, rather they relied on men to deal with both personal and business matters. Six women out of 45 women participants disclosed that they had some close personal and business relationship with others, while the remaining 39 women participants did not:

> I know all the villagers and have general conversations with some women in my village, as I am a native of this village. But, we (her mother, aunts and herself) did not have any close relationships with others (both women and men) because we did not want to get any challenges in communication that might be the cause for fights or misunderstanding when we got closer (Woman participant 4, V2)

This finding is different to Parks-Yancy et al.'s (2008) research as they argued that women might have more social relationships with personal friends than men who tend to have work-related friendships. Nonetheless, 42 of the 48 participants revealed that the intensity of their social relationships with others was weak in general, and 12 per cent (6 women who were involved in their family business or were physical labourers) had good, strong social relationships.

> Fishery and sea salt businesses at the Bay of Bengal produce popular products for the whole of Myanmar, together with farming and agricultural products. Labour markets demand only young men and the experienced mature men from across Myanmar. Waterways and boat trips were only available to connect with those different places so women and girls are used to stay at home (Local authority figure male participant, V3).

Overall, it appears that the social practices and traditional village culture (geographical location in particular) allowed the men and boys to be favoured in terms of accessing jobs, so consequently, they became the breadwinners in the families and/or operated the businesses, whereas the majority of women and girls were their dependants. Based on the leadership roles of the men in families and in business, they gained the power and became the decision-makers not only for individual households but later on for the whole community, whereas the women and girls were the followers. The 45 women participants and the three local authorities figure male informants thus agreed that gender was another factor that considerably affected women's empowerment in relation to who could make decisions, own resources or generate income. Thus, the majority of the 45 women participants did not generate income and lived as the dependents.

The differences in ownership of tangible assets contributed to social barriers among villagers and hindered the building or enhancement process of social capital among villagers such as the wealthy vs. the poor, the resource owners vs. the resource impoverished villagers in the pre-cyclone period. These barriers due to resource ownership (income) led to weaknesses in

social relationships, communication and social networking in particular, amongst the villagers in the three different groups. Seventy-five per cent of the 45 women participants stated that they would have had better communication and deeper social relationships within different social classes (resource owners and labourers) if there were no social barriers in the pre-cyclone period. For example, the majority of previously poor women participants from V3 revealed that the poor were afraid to talk to those in the higher social class such as the authority figures and wealthy villagers, but that was not the case with other poor villagers within the same class.

> As a forever-poor villager, my children and I were afraid to talk to the authorities and the wealthy villagers from our neighbouring villages, mainly from V1. (Woman participant 2, V3)

To summarise, the general findings concerning the analysis of both the tangible and intangible capital inputs (resources) in relation to the 48 participants pre-cyclone indicate that resource ownership – money (financial capital), land and equipment (physical capital) – served to generate different social classes among the villagers and directly influenced the development of the individual (social capital) as well as communication and the social relationships among villagers, women in particular. As a consequence, other types of capital (psychological and human capital) were affected either positively or negatively.

6.4.4 Comparison of the three villages pre-cyclone

The output data from the study villages was drawn from the feasibility study conducted by the INGO prior to commencing their project in 2008, together with in-depth interviews and focus groups comprising 48 research participants. In order to analyse the data for this study, Table 6.3 indicates the situation concerning the resources (output) before Cyclone Nargis in relation to the different types of tangible/intangible capital. Table 6.3 compares the situations of the three villages according to their output in the pre-cyclone period.

Table 6.3: Comparison of the three villages (pre-cyclone)

Resources and different types of capital	V1 (the poor performing village)	V2 (the medium performing village)	V3 (the best performing village)
Physical capital (land, equipment) (Tangible capital)	80% of villagers owned physical capital and 20% worked in the local businesses of the wealthy villagers	10% of villagers owned equipment while 80% worked in local business	No wealthy villagers, 100% of villagers worked in local businesses
Human capital, Social capital (knowledge) (Intangible capital)	Most villagers completed primary education, i.e. 5th grade, 25% of wealthy children were either graduates or passed 12th grade	Most villagers completed primary education, i.e. 5th grade, two graduates, 20% completed 12thgrade	No graduates, 20% of children completed primary education, i.e. 5th grade
Human capital, Social capital (information) (Intangible capital)	Local authority and wealthy villagers had access to information and conveyed it within their community.	Local authority and a few wealthy villagers had access to information and conveyed it within the particular community.	Only local authority figure had access to information from the State, the poor had strong/close networks where they shared news and gossip.
Human capital, Social capital (experience) (Intangible capital)	Children (including girls) of wealthy villagers quit after 5th grade, women/girls for domestic chores, men/boys to feed family as breadwinners (child labourer issues very familiar to all villagers)	Children (including girls) of wealthy villagers quit after 5th grade, women/girls for domestic chores, men/boys to feed family as breadwinners (child labourer issues familiar to all	Children normally quit school after 5thgrade, schooling not for children of migrants, child labourers worked at the fishery and sea salt businesses off shore
Financial capital (financial resources) (Tangible capital)	The wealthy villagers had money and gave loans at 25-35% monthly interest rate	No loan lenders, the wealthy villagers invested money in various types of local businesses, the majority of villagers were low wage physical workers	No loan lenders, almost all villagers worked in V1 or offshore as daily wages/general labourers/ seasonal workers
Human, Social, Psychological Capital (Intangible capital)capital (personal-expertise)	The wealthy and local authority figure were the powerful villagers and acted as experts, the poor were used to being followers	Only local authority figures attended administrative training done by Township Authority Office to upgrade knowledge, their long experience in work led them to think as skillful workers	No villager considered they knew anything worth sharing with others; all felt that they were born to be unlucky

6.5 Drivers and restraints to women's empowerment pre-cyclone

This section considers the women's situation pre-cyclone in relation to drivers and restraints relating to the women's capacity building, empowerment and social capital development.

As outlined previously, the social structures, networks and ability of individuals to interact with them are fundamental for capacity building and empowerment (Fatima 2017; Kabeer 2009; 2012). Pre-cyclone there was one poorly structured elementary school (education ranging from basic to 5thgrade) situated in V1. Children from V1 and its nearby villages (including V2) attended and completed 5thgrade, while children from V3 did not have that opportunity. As a result, all 16 research participants from V3 (15 women and one male authority figure) pointed out that the parents and children of V3 were not interested in formal schooling but some parents sent their children (mainly boys) to a village monastery where children could gain a basic education (reading, writing and calculation) and basic Buddha talks from senior monks.

> Like my parents and elders in this village, I was not interested about education and schooling. I did not urge my children, mainly daughters, to go to school. If they wanted to quit school, I allowed them to do so. (Woman participant 2, V2)

The combination of school accessibility and traditional gender roles hindered girls' education. However, the local monastery provided boys with more opportunities to learn than girls.

Although girls in V1 and V2 had access to a school, 90 per cent of V1 and V2 participants disclosed that the majority of girls dropped out and only a few girls completed the 5th grade. Two women participants from V1 stated that parents urged girls to leave school before they completed the 5th grade as they expected girls to take care of junior siblings at home and/or share domestic chores. 38 of the 45 women participants (11 from V1, 12 from V2 and 15 from V3) were early school dropouts at age 7 or 8 years old or they had never been to school at all.

As a consequence, the majority of the 45 women participants had a number of social challenges because they had not had many chances to network with other girls their own age. Rather they spent more time with their mothers and older women from their family for social and emotional support. This finding concurs with the assessment of the UNFPA (2010), which indicated that women receive social and emotional supports from elder women in their family whereas boys maintain their social networks at their places of work as noted by Parks-Yancy et al. (2008).

Only 12 women out of the 45 women participants were involved in any business operations prior to Cyclone Nargis: four women participants from V1 worked as bookkeepers in the family businesses, such as loan lending, or leasing livelihood resources for farming or fishery businesses; two women participants from V2 were fishmongers and six women participants from V3 worked in paddy fields being paid daily wages as manual workers. The primary data indicates that pre-cyclone, women from the three villages experienced more barriers than supporting factors in relation to their capacity building and empowerment.

II. Section 2 of the primary data analysis

This section focuses on the period during and after the cyclone until the INGO project commenced. It addresses the main research question: **How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis?** and the second subsidiary research question: *How did the women cyclone survivors perceive the role of networks and tangible/intangible capital in the recovery process?*

6.6   IPO analysis and intangible input and output during and after the cyclone

As per Table 6.1, resources (knowledge, information, experience) and personal expertise are considered the intangible inputs possessed by the women participants. Regarding information, particularly in relation to Cyclone Nargis, all 45 women participants stated that they did not receive any news about the cyclone in advance and therefore could not prepare any response. This resulted in mass devastation in their villages.

The traditional way of sharing news in the villages was the local authority figure from each village using a loud speaker to announce any information. This could be news from the radio, government orders from the senior authorities (who is the fourth-level administrative subdivision of rural township– see 2.4, Chapter 2), and any other announcements regarding social and religious affairs. However, the three male local

authority figures from each village admitted that no news about Cyclone Nargis was disseminated in advance.

> I heard about the cyclone [Cyclone Nargis] from my friend at the teashop. But no one believed it and did not pay any attention. I didn't have any prior experience and no knowledge about cyclones so that I didn't tell about it even to my family. Everyone came to realise how the cyclone was dangerous when it started by heavy winds that destroy the bamboo huts and trees away easily and the tide reached our lands so quickly. (Local authority figure male participant, V2)

The local authority figures from both V1 and V2 said that the lack of advance knowledge about the cyclone resulted in devastation and loss in all the villages. Another consequence of the lack of cyclone news was people experienced shock due to being unprepared. A 32-year-old woman participant disclosed that she suffered psychological and reproductive health problems due to the cyclone.

> We [the family] didn't know about any cyclone news in advance. I panicked when heavy rain and strong winds hit our newly built house when we had dinner together. The tide pushed our bamboo house away and all family members disappeared in the dark. I was the only survivor in my family. Since then, I couldn't sleep and lost weight. My monthly blood stopped since then. (Woman participant 4, V2)

Although the official news about the numbers who had died in each village was not released to the respective village communities, all 48 participants, including the three local authority figures, shared their news regarding the estimated death toll of the three villages: about six per cent of V1 households, 17 per cent of V2 households and 25 per cent of V3 households lost one or more family members. Consequently, as confirmed by all 48 participants, all the villagers from the three villages were depressed as each village looked like a war zone where traumatised and hungry people lived.

6.7   IPO analysis and tangible input and output during and after the cyclone

This section refers to the IPO analysis of the women participants based on their tangible input (land, equipment, and money) during and after the cyclone (see Table 6.1). All 48 research participants confirmed that they had first-hand experience when the cyclone hit. They further confirmed that almost everything- including shelters and livelihood resources- from the cyclone-affected villages was destroyed as the cyclone raged from 3pm in the afternoon until dawn the next morning.

The cash, livelihood resources, farms, paddy fields, trees, plants and fishery goods (physical capital) of each village was destroyed. All 48 participants confirmed that they did not receive any emergency assistance from either local or international donors due to the embargo of State aid. This was in place for nearly three months afterwards. Some women also lost their breadwinners - fathers, brothers or husbands who were fishermen at sea. These factors caused the villagers (particularly the women) trauma and psychological problems. All the participants from the three study villages experienced different kinds of severe psychological problems such as sadness, fear, pain, loss of hope, headaches, nervousness, depression and weight loss following the cyclone.

 All 48 participants confirmed that the loss of property in V1 was the worst amongst the three villages.

> Though I owned lands, all the paddy fields and cash were destroyed by seawater. How could I restart farming on my land when all of my cash was gone? How can I give jobs to others (villagers) who used to ask me for jobs? They (other villagers) are jobless when I don't run any business because they were destroyed by the cyclone (Woman participant 1, V1)

As a result, both rich and all the poor villagers suffered psychological problems because the V2 and V3 villagers relied on the livelihood and financial resources of V1 pre-cyclone. Of the 45 women participants, seven lost their breadwinner male partners and the 12 'businesswomen' who had worked prior to the cyclone could no longer continue in the same way. Therefore, all the 48 participants concluded that the depleted resources that they relied on for their livelihood (physical capital), financial investment (financial

capital) and the loss of their family breadwinners changed their roles from being passive to active as necessary for survival in the aftermath.

All 45 women disclosed that their fear for survival (as a push factor) made them gather in groups and perform cooperative action to find food (salinated rice and dried fish), as well as coconut water for drinking and to arrange temporary accommodation.

> I was so terrified to die while the cyclone hit. Again, I feared for our survival after the cyclone when I came to realise that all of my properties, including our house and livelihood resources were completely destroyed by the cyclone. My family and I had no choice but to stay and communicate with others as we were so terrified to live by ourselves as we did not have any resources to live. That fear for survival was a push factor for us to get closer with others. (Woman participant 2, V1).

Fear became a reason for living and cooperating with others for the survival of the cyclone affected villagers. Another factor for women's unity in the groups was all the social barriers between the wealthy villagers and the poor were broken down when the physical and financial resources were depleted.

> None of us were rich after the cyclone. Then, we all united through helping and sharing the remaining food with each other for survival. Everyone was treated equally and nicely. It was the first time in my life to feel the beauty of equality and sharing with respect. (Woman participant 4, V1)

The above quotes indicate that most women were united due to their fear for survival. 42 per cent of women participants also stated that they considered it was a positive factor that the social classes broke down among the villagers following the cyclone.

As a result of the State's aid embargo, the cyclone survivors were difficult to reach by local and international donors for nearly three months (see Chapter 2). In the meantime, the situation of living with nothing gave the women a chance to explore their hidden strengths through the collective actions of the villagers, even though most had psychological problems. Every participant agreed that this situation facilitated stronger social relationships both within villagers and across villages as they connected closely. Table 5.4, Chapter 5 indicated the aftermath situation of women (as their output) in

three-study village. The feasibility assessment of INGO (see chapter 5) considered that aftermath result of women as their input to the INGO project.

Two factors were evident as drivers for women's capacity building. They were their voluntarily involvement in group action and their cooperation with others towards the building of social capital during the first timeline (after 2 May 2008 until the INGO commenced its project in mid-August 2008).

III. Section 3 of the primary data analysis

This part of primary data analysis focuses on the second timeline of Table 4.3 (see Chapter 4). This covers the 30-month project of the INGO from August 2008 to December 2011. As before, using the input-process-output of the (IPO) model outlined in Figure 6.1, the input of the three villages (see Table 5.4, Chapter 5) and the INGO will now be examined along with the process and outputs delivered during the 30-month project.

This section addresses the main research question: **How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis?** and the subsidiary research questions 1 and 2:

Sub question 1*: What were the drivers that assisted, and the barriers that restrained women's capacity building, and empowerment during and after the INGO project?*

Sub question 2: *How did the women cyclone survivors perceive the role of networks and tangible/intangible capital in the recovery process?*

6.8   The role of the INGO during the 30-monthproject

The input of the INGO is identified in this section before examining the process and output stages of both the women participants and the INGO during the 30-monthproject.

6.8.1 The INGO input

The INGO input was associated with different types of tangible/intangible capital following the interview analysis with the four INGO staff informants. Following the feasibility study (see Table 5.1, Chapter 5), the INGO staff tailored their project plans to suit the situations of the village women. The feasibility study concerned both the village and the individual level. Regarding the village level, the questions focused on the food, health, shelter, education, and livelihood situations in each village, along with an assessment of each individual's psychological status and financial situation.

All 4 INGO key informants reported that their project contributed both tangible and intangible inputs. The tangible inputs were not significant, except for the field offices and loan provisions. The INGO mainly contributed intangible inputs such as resources (knowledge, information and experience), along with experienced and qualified staff.

With regard to the tangible input, based on previous experience, the INGO staff recognised the importance of a community place in each village. They transformed the field offices to become community centres/meeting places for the women in each village. Each centre was later named a 'Women Friendly Space' (WFS**)**, locally known as *Sone-Se-Yar* in the Myanmar language. As a result of the village women communicating with each other at both informal and more formal regularly held meetings, the WFS became pivotal for developing networks and building social relationships through communication (social capital).

In relation to the intangible input, the INGO's feasibility study identified many areas where there was a need to restore or upgrade services post-cyclone. However, as stated in the document analysis, the input analysis conducted for this study highlighted only the selected areas where this was realised: capacity building(knowledge and information

related to education) and the development processes concerning social capital (solidarity built through regular meetings to improve social relationships and knowledge sharing).Table 6.4 indicates the sequential activities implemented by the INGO during the 30-month project and how they contributed to various types of capital in tangible and intangible form. In general the INGO had a range of different expectations with regard to the potential outputs that might be achieved when they contributed various kinds of input and processes for the women from the three villages.

Table 6.4: INGO input and expected outputs

Input as per Table 6.2	INGO input	INGO's expected output	Output as various types of capital
Land, equipment	Opened offices in town and villages. All field offices in villages were transformed into Women Friendly Space (WFS)	Conduct meetings, arrange counselling, conduct various kinds of training, and disburse loans for women.	Physical capital (tangible)
Group meeting and trainings	Facilitated creation of WFS for women's networking and initiated small (five women) group networks. Organised regular meetings and training at WFS in each village.	To develop better social relationships as individuals and within the women's group networks. To experience training together and share findings/ experiences.	Social and human capital (intangible)
Knowledge. Personal (expertise)	Provided counselling for individuals and groups in each village.	To reduce cyclone trauma and the psychological problems of women.	Psychological capital (intangible)
Knowledge and expertise	Conducted a feasibility study. Conducted different kinds of training: social, health, etc., and facilitated the sharing of knowledge among women. Trained and coached peer educators and transferred knowledge and social funds in each village.	To examine each village's situation -identifying the neediest villages for project. To promote knowledge and skills of individual women and help them gain experience from others within the women's network. To develop the ability and capability of peer educator women towards sustainability of knowledge and money.	Human capital (intangible)
Financial resources	Disbursed different types of loans to individuals/ collective loans to groups of five women and initiated savings practices. Transferred social funds in each village.	To provide the start-up capital to generate income for individuals and promote collective work, together with savings practices. To secure financial resources for the women to promote their business.	Financial capital (tangible)

Input as per Table 6.2	INGO input	INGO's expected output	Output as various types of capital
Information	Established library at WFS in each village	To access information informally and promote reading habits among the women and their networks.	Human & Social capital (intangible)
Experience	Promoted social events and initiated conversation between individuals and women in the network groups. Facilitated women to become independent leaders.	To promote communication of individual women among the women's networks. To promote women's roles in the households and community	Social & Human capital (intangible)
Personal (Expertise)	Provided expert knowledge; skilful staff; exchanged knowledge; trained peer educators.	To transfer technical and professional knowledge to the women villagers.	Human &Social capital (intangible)

The INGO staff experienced some barriers that blocked their contribution (input) particularly with regard to some of the women who were depressed and restless. Almost all the women suffered psychological problems that affected their social relationships. Consequently, some women were not interested in attending the INGO meetings, particularly those in V1. To support the women's psychological situation, as per the quote below, the INGO conducted two types of counselling services - both individual and group sessions.

> Those V1 cyclone survivor women faced more problems than other vulnerable women's groups from V2 and V3. Before starting any training, counselling for both individuals and the women groups helped to stop their tears and the women were ready to look forward to their future. For their recovery and economic growth, different types of interest-free loans were provided. (INGO informant 3)

As a result of the INGO's network approach, the women who had previously been lonely and traumatised became members of the women's network groups in each village and benefitted as a result. The community meetings at the WFS replaced what had previously been the only meetings held at a monastery where only those of Buddhist faith were comfortable attending.

6.8.2 The processes and the outputs during the INGO project

This section addresses the process and output analysis concerning the 52 participants (the 45 women, the 3 male authority figures and the 4 INGO staff). It refers to the second timeline (see Table 4.3, Chapter 4) applying the IPO section of the analytical framework. As per the IPO of Figure 6.1, the process section of the research framework concerns both the individual and group processes within the three villages. In a sequential manner, the process components are: first, training to build capacity (human capital); and second, enhancing the other types of capital including social capital through individual and group interaction regarding knowledge sharing and the development of trust, social networking, effective communication, cooperation and social cohesion.

The analysed data concerning the process section of the IPO model indicates how the input of the women from the three villages combined with that of the INGO worked together to produce outputs of varying degrees.

6.8.2.1 Social capital development

As outlined in the process section of the IPO analytical framework (Figure 6.1), different types of capital and capacity building are the key concerns of this study. Table 6.1 shows that the women participants perceived social capital as an intangible asset that is related to other types of capital. This, in turn supports different types of social relationships between individuals. For example, regular meetings facilitated the building of social relationships through discussion and social networking, which resulted in the building of social capital.

Social capital development and related dimensions

This part of the process and output analysis identifies the role of social capital, particularly in relation to the social relationships developed between the women's network groups. As stated previously, in relation to social networking, the villagers did not meet regularly and their social relationships were dispersed and sometimes negative pre-cyclone Nargis. However, that situation changed to become more positive when the most intense social relationships that developed during the cyclone aftermath came about because fear made the villagers more united for their survival, and the sharing of whatever limited resources were available. This contributed to social cohesion through communication and cooperation amongst the villagers, and allowed for the development of trust and mutual respect as well as the building of social bonds among the women.

The 45 women participants stated that their social relationships were at their strongest in the cyclone aftermath. The four INGO staff participants stated that mutual respect plays an important role in their communication with local women, as a basic foundation in social relationships and cooperation that facilitates trust for stronger and longer social relationships.

The role of mutual respect and trust in social capital development

From the findings it appears that the role of mutual respect appears to coexist with trust in relation to social capital. The participant interviews and the process and output analysis concerning the women's social capital highlighted the roles of trust and mutual respect as the foundations for more effective communication and the maintenance of social relationships.

> Among the three villages, the V1 villagers were the most difficult to deal with, more so than V2 and V3 as they were more diverse due to their pre-cyclone social class, and they preferred to solve their social problems individually. The V2 and V3 villagers were more united and more considerate to others as a group. (INGO informant3)

Regarding long-term relationships, 40 out of the 45 women participants stated that the roles of both mutual respect and trust were pivotal in maintaining longer and stronger social relationships amongst the village community.

Moreover, all 48 participants and the four INGO staff pointed out that frequent meetings and training for women's capacity building also built social connections through communications with mutual respect - a foundation of trust building.

> After attending various formal training and informal meetings, I had more chances to connect with the INGO staff and other women from our villages and the nearby villages. We listened to each other and helped with respect to someone's need through job sharing (Woman participant 3, V2)

As a result, the INGO staff organised a series of meetings, which led to the V1 villagers gaining confidence and more trust over time. By contrast, the V3 villagers did not experience any problems with the INGO staff, while the V2 had similar issues to the VI villagers once the 30-month project started.

> The repeated and regular meetings gave more chance for dialogue with villagers that facilitated building social relationships. But, mutual respect is the key to maintaining any kind of social relationship with them (the villagers) for gaining their trust and the confidence to cooperate with us (INGO staff). I think power in social relationships can be reduced when mutual respect takes place. Among them, V3 was better than the other two villages. (INGO informant 2)

Community work involved the sharing of tasks and responsibilities – for example childcare- so that some could work in the fields, while others went to the markets. However, some of the V1 villagers had communication and social relationship problems with the INGO staff mainly because they were reluctant to discuss their personal issues.

> How can I trust easily what everyone's saying? But, I can talk with everyone who shows the same mutual respect with me. I think trust will be developed later after meetings in a longer relationship (Woman participant 1, V1)

The above quote indicates that trust is not always developed easily (as stated by Putnam 1995). Other scholars propose that social capital concerns trust (Farr 2004; Field 2003), although this study indicates that, in the case of the village women, trust was also associated with mutual respect.

Social networking, communication, cooperation and social cohesion

As stated previously, together with mutual respect as a precursor to trust, social capital, social networks, communication, cooperation and social cohesion comprise the other key dimensions of social capital. The analysis of the process and output sections of the study show that the nature of social capital and its related dimensions may be changeable over time, depending on the context-specific situations or the people concerned. Furthermore, it is proposed that the dimensions of social capital can be changed according to differing perspectives. According to this study, social capital was developed as outlined in Figure 6.2 below.

| Participated in a **network** group as a member to attend regular formal meetings and informal gatherings for conversation and **communication** with other women | → | Interacted with **mutual respect** and gained **trust and confidence** (positive psychological capital) to deal with others for longer and stronger social relationships | → | Engaged to perform **co-operative** work with group members and developed **social cohesion** with other women in the networks through stronger and longer social relationships as e**mpowered** women individuals |

Figure 6.2: Social capital development in this study

Figure 6.2 outlines how social capital developed for the majority of the women participants. The first column indicates that women were able to communicate closely each other in their network groups. The second column illustrates the interactions between mutual respect and trust towards the development of different types of capital - such as communication (social capital). The third column illustrates the influences on cooperative work and social cohesion.

Empowerment and social capital

The definition of empowerment adopted for this study refers to Kabeer's (2012) work, which refers to women's empowerment concerning the ability to make choices and take chances achievable along with the provision of three elements – opportunities, knowledge and capacity building. In this project the three elements were provided by the INGO project where the women's network groups were identified as a foundational provision of social capital. The network groups supported communication and the development of social relationships with mutual respect resulting in trust and confidence (a positive stage of psychological capital). Social cohesion was considered to be engendered through cooperation as an outcome of social capital development. The study participants indicated that they received support from their friends in their network groups of five that led to collective power for the group members.

> I didn't feel alone when I was with my (women) friends within our small group. We consoled each other and got closer and helped each other, where I got more power from my (women's) network group (Woman participant 3, V3).

The participants explained that the development of social capital towards social cohesion led to knowledge and capacity building, over time enabling empowerment. This quote illustrates that empowerment can be generated continuously as an input-process-output flow for each individual when other types of capital are involved.

> I know that I am not alone after attending several meetings. Now we are five close friends working together. Exchanging ideas among us gains trust and confidence to generate better social and business relationships. So, we are getting closer and closer. Though we have different personalities, we trust each other and keep our own space with mutual respect that can avoid crossing the lines. It proves to me that I am not a powerless woman anymore. This is why I said that I am not alone. (Woman participant 5, V3)

6.8.2.2 Psychological capital

This part of the process analysis focuses on the role of psychological capital. The aim is to examine how psychological capital supported capacity building and social capital development and how this related to empowerment during the course of the INGO project. A finding that emerging from the process analysis was that the women were able to regain a sense of self-efficacy and self-esteem similar to their pre-cyclone situations or higher and thus gain sufficient confidence to participate in the group work.

Prior to this stage, a V1 participant explained her situation:

> I was a tough woman who lent private loans to needy villagers for years until [Cyclone] Nargis. After the cyclone, I worried so much and lost weight. I couldn't sleep when I thought about my future without having any livelihood resources as before. I didn't even know how to rebuild my damaged house as all my money had gone. (Woman participant 1, V1)

Following the creation of the women's network groups the majority of the 45 participants, mainly from V3, revealed that social cohesion within the network groups was pivotal for their development capacity and economic growth through the development of different types of tangible/intangible capital as illustrated from the following quote:

> The collective power (from the networks groups) gave power for us to handle different situations -either the ups or the downs, particularly those who were the forever-dependent housewife pre-cyclone. With strong will and not being afraid to take on challenges, our inner power and capacities are not limited to generate a better living and we get a secure feeling towards our lives. We complement each other - that was the key of the network groups (Woman participant 1, V3)

Although, psychological capital is not considered widely as key for the development capacity of disaster survivors, this study identifies it can be developed through the collective power of network groups.

Psychological capital in the process and output analysis

This section presents the process analysis of psychological capital in relation to the 30-month INGO project. Luthans et al. (2004) argue that, with positive psychological capital, individuals maintain a higher level of self-efficacy, optimism, hope and resilience. This is because psychological capital can be generated from a person's other types of capital (Luthans & Youssef 2004). All the INGO staff informants disclosed that the participants were not interested in having conversations at either the formal or informal INGO meetings when the feasibility assessment was conducted in the villages in August 2008. After discussion with the local authority figures from V1, V2 and V3, it was determined that the cyclone and the lack of emergency aid may have led to this situation.

> No one informed us about Cyclone Nargis in advance and no one came to us after the cyclone. We survived the cyclone but nothing remained for us to live on. Now, the staff came and asked what we needed after eight weeks. What could I say after I lost hope and optimism as a cyclone survivor (Local authority figure male participant, V2)

All four INGO staff informants further disclosed that the lack of communication with the cyclone survivors, women in particular, became barriers for them to provide the planned services from the INGO recovery project. In order to restore their pre-disaster resilience, the provision of counselling services improved their psychological status (as per Klein et al 2003) over time.

The four INGO staff revealed that the women participants were initially reluctant to use the individual counselling provided by the INGO. All the 45 women participants indicated that they did not wish to share their insights and feelings with strangers. However, over time the experienced counselling staff were patient and the participants appreciated the results of their private conversations.

> I had never experienced sharing my personal opinions or feelings with strangers. However, after talking with them (the INGO staff) privately, my pain and sorrow were relieved and I regained my pre-cyclone psychological status. I even acknowledged what I should do for my future (Woman informant 2, V2).

All 45 women disclosed that they eventually participated in the counselling sessions acknowledging that it relieved their trauma, sadness and pain. All but one of the 45 women participants disclosed that they received both social and psychological benefits from participating in the group counselling sessions in each village. The group counselling with other women who suffered the same experiences delivered more understanding of each other's situation and therefore they become closer as a group.

> The communication amongst us is getting better than before [Cyclone]
> Nargis because of the group counselling. However, although not as strong
> as before, some kinds of social barriers still exist between the wealthy and
> the poor villagers. (Woman participant 5, V1)

Some social barriers related to the participants' reluctance to share openly (particularly in relation to business matters) as illustrated by the quote below:

> I trusted them [the other women villagers] in social matters as we met
> regularly after the cyclone. But, it was just impossible for me to share all
> my information, mainly due to business secrets because I knew that no one
> could help me out to regain my resources that were destroyed by tides
> when the cyclone hit. So, I still have mistrustful feelings in-group
> counselling in relation to some issues. (Woman participant 1, V1)

The above quote indicates the interrelationship between trust (social capital) and optimism (psychological capital) of individual woman within the women network groups. However, 15 women participants from V3, and 12 from V2 repeatedly emphasised the value of two-way communication through listening and ongoing dialogue (i.e. sharing feelings) which they said helped to reduce the social barriers over time.

In relation to the psychological capital of individuals, 80 per cent of women participants said that the loneliness and sadness they had experienced largely disappeared after the group counselling sessions. This assisted in improving the psychological state of individuals and helped them to attain a level of mutual understanding with the other members of the group. Therefore, group counselling was popular among the women villagers and became a foundation for building networks and gaining trust (social capital) among group members when they shared problems, experiences, challenges and possible solutions to their various dilemmas.

> We all were sad and lost hope after the big loss due to the unexpected, catastrophic Cyclone Nargis. But, we came to realize that everyone had the same experience, sorrow and pain shared at our gatherings and we understood from our current situation how to continue into the future. We gain power when we are in the group. That mutual understanding built trust for us to solve our problems. (Woman participant 5, V3)

The process analysis indicated that the psychological status of most of the 45 women participants gradually became more positive during the 30-month project with the help of both individual and group counselling. All the 45 women participants generally agreed that, over time, they were becoming happier – for example they had very close friends within the women's network groups to share both personal and business matters.

> Participation in-group counselling was a first step for the women to positively change their psychological status. Later, women from the same village purposefully gathered to find solutions to their problems. It was a significant change for the women villagers who had cyclone trauma towards building their own social networks. (INGO informant1)

Resilience helps disaster-affected populations for their recovery through strengthening social infrastructure and social capital at the community level (Aldrich & Meyer 2014). In the cyclone recovery period, the analysis of output gathered from the four INGO staff and 45 women participants shows that the majority of the V3 villagers recovered faster than did the women from the other two villages.

> We used to live with no resources before cyclone (Nargis). Nothing can be lost after the cyclone. But, the (cyclone) experience made us terrified. Group counselling and meetings gave us our own identity to change our lives. (Woman participant 5, W3)

According to INGO documentation seventy per cent of V2 villagers and 40 per cent of V1 village achieved recovery during the first six months of the INGO project. Kukihara et al. (2014) note that higher the levels of resilience can promote faster recovery periods.

> Women from V3 recovered from (cyclone) trauma quicker than the V2 and V1 women, whilst the recovery rate of the V1 women was the slowest among the three villages. (INGO staff informant 1)

The interview findings revealed that the majority (42 of the 45) women participants had recovered by the cessation of the INGO project in December 2011. Recovery in terms of this study meant that they had overcome the challenges resulting from the cyclone, rebuilt their homes and lives and, in some cases were stronger than before as they had started their own business.

> Based on my 16 years of experience as a social worker/counsellor for disaster survivors, the V3 women recovered more quickly from the tragedy than the women from the other two villages. They (V3 women) started their own businesses in local markets at Labutta town when the individual loan was disbursed. However, the majority of V1 women and some of the V2 women were delayed in running their businesses and utilising the individual loans. That was why we (the INGO staff) paid more attention to monitoring the progress of those who were slow starters (INGO informant 1).

Empowerment and psychological capital

The process and output analysis concerning psychological capital identified both negative and positive aspects from the women's perspectives. Generally, enhancing the psychological capital increases their self-esteem and the women survivors began to feel empowered, largely due to the collective power they experienced in the network groups as illustrated by the quote below:

> Instead of keeping silent at meetings as before, we talked a lot within our small group where we shared feelings, and exchanged experiences and lessons learnt through listening and dialogue with all due respect. I felt that I am not a voiceless woman anymore as I have gained power to share something with my friends since I am involved in my network group (smile). (Woman participant 4, V3)

All the women and the INGO staff participants highlighted the important role of participation in all the network activities, with mutual respect in all interactions essential for the maintenance of social relationships within the network groups and beyond.

> I participated in all of the INGO's training and meetings actively. Later, I came to notice my better communication skills so that, in turn, they (other women and the INGO staff) dealt with me with respect. (Woman participant 1, V3)

6.8.2.3 Human capital

This section presents the process and output analysis in relation to the role of the INGO and the human capital development of the women participants. Human capital is shown as one of the potential outputs of the IPO analytical framework (see Figure 6.1), where social capital and capacity building (human capital) support different types of capital. As indicated in Table 6.2, the women participants considered human capital as a form of intangible capital to build their capacity in relation to knowledge, information and educational status.

Human capital in the process and output analysis

Figure 3.6 (see Chapter 3, literature review) states that three levels of capacity building are referred to in this study. The individual level is the core, followed by the group (women's networks) and the community (village) levels. In this regard, the four INGO staff revealed how they worked together with the women to transfer knowledge, how the women translated that knowledge in their everyday lives and, in turn, transferred knowledge to their peers.

The INGO staff (all of whom were training instructors for the women participants in the three villages) stated that they observed the women during each of the basic (level 1) training sessions and noted who might have potential for progressing to peer educator training. Among those women who completed the basic training, the INGO chose those women who self-nominated and who were interested in undertaking further work as volunteers. The selection criteria for peer educators were based on a continuous recording system conducted by the INGO. They kept records of those who performed well, who seemed enthusiastic and actively participated in the sessions.

The majority of the participants completed the basic training, and 20 per cent were selected for intermediate training (level 2) by the INGO staff and became peer educators. The other 80 per cent were apparently content to run their own businesses and

did not commit to any further training. Later, a smaller number were selected to attend advanced leadership training (level 3) for community educators who were to conduct basic training for other women from the same or different villages. The INGO intended for the advanced graduates to help manage the community work with other peer educators in each village beyond the life of the INGO project. Table 6.5 illustrates the three levels of training offered by the INGO to the participants.

Table 6.5: Human capital development in the three villages

Human capital development through training	Educators and trainees	Aim of the training	Processes
Level 1 (basic) – Capacity building training	Training conducted by experts from different sectors and the INGO staff.	Promote awareness of and improve women's basic knowledge of different issues related to business, health and life skills.	1,265 women attended training at the WFS; 253 women were selected as peer educators to host group discussions.
Level 2 – Intermediate training to be Trained peer educator women (TPEW)	Training conducted by the INGO for women who wanted and had capacity to organise/ lead; the women's groups who wanted to serve other women and do community work.	Select 253 women for leadership roles – to organise training, social events, meetings.	253 peer educators hosted discussions and shared knowledge with other women at WFS; Communication between the INGO staff/local authorities for policy issues/ women rights.
Level 3 – Advanced leadership training for TPEW to conduct cascade training as community educators	Training conducted by community educators in each village.	New trainees received capacity building training (level 1) and the INGO staff took on the role of mentors.	INGO transferred knowledge to TPEW through on-the-job training; INGO monitored training effectiveness through feedback assessment of trainees.

As per Table 6.5, The INGO contributed different kinds of capacity building training that included 1,265 women from the 27 villages. Only basic financial training was compulsory for all the loan applicants before the interest-free loan disbursements began. This training was intended to promote awareness and knowledge and was conducted from the first three or four months of the INGO project.

All 45 women participants acknowledged their development in relation to knowledge, information and the social relationships built within the women's network groups. These assisted with the development of their interpersonal skills through attending different types and levels of training. This occurred even though the focus of the training was on skills and knowledge development. The unintended outcome of these group-training sessions was the development of different types of capital through interactions in the social networks. This led to improved communication between the women overall.

> I was so happy to be selected as a trainee for the level 2 (peer educator) training. In my entire life, it was the first time for me to realise my value and feel that I am a valuable person. My friends told me that I won a prize that they also wished to get. They [the INGO staff] said that my participation in our network activities were so useful. (Woman participant 1, V3)

The 'trained peer educator women' (TPEW) contributed to their own communities in order to share knowledge and organise meetings at the WFS. Some peer educators facilitated training as helpers who assisted with trainee registration, seating plans, printing and distributing notes, and collecting the feedback sheets from all trainees, as well as preparing the logistics and food expenses for the training. In this study, 36 women (10 from V1, 12 from V2, and 14 from V3) participants of this study were TPEW. The INGO staff noted:

> We noticed that the women trainees appreciated the help of peer educators who are their old friends. The training atmosphere became livelier than when we (the INGO staff) alone conducted the training. (INGO informant 3)

The level 3 (advanced) leadership training targeted the TPEW and was intended to train qualified peer educators to become community educators. The intention was that they would conduct level 1 (basic) training in place of the INGO staff. After three to six months of peer educator training, the TPEW, who were assessed by the INGO as effective communicators and who actively participated in training, were invited to attend advanced level 3 training. Fifteen women from each village were selected for on-the-job training with the INGO staff as community educators, who later enabled the cascaded training of other women from the same or different villages.

One of the exit plans of the INGO is transferring knowledge, practice and experience to the local people. We [INGO] trained them [TPEW] to learn the system together with us first. Then we allowed them to exercise by themselves, and we are their mentors. It will keep the sustainable momentum in each village after we leave. (INGO informant 2)

After 3-6 months of TPEW training, the TPEW who had worked efficiently and effectively were trained and appointed as community educators. The peer educator positions were unpaid but the community educators were paid which was much appreciated as evident from the quote below.

I've never, ever expected to be appointed as paid staff. First, I didn't believe what I heard about it so I pinched myself (smile). It was an honour for me as a poor, illiterate, rural woman. Since then, whether or not I got paid, I have continued this task for all women from my village and other villages too. (Woman participant 3, V3)

The community educators conducted cascade training for women and girls from their village or other villages using the same methods as the INGO staff. Therefore, Table 6.5 above indicates how the INGO transferred knowledge, information, practices and experience (human capital) to the women cyclone survivors. The data shows that an individual's development, particularly of human capital, was directly related to her recovery level.

Our experience in the three villages indicated that the individual women of V3 attended all kinds of training and meetings conducted by us. Later, they used to meet their network group members at WFS and shared knowledge they have learnt from training. They ran their own business within two months and have operated collective businesses within the networks of V3 within six months. Peer support helps them a lot. Among the three villages, the V3 women changed completely and the V3 village has also changed because women invest their money to rebuild the WFS and have the aim to build a primary school that is very big dream. This was not the case for V1 however and V2 was slightly better. (INGO informant 3)

Clearly capacity building took place at different rates amongst the 45 women in three villages. The INGO staff observed that the women's participation in training and voluntary work made a big difference to their development.

> Without the women's participation, their interest and desire to contribute to other women, the results would not have been achieved in the three villages. Nonetheless, among the three villages, there were different numbers of TPEW involved in the cascade training for the other women. This is the real project in moving from disaster to development for community change. We [INGO] wish them (women from their project villages) to maintain this momentum after the project has ended. (INGO informant 1)

Specifically, the training helped the women become aware of different kinds of basic knowledge – as stated earlier in relation to life skills, health and business skills. The women participants gained knowledge through dialogue with other women and applied that knowledge in their daily lives. All but two of the 45 women participants disclosed that different kinds of capacity building helped them obtain money to run their own business – an opportunity that enhanced their capabilities.

> There are many "ifs" in my life. If there was no Nargis, this INGO did not come to us. Then my life would be the same as before. The INGO gave knowledge, information, and money too. They taught us how to make records in business. Now I know how to control waste, make a reasonable wage with some profit in my business. My communication skill has been improved that helps in my business. But, some women from our village were different to me. Instead, they kept doing the old method in business. Therefore, our achievements are also different. So, I can say in Myanmar that "a midwife will help you, but you have to give all your force to get your baby out in labour. You can't get your baby out only with the help of midwife. Your child might get problem in labouring without the skilful midwife, particularly for the first baby". I meant that I have to change my life together with the help of INGO, who will not stay forever with me. We [women and INGO] performed our dual tasks in harmony. (Woman participant 3, V2)

Some women participants put in their utmost effort and ensured maximum participation to learn and practice to develop their skills following training. These development processes, particularly for the TPEW and community educators, can be referred to as 'Ko-Htu-Ko-Hta' in the Myanmar language, meaning 'first help the self to help others' ('capacity-co-development'). This relates to the women and the INGO staff working closely side-by-side as the women participants received training from the INGO first (meaning the level 1, 2 and 3 training) and then they supported the other women as TPEW by conducting cascade training.

Empowerment and human capital

This section considers the empowerment of the 45 women participants regarding the analysis of their human capital as an output. The data indicates the three levels of training (basic, intermediate and advanced) led to human capital development for the women villagers. However, although capacity building was a process in the IPO (see Figure 6.1), the output analysis regarding human capital showed different outputs among the 45 women informants. For example, data indicated that the women (mainly from V3) who participated actively and who were engaged in meetings, training, and knowledge sharing among the women's network groups, demonstrated the best levels of achievement. Specifically, the V3 women were awarded more funding than the V1 and V2 women from the INGO both individually and collectively. The converse was also the case, where the V1 women who participated less, were awarded less funding than those who were active participants of V2. This study argues that 'capacity co-development' was the most appropriate term to indicate women's empowerment status with regards to the relationship between the women's contribution in combination with the other women from the same village.

> We [INGO staff] gave the same amount of water to them [the women]. Depending on the size of water containers, the amounts of collected water are different. Same as that example, we provided the same services to women from the three villages. The active [women] participants gained the best achievement. We, alone, make them change. We need their participation, active learning and effective utilization of knowledge and information for their sustainable achievement. (INGO informant 1)

In this study capacity building is referred to as 'the ability of individuals, groups, institutions and organisations to identify and solve development problems over time' (Morgan 1996 cited in Lusthaus, Adrien & Perstinger 1999). Hence, capacity development is used here to refer to when that state has been achieved and sustained. In this case, the term capacity co-development has been created to identify a state where the project participants have worked with the project providers to solve problems and make decisions resulting in empowerment for the individuals concerned.

Regarding the development of different types of capital development (referred to as output in the IPO model), human capital emerges as a core factor for women's empowerment through capacity building. All but three of the 45 women participants stated that participation in the women's network groups provided courage to all the group members who consequently felt that they were not alone.

> All of us [women of V3 village] worked together closely to follow up/translate knowledge that we have learnt from the series of training into practice. We were well equipped with knowledge and related experience when we digested them through dialogue/discussion at our WFS and applied in our daily work. They [INGO staff] helped us while we worked together for ourselves or for other women and community work. Those made us grow through learning and working together with the experienced staff [of the INGO]. We just gained knowledge from training first, then, that knowledge guided us in practical work so that we realized our capability is getting larger when we are in a group. (Woman participant 3, V3)

All but two of the 45 women participants and all the three male authority figures disclosed that different kinds of capacity building helped the women to develop their knowledge and obtain money to run their own business. For example, some women did not attend all of the training, or they just registered for workshops (so that they could obtain a daily per-diem and approval for their loan proposals) and then they left the session. Together, these factors contributed to or detracted from the various levels of women's empowerment and capacity building.

Conversely, the INGO staff admitted that they could not guarantee that the women would attain the same level of achievement if their participation levels varied. The women and the INGO worked together to achieve capacity co-development through capacity building training. Importantly, this involved the INGO and the women engaging in co-operative work with members of the women's network groups. This resulted in the generation of social cohesion, empowerment and collective power.

6.8.2.4 Financial capital

Bourdieu (1986) states that social capital can be understood when the other types of capital such as financial capital and physical capital are reinforced. For Coleman (1986), financial capital is a component of physical capital generating human and social capital of particular social structures.

Financial capital in the process and output analysis

As per the analytical framework (Figure 6.1), financial support is one of the input components and one of the potential outputs of the IPO. This section of the analysis of process and output aims to identify how financial support to both the women and the INGO assisted capacity building and the development of different types of capital and empowerment. Financial capital is considered a tangible asset (see Table 6.1), so only two forms of financial capital are evident in the INGO project: the loan disbursement, and achievements in economic growth due to financial capital. In this part of the analysis, the drivers of, and the barriers to, women's empowerment as the output of financial capital are also identified.

Regarding the role of the INGO and the economic growth of the women, all 45 participants agreed that the support of the INGO through financial training, loans and more was pivotal for their economic growth and capacity development. At first, all the V1 women were recipients of the INGO's start-up capital loans, whereas the majority of V2 and V3 women hesitated to borrow loans due to their lack of confidence and inexperience in business. However, after two to three loan cycles, covering four to six months, the majority of the V1 women asked for larger loans due to the business failures they were experiencing. They reported that they did not want to follow the INGO's financial rules and monitoring regulations because they did not take the INGO financial training seriously.

As indicated in Table 6.5, 1,265 women received the individual loans after completing the basic financial management training. Among the three villages studied, the highest women's attendance at training sessions was from V3 and the least from V1. During the training, the V3 women participated actively in all the training sessions and received the highest assessment results in training, while the V2 and V1 women were not as active. After the loan disbursement, the results of six-monthly assessments per village showed that almost all of the V3 women were able to manage their business finances, particularly in relation to daily cash balancing and waste control, where they earned the highest profit margins. Conversely, only 70 per cent of the V2 women and 50 per cent of the V1 women achieved the same results as the V3 women. As noted earlier, this was largely attributed to the lower levels of participation in the training sessions by the V1 and V2 women, although some villagers indicated that they did not need the INGO provided training as per the quote below:

> Not like other women, I had 20years of experience about it (financial management) when I assisted in my father's business since I was 16 years old. So, I didn't need those kinds of training like other women who required attending training repeatedly as they didn't know any prior knowledge in business but they wanted the INGO loan. (Woman participant 2, V1)

The four INGO informants and 38 out of 48 participants (45 women and 3 male local authority figures) claimed that without knowledge and information about finance, loans could not guarantee successful business results for individuals. Although, all the 45 women participants had completed the INGO facilitated financial training, only 41 repeatedly attended all the basic training for bookkeeping, sales, marketing, and waste management. Three women from V1 and one from V2 attended only once and were in the INGO's poor performance lists.

Of the 45 women participants, 38 identified the three characteristics of a successful business as knowledge, money and courage, which was supported not just by the INGO provided training but their participation in the women's network groups.

> We came to realise the value of knowledge, money and courage in successful business. None of them I had before INGO. Hence, I was looking for money, searching for knowledge and participating in groups – my courage came from the group of five women, as we are five fingers of a hand that we can fist. (Women participant 3, V2)

Nonetheless, 60 per cent of women participants maintained that successful business solely depended on luck, and another 20 per cent said that the loan amount provided by the INGO was insufficient for running their own businesses successfully. The remaining 20 per cent did not provide any comment on the INGO financial project. However, all of the women participants agreed that the INGO loans assisted progressive change for them by enabling their business and the development of their capacity and different types of capital for delivering economic growth that eventually led to improved social status.

All the V3 women and the majority of the V2 women took the training seriously and applied the knowledge they gained to their businesses, particularly in relation to financial knowledge and communication/marketing. Moreover, the V2 and V3 women learned lessons from other women at the group network meetings held at the WFS in each village. Those activities helped them to achieve better economic situations and appreciate the value of social networking, particularly the opportunity to learn from others. Conversely, the quote below from a V1 participant indicates that, although she felt she was empowered to run her own business and did not need the INGO provided training (only their finances), her business ultimately failed.

> I was the loan lender before the cyclone. When the INGO disbursed a small loan, I was not interested to borrow it at all. So I asked for a bigger loan amount. I argued not to join women's meetings regularly because I need time to restart my business. No time for meetings. I didn't like to follow so many rules for getting the loan. (Woman participant 1, V1)

The economic growth of the V3 women was more rapid and significant than that of the V1 and V2 women. This demonstrates that the development of social capital among the members of the network group led to the economic growth of the women, and their collective business success led to stronger social relationships among group members, thereby growing financial capital through communication, social cohesion and trust.

> I was just a powerless woman when I helped in the family business. But, I gained confidence and avoided business mistakes when I was with my network group friends. This is the power I have gained from them (smile). (Woman participant 3, V1)

Overall, the V3 women formed the highest number of women's network groups and in turn they received the highest number of collective loans to support their income-generating activities. Conversely, fewer V2 women's network groups and very few V1 women's network groups received any collective loans at all.

Empowerment and financial capital

All 45 women participants clearly stated that they were treated equally by the INGO regarding loan assistance. For different reasons, some of the INGO policies and practices challenged some women participants and became barriers to those who had never before related to any formal discipline in their entire lives. Due to the loans being interest-free, the INGO required loan recipients to save the interest accrued in each loan cycle. It was one of the basic intentions of the INGO to encourage the loan recipients to save and re-allocate some of their profit to grow their own business or invest in another business.

About 95 per cent of loan recipients shared their perceptions concerning the INGO's saving and re-investment policy. The saving methods and the reinvestment policy promoted by the INGO challenged some women. For instance, four women participants from V1 did not want to save money from their daily earnings, and this became a barrier for them. Only 35 per cent of V1, 60 per cent of V2 and 82 per cent of V3 of loan recipients saved money on a daily basis.

> I borrowed loans for running my own business. Instead of paying the interest rate to them [the INGO], they encouraged us to save that amount. It is a good system for the capital repayment so I followed it. They also advised us to re-invest some profit in business whether it was in our existing business or a new one. If I do so, I have to save all my profits and daily income. So, I promised them – but I didn't do it. (Woman participant 1, V3)

All the INGO staff stated that some of their financial practices were set up for the benefit of women and to support them, but some women did not want to follow the rules and regulations after withdrawing the loan and they gave many reasons and complaints to justify why they did not. The INGO monitoring records show that those women faced a lot of difficulty throughout the 30-month project period. In total, approximately 65 per cent of V1, 90 per cent of V2 and 95 per cent of V3 women re-invested their profits in their businesses. Among them, 60 to 80 per cent of women participants re-invested in the same business and the other 15 to 25 per cent chose to invest in new business ventures.

The women participants stated that the INGO's contribution acted as support for their economic growth. If the women participated and took the development of their own business seriously, by applying the knowledge they learnt from training and their peers they could then become change-makers for themselves and their families, and ultimately for their own communities. As Sen (1997) indicates in his capability literature, individuals have the choice to transform their own capacity to capability by making their own decisions.

As noted previously, Kabeer (2012) proposes that women's empowerment relates to their ability to make decisions and have choices. All 45 women participants concluded that empowerment was constituted by the combined results of external support (such as that provided by the INGO) and their courage to join and participate in activities that the INGO provided. For example, empowerment through economic growth resulted from the capacity building training in financial management and the INGO loans. These factors meant that the women could apply their financial knowledge. Capacity co-development resulted from the combined work of the INGO and the women referring to the co-development of their capacity.

> If I want to change my life, I have to take all the chances for improvement of my skills in everything for economic growth. With my utmost contribution and participation in learning, doing, sharing and working, etc. with others. Though, the opportunity is around, if I do not take it, I will lose it. I am the only change-maker for my life and my family. (Woman participant 1, V3)

As per Coleman (1988), people (mainly parents) invested their money (financial capital as a tool- the input) for their children's education/schooling (human capital development- the process) and expected that their children's educational achievement (human capital: degree, qualification- the output) could then generate further income (financial capital- the output). However, in this Myanmar case, human capital (the input) was also considered a tool for operating businesses as the process when the loan was equipped (the input) to both individuals and the collective business so that individual could be able to generate further income (financial capital- the output). For example, the INGO provided different types of training (for human capital development- the input) and disbursed different types of loan (cash- the input) to women from three study villages, All 45 women participants agreed that the achievement results (both training completion and economic growth (the output) were varied according to different individual's participation in training and business (the process). It can thus be said that the stand-alone input of financial capital in business cannot be guaranteed for women to attain a higher income without knowledge (human capital) and the individual's participation in business.

Nonetheless, in relation to financial knowledge, all the 45 women participants stated that financial resources were the basic driver for their sustainable income, whereas different kinds of training and financial management training supported their capacity building. Ninety per cent of the women stated that their financial empowerment was the cumulative result of increasing their income and experience, which in turn, gave them power in decision-making. They also maintained that their individual empowerment did not result from one single factor, but was the cumulative result of other factors such as knowledge gained, funding, experience, guidance, peer sharing and more.

> I feel that I have a certain power to make some decisions now because I have knowledge and my own income so that I am not a stupid, poor woman anymore (smile). (Woman participant 3, V3)

Hence, the women participants stated that both their individual and the collective empowerment of the various groups resulted from their knowledge (human capital), financial resources (financial capital), confidence (psychological capital), networking (social capital) and successfully practicing their skills to run their own businesses (building human, social and financial capital). These factors are represented as their

improvement of capability and led to their ability to buy equipment and to generate income (resulting in physical capital).

> My experience in business shows that the development of my capacity to make decisions, my capability to generate money and my ability to network with others as an empowered woman doesn't come freely and does not stand alone. It is the combined result of knowledge, money, confidence, participation and networking with friends. (Woman participant 5, V1)

The male local authority figures from each of the three villages highlighted that the drivers of financial empowerment were work experience and a healthy environment. Of the 45 women participants, 39 stated that the core value in business was the combined result of other types of capital (human and financial capital mainly), whereas the other four women perceived that money was the only factor in successful business development.

> I have no choice but to go to training if I want their loan. To be honest, my previous business experience as a loan lender showed that training doesn't mean anything; it is just money that attracts other money. (Woman participant 1, V1)

By contrast, the analysis from the INGO staff interviews shows that the four women, who considered money to be more important than training, faced more difficulties in their business development in the long term, whereas the other women fared much better.

> Coincidently, those who counted only money as the core for running their business failed in business more than the other women who had successful achievement because they applied their knowledge in their business. (INGO informant 1)

In this regard, the four INGO staff participants and all of the 45 women participants disclosed that the INGO's loan required every recipient to develop and operate their own business. The processes to support this were training, knowledge sharing and business experience (human capital). The input-process-output (as per the IPO model) comprised a continuous cycle for the women's business skill improvement (Okuyana & Santos

2014). There was also a feedback loop evident, as the output became the input for another cycle of process and output. It is evident that when the IPO process functioned effectively there were three key issues at play: the role of the local authority figures, the INGO's financial policy, and the loan capital for rural businesses, particularly with regard to the financial growth of the women's business.

The INGO's social funds and empowerment

When looking at the financial sustainability of the three villages, the INGO staff assessed the capacity and capability of each of the women's committees with regard to their financial   management skills and their collective income-generating achievements. Moreover, the numbers of the formal and informal meetings held at the WFS, attendance at the meetings and training organised by the women, as well as the number of social events held in each village, were basic indicators of the level of social capital developed within each village.

Among the three villages, the V3 women's committees achieved the highest score, with V1 the having the lowest. The INGO therefore transferred the largest grant of social funds to the V3 women's committee because it had more women involved in business than the V1 and V2 committees. They then guided committee members with regard to knowledge transfer processes. Though the social funds were transferred from the INGO to the women's committee in each village, the approval of the local authority figure within each village was required. With this permission, the INGO staff transferred both knowledge and social funds to V1 for a period of 12 months, to V2 for 16 months, and to V3 for 18 months prior to the completion of the 30-month INGO project. Notably, although they had to give their permission for the funds to be transferred, the local authority figures had no control or power over how the social funds were spent in each village.

> Our boss [the local authority figure of V1 village] was not happy because
> there was no role for him to manage the social funds. So, he came to us
> [the women's committee] and told us that he wanted to spend that money
> for village infrastructure. But, all of us said "no" to him. (Woman
> participant 4, V1)

As a deterrent for cases such as this where the village authority figures tried to access the social funds, the INGO staff introduced the same financial policies throughout their projects and disbursed loans to the three villages equally. However, the local authority figure was still the most powerful person in each village and would intervene in the business of the villagers. Fifteen women from V3 disclosed that their local authority figure provided necessary assistance at any time, whereas only 11 women from V1 and 2 women from V2 received assistance from their respective local authority figures. The V3 authority figure was supportive of the women and their economic development, the V2 authority figure was not interested in any issues relating to the women, and the V1 local authority figure had a controlling type of personality and did not allow the women to operate their small businesses freely.

> I do not control or ignore any issues related to the women – I am always supporting everyone. Regarding my help with their businesses during the INGO project and beyond, I facilitated them to operate their business freely. I was at their disposal for any requirement either of the individuals or groups of women. (Local authority figure male participant, V3)

6.8.2.5 Physical capital

This section presents the process and output sections of the IPO model concerning the physical capital. DFID (1999) defines physical capital as the basic infrastructure for people to generate income to support their livelihood or to facilitate the space or utility so that people can meet and share knowledge and gain experience-generating income. The women participants' perceived physical capital as a tangible asset (see Tables 6.1) and the INGO provided the Women Friendly Spaces (WFS) in its project villages.

Physical capital in the process and output analysis

As stated previously, all of the 48 participants perceived that physical capital provided them with some kind of social identity. This was because the ownership of property (physical capital) was the only visible feature to indicate different levels of social class pre-cyclone. As a result of the cyclone induced resource losses, the social identity of the wealthy villagers changed from being resourceful villagers to being resource-

impoverished. At the same time, the poor lost work places that had been provided by the weal their villagers. As a consequence, the psychological status of the resource-impoverished (the then-rich women) was very low after Cyclone Nargis. Among the three villages, women from V1 lost more physical capital and consequently suffered more psychological problems than did the V2 and V3 women, particularly the V3 women who were used to living in poverty.

For example, the international donors who assisted the villagers following the cyclone applied the selection methods to the aid distribution to try and determine the most vulnerable villages in the cyclone-affected areas. Specifically, villagers who had lost at least one family member were selected as aid recipients and named as the poorest of the poor. Unfortunately, the selection method relating to aid distribution became a mechanism for the local authority figures who wanted to use their authoritative power.

> He [local authority figure of V2] warned me to follow his instructions, and said that my name will definitely be excluded from the aid recipient lists if I don't. I knew that he was the one who proposed the names for aid distribution. So I followed whatever he says. (Woman participant 5, V2)

The process section of the IPO model indicates that the selection method for aid distribution led to division among the village communities. This affected the social capital of the rural villagers and operated as a barrier in building social capital. Among the three villages, the V1 participants made more complaints than did the V2 and V3 participants because the previously wealthy villagers were not selected as aid recipients. As a result, together with the local authority figure, they put pressure on those who had always been poor and who had been chosen as aid recipients.

> I didn't want to get the aid from the donors anymore. My previous boss and her family didn't talk to me since I was selected as an aid recipient by international donors, while they were not selected. Some called me opportunistic. I understand their feelings as we shared things with each other for survival after Nargis till the aid came to our village. It took nearly three months. I didn't like the way of giving assistance from donors. (Woman participant 5, V1)

The unevenly provided aid distribution resulted in negative psychological capital amongst the villagers and led to some conflict in their social relationships. In turn, this

led to the four INGO staff stating that they felt very uncomfortable because the villagers were not interested in their support and only a few villagers participated during the opening of the field offices.

> It was a very hard time for us [the INGO] to communicate with the villagers. They expected shelter and food assistance from us. So sorry for them but we can't help as it was not our agenda. When they knew that we came for a feasibility study, they were not interested to talk to us. They were very united to stop all communication with us, the local leader of V1 and the V1 inhabitants were the worst – like the V2 local authority figure. (INGO informant 3)

As stated previously, the WFSs enhanced social relationships among the villagers, women in particular, and helped build social networking within each of the village's network groups. The tangible inputs provided by the INGO, such as offices and equipment, were instrumental in supporting the women's meetings, which delivered social and psychological capital as output for all three villages. The process analysis indicated that the women from each village contributed some physical capital at the WFS in terms of sharing responsibility with the INGO during the 30-monthproject.

> When we [the INGO] provided two bookshelves and books for the library establishment at the WFS in each village, women asked the village men to make wooden tables and chairs. Children used to come along with their mothers who came for meetings and training. So, we provided a swing and slides beside each WFS, while women filled the earth, fenced and cleared land regularly. It was lovely sharing responsibility with them [the women]. (INGO informant4)

The INGO staff informants stated that taking responsibility showed that trust was built between both sides and a sense of ownership was evident amongst the villagers. This resulted in positive social networks being developed between the INGO and the women. This sense of ownership, in turn, produced positive psychological capital. The social gatherings for women were a new way of life in each village, which was now based on the existence of the community-owned WFS.

> Every mother was happy to see when children were laughing, playing, and sharing things together, instead of crying at home alone. Neither the rich

> nor poor owned our WFS, but every villager owned it. So we took care
> and maintained it as ours. (Woman participant 5, V1)

As previously argued, physical capital and psychological capital were connected with each other in this study and also affected the women's social relationships (social capital). The positive psychological capital of individuals and the groups of women made for stronger social networks resulting in the women performing more cooperative work at the village level. For example, the INGO staff disclosed that 90 per cent of homes were rebuilt in V2 and V3, whereas only 20 per cent of V1 houses were rebuilt after the cyclone.

Although the INGO contributed the same physical capital (the input) such as the creation of the Women's Friendly Spaces (WFS)to all the three villages, the different inputs of the women villagers led to different outputs (for instance: different numbers of meetings were organised at the WFS of the three different village). For example, two INGO staff informants said that almost all the women of V2 and V3 were delighted with the assistance of the INGO and the creation of the WFS in their villages. However, one third of the V1 women did not appreciate the INGO's assistance at the commencement of the project explaining that they expected more free household and livelihood equipment from the INGO instead. Consequently, some of them did not participate nor attend meetings regularly.

Empowerment and physical capital

The output analysis regarding the physical capital of the 45 women from V1, V2 and V3 and the four INGO informants indicate that the livelihood resources were the first types of physical capital owned by the women towards the generation of income. The continuous flow of IPO delivered further and better physical capital through business development. This also led to the procurement of further types of physical capital such as domestic utensils, mattresses and mosquito nets.

The 45 women participants rebuilt houses and bought domestic items following 12 to 18 months of the INGO project. This indicated that the women prioritised physical capital, for example, equipment such as livelihood tools, seeds, farming equipment and tractors, as the basis for achieving various types of capital, whereas housing was not prioritised. As proposed by Coleman (1988), economic capital (physical and financial capital) is the key for developing other types of capital. All 45 women participants revealed that they felt a sense of security when they bought things for their work and home. This gave them feelings of empowerment, indicating that physical capital was seen to contribute to the development of positive psychological capital.

> I am so happy when I am able to buy things for my business and clothes for my children. This is the end of my life. This kind of feeling makes me feel like an empowered woman who is able to support to my beloved ones. (Woman participant 1, V3)

To summarise, the analysis shows that physical capital supported the women's empowerment as well as improving their psychological capital and economic growth (financial capital). Table 6.6 indicates the comparison output of the 45 women participants. From the beginning of the INGO's project, all of the V3 women participants revealed that they were treated with respect from the INGO staff and they began to notice that they were feeling empowered. Almost all the women participants from V2 felt empowered after 15 months of the INGO project, whereas the majority of the V1 women took longer to achieve this result, starting to feel empowered after 20 months and three V1 women did not experience this until the end of the 30-month project.

Table 6.6: Output analysis of physical capital

Output of physical capital	V1	V2	V3
Different types of livelihood resources (agricultural equipment, fishing net, boats, scale/ balance, sticky rice for selling, traditional food, etc.)	Eight out of 15 women bought various items for business; the remaining seven women bought household utensils and mattresses at first.	12 out of 15 women bought various items for business, The rest bought household stuff, utensils and mattresses at first.	All 15 women bought various items for business.
Household stuff, utensils and mattress, etc.	Eight women purchased after six months in business Seven women sold furniture to buy livelihood resources.	12 women bought after 10 months in business, three women sold furniture/gold earrings to buy livelihood resources.	15 women bought after 12 months in business.
Clothes, cosmetics, furniture for home	All 15 women bought after 10-12 months in business.	All 15 bought after 12 months in business.	Only 4 women bought after 15 months in business. Rest invested in their business.
Bicycles, motor bikes, tractors	Two women bought at least one item after 18 months as investment for logistics businesses.	Five women bought at least one item after 18 months as investment for logistics businesses.	12 women bought at least one item after 12 months as investment for logistics businesses, three women bought gold as investment.
Empowerment (secure feeling for living, satisfaction, happiness, ability to support family)	Only 12 women started to feel empowered after 20 months; three women were unstable in business and	All 15 women started to feel empowered after 15 months.	All 15 women started to feel empowered after 12 months. Due to income from business and being able to buy items for home/family.

6.9 Participation and engagement in relation to empowerment

This section presents the three main areas where the women participants made changes to their situations. These were through their participation and engagement, their traditional cultural roles and through social capital development, knowledge improvement and education. These factors influenced their empowerment. As stated

previously, prior to the cyclone, most of the 45 women participants took a submissive role in the family and communities. The traditional practice sand social norms previously hindered some of the women's access to information, education and business.

Following the cyclone, the women participants needed to 'step up', with the losses they endured becoming drivers for them to generate income and manage their households as well as community matters. As a result of their changing roles, these previously dependent women, who were used to taking subordinate roles at both the household and community levels, became independent breadwinners as well as peer educators in some cases for both their families and their communities.

> Yes, I was a dependent housewife before [Cyclone] Nargis, but my life has changed since I lost my husband during [the Cyclone]. As a mother of three, I am the only person to stand up for my children. It was a time for me to change to survive. Then, I pleasantly found my inner '*swaen-aer*' (in Myanmar language - strength) and '*swaen-yae*' (in Myanmar language - capability) in managing my home and business. I also have a good relationship with the other women now. (Woman participant 5, V1)

Regarding their social relationships within their families, 80 per cent of women participants stated that the financial support they provided contributed to better social relationships within their family, mainly because their family members acknowledged their contribution. Out of the seven women participants who lost husbands during Cyclone Nargis, five remarried during the 30-month INGO project period.

> Now, they [our husbands] know that their wives are also working for the family income, so they help their wives. For example, if their wives want to plant seasonal vegetables, they plough the row for the seeds, or feed water to the plants. (Woman participant 4, V2)

Regarding the impact of capacity building on the 45 women participants, the three local authority figure male informants, and the four INGO staff informants disclosed that the women gained knowledge from the INGO training that they could apply in their daily lives. This, in turn, contributed to positive changes in the social practices of the women. For example, knowledge and information gained from the communication and marketing training helped the women to attain better social skills in relation to both their social lives and businesses, which impacted positively at the individual, household and

village levels. Among the three villages, the V3 women attended the highest number of repeated training sessions and also attended regular meetings during the INGO project. The V1 women attended the least number of meetings. As a consequence, the V3 women formed the most women's network groups and the V1 women the least.

Traditional cultural roles of women

Regarding the role of social capital in relation to the individual and village level, all 48 village participants stated that the village women did not communicate well in the pre-cyclone period. However, attending training and participating in regular meetings promoted their levels of communication and helped them to develop better social relationships that built trust and social cohesion through different kinds of co-operative activities. These levels of participation resulted in the development of social capital within the women's network groups and their wider village communities. The Buddhist religion was an influential factor with regard to taking on debt.

> As a Buddhist, I do not want to owe any debt, as I do not want to carry
> that debt to my next life. So, I carefully managed the loan return as fast as
> I possibly could. (Woman participant 2, V1)

This concept was the underlying cause for loan repayments as well as a driver to generate more income and build better social relationships with others. It also prevented women from being loan defaulters and encouraged them to repay loans for other women if they were unwell (as previously stated). As a result of those practices, there were no loan defaults in V3; three loan defaults in V1, and three delayed payments in V2.

Social capital development, knowledge sharing and empowerment

With regard to the relationship between capacity building and women's empowerment, one third of the women participants were interested in sharing their knowledge and experiences with other women in the neighbouring villages. The V3 women comprised the highest number of peer educators who transferred knowledge gained from the INGO training they had received, and V1 had the least number of peer educators.

> I am very interested to share the knowledge I gained from the INGO training and my business experience with other women. Educating people is noble work to deliver good karma. (Woman participant 4, V3)

In addition, by arranging a schedule, two or three mothers organised reading groups for children at the WFS every Saturday and managed the study groups within each village. The majority of women from each village were delighted with this project because their children completed their homework there, instead of playing all the time after school. This activity therefore enhanced the educational attainment of their children while helping to build stronger social relationships among the women.

Regarding capacity building (human capital) and financial capital, all the women participants had opinions about keeping their children (both boys and girls) at school. Their attitudes after the cyclone and INGO project were completely opposite to their pre-cyclone attitudes.

> Instead of taking my children from school and sending them to work for earning as a dependent housewife because I needed extra income from my working children before the cyclone, I now prefer to support my children to complete their education. I now get money by myself. (Woman participant 2, V1)

In general, the 45 women participants and the three male authority figures noticed significant changes due to capacity building training and the deepening of social relationships amongst the women in each village. When the three male local authority figures were questioned with regard to women's empowerment, the V1 male participant showed interest in controlling all the women's work, the V2 male participant did not provide any support for the women, and the V3 male participant demonstrated a positive and supportive attitude towards the women's activities.

> I don't think they [the women] need to meet regularly and work in business together like us [men]. Before Cyclone Nargis, they met only at the donation ceremony at the monastery. They are now so proud of their work and their management skills. (Local authority figure male informant, V2)

It appears that the individual women's empowerment was a cumulative representation of their social relationships and social practice (social capital), financial situation (financial capital), educational status (human capital), psychological status (psychological capital), the ownership of resources (physical capital) and the changing traditional practices of the community.

6.10 Chapter Summary

A general finding from the primary data is that the situation of the 45 women participants regarding social capital, capacity building and empowerment changed significantly after the cyclone and during the INGO project. However, the levels of change achieved by the individual women varied. There was an overall increase in their psychological, physical, human, social and financial capital at both the level of the individual and the village network groups. In addition, the data analysis shows the inter-relationships between these different types of capital. In some cases these associations functioned to develop other types of capital. Among the five dimensions of social capital shown in Figure 6.1, the network groups were central for effective communication and the gaining of trust with mutual respect for further cooperation and social cohesion. All of these are factors that led individuals to be empowered. The five types of capital (output) form a feedback loop to the input section and contribute to building different types of capacity throughout the dimensions of the IPO model.

When the INGO commenced its 30-month project in the villages, the individual women became members of the women's network groups. All but a few (five) benefited from the collective/group power. With their collective power, the women offered group counselling, attended training together, performed both their individual and the networks' business, shared knowledge, profits, duties and responsibilities, gaining solidarity, and more. The majority of the women changed from being dependent to independent, which indicates improvement in their capacities and capabilities. As a result, this study shows that the role of social capital is vital as a catalyst in relation to different types of capital building, as noted by Coleman (1988). The traditional cultural

practices have changed so that many women moved from being dependent to becoming independent breadwinners for their families and decision- makers for the community. Women obtained access to information and were equipped with technical, social and educational knowledge through the INGO's capacity building training. In addition, the community meeting place, the WFS (physical capital), replaced the monastery where previously only those of Buddhist faith were comfortable attending.

The main key to the success of the individual women was, however, their levels participation and engagement in the different INGO activities. Their interest in learning and using the knowledge gained from training determined their development of different types of capital and their subsequent empowerment. The findings also indicate the influential roles of the INGO staff and the three local authority figures in relation to the achievement of the individual women and their network groups. Finally, the positive engagement between the village women and the INGO staff facilitated the smooth transfer of knowledge and on-the-job training. Chapter 7 presents the final stage of the research timeline and the women's situations after the INGO project within the three villages.

CHAPTER 7: SUSTAINABILITY AND CAPACITY BUILDING

7.1 Introduction

Chapter 7 presents the third part of the data analysis to assist in answering the main research question: **How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis?** Another aim of this chapter is to examine the sustainability of the INGO's project, as per the subsidiary research question 3: *How sustainable were the changes achieved as a result of the INGO project?* In this respect sustainability refers to the continuation or otherwise of the INGO project initiatives after their departure. The participants' situation after the INGO had departed is outlined in the chapter. As per chapter 6, the input-process-output (IPO) model is used to analyse the primary data.

7.2 Sustainability after the INGO project

This section presents the key themes arising from the data gathered from the 45 women participants and 3 male local authority figures. Sustainability was defined and assessed by whether or not: the women's network groups continued with the INGO initiated activities; continued to sustain and grow their businesses and finances and continued to develop voice and empowerment 28 months after the INGO project had ended.

7.2.1 Peer support, networks and empowerment

All the participants from V1, V2 and V3 attested to the value of the knowledge they had gained from the different types of INGO training. This included the experiences they had during the INGO project, and the lessons they learnt from other women after the INGO had departed. Together with the 3 male authority figures, all of the 45 women participants highlighted the important role of peer support within the women's network groups contributing to the sustainability of both capacity building and their social relationships. All 15 V1 women and 9 of the V2 women were of the view that the INGO

was pivotal in keeping up the momentum towards enhancing their capacity and social relationships (social capital).

Nonetheless, all 15 V3 women and 6 V2 women acknowledged the limited opportunities for women's development and economic growth in Myanmar. As a result, they wanted the INGO to move on and help other women in different areas, instead of coming back to their villages for a second time. The interviewees stated that they had gained confidence through using their knowledge and newly developed capabilities. By the time the INGO had left at the end of December 2011, their confidence was an important contributor to their empowerment.

> I was appointed as a community educator in early January 2011 by the INGO. Together with them, I conducted basic training for the other women from the same or nearby villages. But when they (INGO) left, I didn't have enough confidence to conduct training alone. But, my friends encouraged me to continue this volunteer work until now. Without them, I don't think I can continue my work to disseminate training to other women and girls. (Woman participant 1, V3)

Peer support within the women's network groups was key to the women in supporting their empowerment and motivation to keep up their voluntary work. It has been proposed that empowerment is changeable depending on the context and period in time - see Fatima (2017) and Kabeer (2012). An interviewee from V2 also had a similar experience to some of the V3 women:

> We [V2 women] have gained confidence that was generated through our collective work in social and business concerns since they [the INGO] were with us. I think confidence is the most powerful gift from our teamwork (Woman participant 3, V2).

Among the 45 women participants, the V3 women demonstrated higher achievement in social and business matters than did the V1 and V2 women. For example, all of the 15 women participants of V3 stated that they initiated some new activities based on the collective power of the women's groups and the experience they gained during the INGO project. Among many achievements, the women's empowerment is a good example of their collective achievement through social networks.

> Let me share one example of our group's initiative (smile). With women's power, we got a space from a higher authority to sell our farming products nearby the main market in Labutta in late 2012. (Woman participant 2, V3)

All three male village local authority figures discussed the significant work done by the groups of women.

> Unbelievable! They (women) just entered the meeting hall though no one was invited. They sat down at the back of the hall and waited until they had the chance to talk with our boss (a township authority figure). They reported their challenges based on their experience in selling their vegetables and seasonal fruits and requested our boss to arrange one place for their own agricultural products at the Labutta market (Local authority figure male informant, V3).

After that meeting, in late 2012, the higher authority leaders gave their permission for the women to use a market place in *A Khun Hlut Zae*, meaning 'the tax-free market place', near the central market. The capacity and capability of the women were shown when they managed the women's gathering for the market place.

> Prior to the township-level meeting, each female representative arranged meetings with other women within each village. When we got the market place, we applied a rotation model among the 27 villages and set schedules. We arranged meetings every day as reviews and organized weekly meetings to discuss the sale items (types of vegetables and fruit). The sale amounts of our fresh vegetables and fruit rocketed. Of course, we argued a lot, but we all smiled when we got more money and when the profit was shared equally [a big smile]. (Woman participant 1, V3)

Through an arrangement with the township authority figure, the women were not required to pay tax and so they were able to sell fresh products at minimum cost directly to consumers. In turn, the women set a schedule for cleaning the space after the morning market so that children could use it in the afternoon as a playground. This was a very significant achievement and clear evidence of the empowerment of these previously dependent women. Because of the market space, the majority of women participants, who produced different kinds of vegetables and fruit, increased their income dramatically.

> We all were so excited and felt satisfied when we ensured the market
> outlet for our vegetables and fruit and rice as well. From the individual
> and group products, our income increased dramatically. Since we have the
> space, we do not need to worry about sales. (Woman participant 2, V3)

Comments such as this clearly indicate the confidence and empowerment of the individual women. Gathering with others in the women's network groups gave them collective power (a higher level of empowerment as a group) and courage (psychological capital) through peer support.

In addition, the women raised their voices as social actors in order to solve their business problems. The market place (physical capital) became the foundation for achieving more income (financial capital) and more solidarity and sharing of responsibility/collective action among the women's network groups (developing more social capital). Those achievements gave the women more satisfaction (a higher level of psychological capital) and business experience (human capital) and led to them change their marketing style. This incident shows that the inter-relationship of different types of capital can generate the same or different types of capital towards the empowerment of individuals.

All of the 45 women participants considered that interactions within the network groups led to the development of mutual respect. In turn this acted as a solid foundation, so that they gained trust in the other women and the authorities. Mutual respect between the township authority figures and the women's groups was one of the main reasons they were given the market place in the town to trade their goods.

Some negative incidents did occur, however, for the women selling in the tax-free market place. For example, 80 per cent of the participants disclosed that they had some conflict with the vegetable/fruit shop owners who paid taxes for their shops. These shop owners complained to the township authority figure that their prices needed to be higher than those in the tax-free market because of the tax imposition. To avoid conflict with these shop owners, the authorities took back the tax-free open space for the women. Consequently, the women representatives negotiated directly with the shop owners and supplied their products at wholesale prices to those shops. Following negotiation, within one week, the women were allowed to use the market place again.

> We were so afraid to lose our market place and also understood the reason for [the shop owners'] anger. After discussion with the other women, and another six women from different villages, I went to them [the shop owners] directly and negotiated the wholesale prices as suppliers. It was a successful discussion and resulted in the prices being made the same both in the shops and in our tax-free market so that the shop owners did not give us any more problems. (Woman participant 3, V2)

Examples such as this indicate the skill of the women in decision-making, and their capacity to negotiate and to retain the market place when the whole venture was in jeopardy. Two INGO informants (interviewed after primary data collection) stated that the marketplace issues occurred outside their guidance.

7.2.2 Participation, engagement, mutual respect and empowerment

This section focuses on the role of psychological capital and social capital (both forms of intangible capital) for empowerment of individuals beyond the INGO project. The 45 women participants stated that once the INGO departed, they still continued with regular group counselling in the women's network groups at the Women Friendly Spaces (WFS) as per the following quote:

> Our meaning of 'counselling' is a group talk (smile). All of us discussed one issue and shared our opinions and the possible solutions based on our own experience (Woman participant 3, V2).

The V3 women organised more group counselling, meetings and training than the V1 and V2 women did, and the V1 women organised the least. Apart from the different numbers and frequency of counselling and gatherings, the content of each session was varied across the three villages. For example, at every meeting (including group counselling), the V3 women initiated an activity where they showed gratitude to their supporters and gave loving kindness (*Metta*) to those who blocked them on their path to success. All 15 of the V2 women and 12 of the V1 women participants indicated that they had learnt these good practices from the V3 women and they applied that kind of good practice in their villages every Saturday afternoon at the WFS.

> We copied it from the V3 women who initiated and applied this good practice at our weekly meeting on Saturday afternoons. First, we say thanks to all attendees and send *Metta* (loving kindness) to ourselves, our families, our parents, our neighbours, our women friends, our enemies, our customers, all villagers and those who support us in gaining success. It takes 15 minutes and we feel calm and comfortable. Then, we have group counselling with the women. It takes about 30 minutes. The last session is for sharing our good and bad experiences of the week. We have gained experience and knowledge from each other. It takes 20 to 30 minutes depending on the numbers of women who want to share. Afterwards, we all eat together the food we brought from home and laugh. We named it "the weekly recharge to our soul and energy" [laugh]. (Woman participant 4, V2)

The interviews with the four INGO staff indicated that the INGO did not incorporate any religious elements in their project activities, as their mandate stated that they should undertake no religious, profit-making or political action in Myanmar (see Chapter 2). The example quoted above indicates that the women participants maintained the INGO practices, as well as developing new activities relevant to their own culture, in order to achieve better results. That kind of initiative, which supported the integration of psychological and human capital, assisted the development of social capital also. Among the 45 women participants, 9 women from V3, 6 from V2 and 2 from V1, became community educators and peer trainers of the other women from the same or nearby villages.

As community leaders and peer trainers, these women proved their capacity, capability and ability to lead other women, as indicated by their evident empowerment without the support of the INGO. The majority of the 45 women participants, who were poor and/or subordinate in the pre-cyclone situation, were enthusiastic about their situation since they were able to manage their own lives and help to change other women's lives since the INGO project. Five women, however, still expressed dissatisfaction with their lives following the INGO project.

All of the 45 women participants agreed that, in addition to confidence, there was a need for strong will, optimism, hope and resilience for them to be able to participate and engage with the women's network groups.

> We need strong will, resilience and the diligence of individuals and group power to overcome all barriers as well as support from elsewhere, together with hope, dreams and optimism for our future (Woman participant 1, V3)

This reflection from a V3 interviewee indicates the collective power gained through the women's network groups. Conversely, two V1 women participants who disclosed that they participated less in the training and meetings (due to their pre-cyclone higher social status), claimed that they had experienced more problems in relation to social, health and economic matters after the departure of INGO in December 2011. Two years and four months after the INGO departed, which was April 2014 , their physical and financial resources had declined (one woman lost one quarter of her assets) when compared with their achievements during the INGO's 30-month project.

> I have lost my happiness and enjoyment since our resources were destroyed (by Cyclone Nargis) on 2 and 3 May 2008. But I was happier when [the INGO staff] were with us. When they left, I didn't know where I should go to seek advice because I didn't want to talk about my problems with the other women from my women's network group because they were our farmers before the cyclone. Hence I solved my problems alone because I didn't trust them, primarily with business matters. Now, my savings and investments have decreased; let's say by about a quarter of my assets as my business was falling apart. So I lost hope again and lost optimism because of the lack of business fortune. The consequences were I didn't want to work as diligently as I did with the INGO, I had no more patience at all, no stronger will and no wish to have more discussion with other women who achieved successful results in their business. (Woman participant 1, V1)

The loss of resources (physical capital) resulted in a lack of positive psychological capital: this woman and a few others were not happy, did not trust others, lost hope and did not want to talk to other women members. This also affected social relationships with other successful women in business.

Those women who became successful in business and in their social lives discussed the importance of psychological factors such as resilience, hope, happiness, patience and strong will in achieving their goals. They also expressed satisfaction with their jobs, family, close relationships and trust with the women members of their network groups. The networks (social capital) were the catalyst for building social relationships and expanding social networks. This led to the empowerment of individuals as per Luthans

et al. (2004) and Luthans and Youssef (2004) research as he proposed that the positive stages of psychological capital (hope, optimism and resilience) are key for building social relationships and expanding social networks.

Based on the experiences of the 45 women participants, it appears that the development of psychological capital can result in the development of social capital also (for example the participation and engagement in the women's network groups). Consequently, it is proposed that the level of participation (and engagement) relates to the subsidiary research question 1: *What were the drivers that assisted, and the barriers that restrained women's capacity building, and empowerment during and after the INGO project?*

The level of individual participation and engagement in the network groups, in turn, was an important contributor to the empowerment of individuals and groups. In the few cases where women (from V1 and V2) did not develop positive psychological capital with mutual respect and trust towards the other women, this acted as a restraint in relation to their levels of participation and engagement in the networks.

This study also determined that pre-cyclone social class and resource ownership fundamentally affected the women's capacity building and empowerment. When comparing the three villages, the V3 women participants attained higher levels of resilience even though the cyclone destroyed all of their resources (bamboo houses). As per Chapter 6, poverty was not a new experience for them as they were used to living with nothing, so possessed inherent resilience. As Zhou et al. (2010) maintain, inherent resilience pre-cyclone can assist disaster survivors in their ability to adapt in the aftermath. For example, the V3 women were more active than the V1 and V2 women during and after the INGO project. During the INGO project, the V3 women took all of the opportunities provided and made huge efforts to change their lives. Their pre-cyclone experience suggested that there might not have been any other chance to do this in their lifetime. This was demonstrated in India, where illiterate and destitute girls and women demonstrated an ability to generate positive outcomes when provided with appropriate resources (see Kabeer 1999, 2012). As a woman interviewee from V3 explained:

As a poor, illiterate, migrant and orphaned woman, it has been so difficult for me to reach this level of achievement in my life. If there were no cyclone, my life would not have changed. Now, my family are very happy with what we have now. The strong will and dedication to gain knowledge from training was the only way for me to develop. For me, I have many more women friends than before and am able to share my knowledge with other women who missed the opportunity to attend training with the INGO. I am thus fully satisfied when I can give my help to other women to stand up. (Woman participant 5, V3)

7.2.3 Intangible capital, engagement and empowerment

As stated in chapter 6, intangible capital refers to social, human, and psychological capital. This section analyses the input-process-outputs (IPO) regarding intangible capital after the INGO project.

After the INGO project, the women participants changed their attitudes towards the value of education. None of the 45 women participants received any other formal training from other organisations or groups during the 28 months between the INGO's departure and the data collection stage of this study. However, they did learn lessons from other women at the experience-sharing meetings held at the WFS every Saturday. Another finding is that the five illiterate women participants voluntarily and enthusiastically attended the basic literacy and numeracy lessons provided by the youths who had passed the 11th grade in their village. The male local authority figure (informant), V3 said:

Nowadays in our village, mothers wanted to keep their children in school, instead of pushing them (their children) to be school dropouts and seeking money from them as child labour. Those women who did not know how to read have now attended the basic literacy courses that were taught by two girls who passed the 11th grade (Local authority figure male informant, V3)

Several women participants shared their changed expectations of their children as educated individuals, instead of expecting income from their children who had been forced to leave school in the pre-cyclone years. Furthermore, these women pooled their funds to buy books and journals for their children and themselves to help the monthly group sharing sessions at the library in each village. Together, most of the 45 women

including the previously illiterate women participated in group reading and set the schedules to manage the library in their villages. Three women only donated money and did not participate and two women participated infrequently. The majority of those women had also increased their incomes, buying radios and televisions for their families following the INGO project. Prior to the cyclone, only five families in V1, two in V2, and none in V3 owned a television. This tangible evidence of their financial growth (financial and physical capital) also assisted in enhancing their confidence and capacity building.

All but five of the 45 women participants maintained and/or increased their achievements following the departure of the INGO (a period of 28 months), providing evidence of the sustainability of their capacity building. This indicates the results in relation to tangible capital (financial and physical capital) from the combination of intangible capital (social, human, and psychological capital) - the latter being the foundation for the women cyclone survivors to participate in the women's networks. These factors also contributed to their capacity building and empowerment.

7.2.4 Tangible capital and empowerment

This section analyses the input-process-output (IPO) regarding the tangible capital aspects (physical and financial capital) of the women participants following the INGO's departure. With regard to physical capital, again all but five of the 45 women participants stated that they had become owners of different types of physical resources such as land, houses, livelihood equipment, bicycles, motorbikes, tractors, sewing machines, gold, and other resources that generated further income following the INGO project. In particular, nearly all of the women gained confidence in making business investment decisions to including consideration of the potential risks.

> I am not afraid to sell my gold chains at any time for investment if I see a business opportunity. Instead of borrowing, I transformed it (my gold chains) into cash. I know that I can buy a better one (gold chain) when I make a profit. But, my five years' experience has shown that there is no guarantee in business. I can be a either winner or loser this time, but I have to pay more attention in my business when the capital is becoming higher than before. (Woman participant 1, V3)

Some women from V1 and V2 who chose not to participate and engage with the other women in their network groups did, however, experience many problems in their businesses. For example, a previously poor woman invited her boss who was rich pre-cyclone to attend meetings but she would not participate.

> I wanted to help her because she was my boss before the cyclone. I worked at her father's betel leaf farm as a daily labourer. But she would not accept me, didn't want to meet or listen when I shared my experiences. (Woman participant 3, V2)

This type of experience demonstrates how some previously wealthy women allowed their pre-cyclone status to deter them from participation which would have played an important role in their economic growth, social capital and empowerment. This interviewee and one other from V1 stated that they did not want to participate in the women's networks due to their pre-cyclone social status, as they did not trust the women who had had lower social status pre-cyclone. This indicates that intangible capital can lead or limit the growth of tangible capital (i.e. financial and physical capital) of individuals.

Nonetheless, the majority of the 45 women participants indicated that they had the ability to manage, not only their individual income, but the social funds in each village as well. All 15 of the V3 women, 12 of the V2 women and 11 of the V1 women explained that they had enough cash and equipment to arrange their daily work, together with some savings (gold, jewellery, and money in the bank). This meant that they only required loans from social funds when they wanted to expand or start new businesses. All of the women participants disclosed that they wanted to share this loan opportunity with others. But, some women did not borrow loans from the social funds when they realised that they had reached their personal capacity and got sufficient income.

> I have reached my utmost level in production and feel satisfied in terms of my business results and income. I don't want to do more than I have now. The main problem for me is my husband will meet prostitutes when we have more extra money or might start extramarital relationships with others if I earn too much in our business. So, I just stay with my current achievement and am happy with whatsoever I earn. What is the point to get pain in marriage with a lot of money? (Woman participant 2, V2)

Social cohesion and cooperation among the women was evident when they shared the opportunity to access loans from social funds with other needy women. For example, in order to share these loan opportunities with others, one interviewee, who was the first loan beneficiary in V3, stated that she did not apply for more loans from the INGO as she was already satisfied with her current income and assets. However, she did join in every weekly meeting.

Among the three village loan committees, the V3 women's committee utilised their social funds to disburse more loans than the other committees. The V1 had the fewest loan recipients. The V3 women not only retained the original loan amount provided by the INGO, they also provided loans to other V3 women who were not involved in the 30-month INGO project. The V3 women committee for social funds adapted the INGO rules in relation to the loan repayments and penalties to loan defaulters. For example, when some V3 women faced repayment problems due to health issues, the members of the network groups helped them solve the problem.

> When I had a reproductive health problem and underwent surgery, it took three months for me to recover, while I could not work. I spent all my savings and had no income from work. During those months, my friends lent me enough money for my family and helped with my loan repayments. They also did my assigned duty in the group work at the agricultural shop in town. I am so blessed to have my friends and consider that our friendships are the most important element in my life. It is 'karma', which means that the good will return if I do the same to my friends from the women's network groups. (Woman participant 3, V3)

As per the INGO guidelines, the V1 and V2 women's committees kept their social funds at the bank in town and withdrew money when loans were requested. The V3 women's committee, however, put only 50 per cent of their funds in the bank and the remaining 50 per cent was lent to women from the nearby villages.

> We put some money in the bank and kept some with us as guided by the INGO. The bank interest rate was low so we informed the women from the other nearby villages about our loan assistance. When they came and submitted loan requests, we replaced the INGO's position for checking the loan applications and conducting financial training by our women peer educators. We made a field visit before any loan was disbursed. We

disbursed the loans and monitored the first three loan terms closely. Of
course, they also have to form women's network groups and have regular
meetings like us as part of the loan conditions. We were so proud of their
successful achievements in business and our contribution in helping other
needy women from nearby villages. (Woman participant 4, V3)

The two INGO staff, who were interviewed after the primary data was collected in the
three study villages (see Chapter 4), stated that these actions were purely due to
initiatives by the V3 women who were poor, submissive and dependent in pre-cyclone.
This scenario indicates the capacity of the V3 women as empowered women. They were
the INGO loan beneficiaries at first, then they were trained as community peer educator
women (TPEW) to assist the INGO staff in training. These actions by the V3 women
also demonstrate the 'capacity-co-development' of the women beyond the INGO
project. The V3 women gained more confidence and expanded their own financial
systems to assist other women in terms of knowledge development (financial training),
access to resources (loans), and support to form women's network groups, as well as to
facilitate meetings and promote their economic growth.

The township authority figures also acknowledged the women's capacity building, the
creation of better and stronger social networks and their improved economic growth.
One local authority figure, however, did try to influence the V2 women, offering a better
interest rate than the bank in order to access his wife's social funds:

> Our local leader [the local authority figure] and his wife were not happy
> about our decision to save the social funds at the bank. We did not want to
> lend further loans from the social funds to the wife of the local leader who
> wanted to borrow our social funds with a higher interest rate than the
> bank. All of us worried about the repayment from our boss's wife as it
> might be difficult to ask for it due to her position. Particularly, his wife
> didn't attend any financial training when the INGO were with us, and
> never get close with us at all. So, we decided to keep the money at the
> bank rather than lend it to her. We were so afraid of making the decision
> to resist our boss, but we did not want to make any mistakes and lose our
> funds. I can't decide this alone but the decisions were made when we were
> in our network group, so we gained more power [smile]. (Woman
> participant 5, V2)

This example shows that the women gained value from their collective group power and were able to protect the community resources. Individuals also gained support from the network groups. This, in turn, empowered them to resist the financial offers from the powerful V2 local authority figure and his wife. By contrast, the V3 local authority figure supported and encouraged the V3 women's committee to save their money at the bank. As demonstrated, the role and attitude of each village's local authority figure influenced all of the 45 women participants in different ways.

Forty-one of the women participants involved in this study acknowledged how much they had developed through the INGO project in terms of their education and the development of their social, physical, financial and psychological capital. This change in their capacities and capabilities supported their transformation from being dependent to becoming independent, decision-makers in their homes and communities. In the context of the women's network groups, the individuals developed and then achieved even more success from the network group experience. They also had a strong desire to share their experiences and help other women who needed support, opportunities, knowledge, training and financial resources.

> My life becomes more meaningful when I am able to help other women. Like my friends, we are always thinking that we do not want to make any mistakes so we need to consult with friends if we have problems or want to do something new. When we are strong enough, we can give our helping hands to others. This is our life. We get chances from [the INGO] and we give chances back to [other village women]. (Woman participant 2, V3)

An analysis of both tangible and intangible assets in the 28-month period after the INGO departed indicates that the women participants developed ability and gained confidence to:

- operate their business successfully and reinvest where appropriate

- support each other within the women's network groups in many ways, including decision-making

- stand up to their local authority figure due to the collective power of the network group

- change their culture from being dependent to independent women and

- demonstrate leadership, in some cases, by providing loans and educating other women as TPEW.

The last point above was particularly relevant with regard to the women from V3 who were the poorest women of the three villages before the INGO project, and who took on the role of helpers to other women from the same and different villages. The V2 women took on these roles to a lesser extent than those from V3, and the least participation in volunteer work was from the V1 women overall.

7.3 Significant findings of this study

This study identifies two significant findings, which emerged from the primary data analysis. These concern three new themes relating to women's capacity building and an adapted social capital framework. Figure 3.7, Chapter 3 represents the conceptual framework used for this study. Chapters 5, 6 and 7 utilised the framework to analyse capacity building, empowerment and the role of social capital including the examination of the 'drivers and restraints' in the process.

Dimensions of social capital

Figure 3.7, Chapter 3 comprised five dimensions of social capital: trust, networks, communication, cooperation, and social cohesion. The empowerment dimension of social capital was shown as a potential output.

The primary data analysis conducted 28 months after the INGO's departure indicates that, in this study, the network group dimension is the foundation for the development of the other dimensions of social capital. In addition, with tangible (physical and financial capital) and intangible capital (human, social, and psychological capitals per Figure 3.7), this study identifies three supporting themes related to social capital development. These are participation, mutual respect, as a precursor to trust and engagement.

If they did not participate, the women interviewees could not begin to communicate and build social relationships with others within the women's network groups. Mutual respect, together with trust, was identified as another important theme, which can be supported through communication, social and business processes towards the building of trust. In this study, participation and engagement led to the development of social relationships, cooperation and collective work within the women's network groups. Ultimately, the various levels of participation and engagement within the network groups influenced the women's levels of capacity building and empowerment.

Figure 7.1 below represents the three supporting research themes emerging from the data analysis. The two segments illustrate the themes of mutual respect and engagement. Participation is the core as none of these activities were found to be possible without participation. Empowerment resulted from the interconnectedness of five dimensions: networks, effective communication, collective (social cohesion) and cooperation, as outlined in the later research framework.
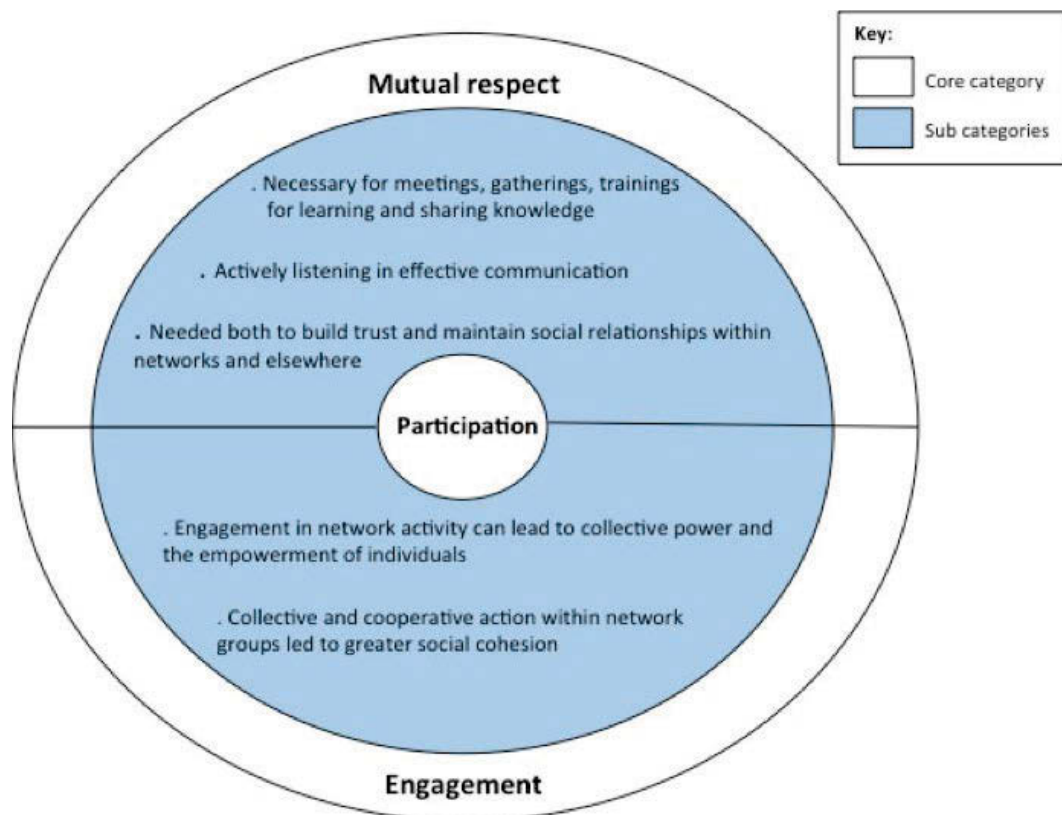

Figure 7.1: The factors influencing capacity building, empowerment and social capital development

Effective communication was found to be a basic requirement for capacity building, empowerment and the social capital development process of the women interviewees within the network groups. Effective communication was necessary for the village women to enable them to fully participate in the network groups and meetings; to complete training; and to support learning and sharing experiences with other group members. If the women did not participate in the network groups or the INGO activities, of course they did not communicate or engage with the other women. The need to listen and work with mutual respect was also found to be important to maintain social relationships amongst the women and to build trust.

Engagement in collective and co-operative work was found to assist the women participants in gaining more experience, which, in turn, led to them having more confidence and empowerment. When engaged, they were more likely to gain peer support and benefit from the collective power developed by the women in the network groups. This study illustrates the influence of a lack of engagement in collective and co-operative work. For example, the 5 women who did not participate or engage with other women in the network groups did not build their capacity or become empowered to the same level as the women who did participate and engage.

Participation in the network groups, engagement, effective communication and mutual respect, as a precursor to trust, were all found to work together to enhance collective and cooperative work and the building of greater social cohesion overall. Consequently, empowerment was evident when the various themes shown in Figure 7.1 functioned synchronically in relation to the women's network groups.

Adaptation of the conceptual framework

This section explains the analytical framework used for this study. The conceptual framework (Figure 3.7), which comprised 6 dimensions and is integrated with the input-process-output (IPO) model was adapted from the 2011 World Bank social capital framework.

Following the primary data analysis (Chapters 6 and 7), three newly identified supporting themes (see Figure 7.1) were included in Figure 7.2 below. These related to the building of social capital - participation, mutual respect as a precursor to trust and engagement. These three supporting themes were confirmed as important for the capacity building and empowerment of the women. In addition, this study identified a hierarchical flow of development in the process section and the sequential development of five different types of capital (in the output section) based on the research analysis.

It was evident that intangible and tangible capital was developed sequentially in this study. The output section of Figure 7.2 indicates that intangible capital preceded the development of tangible capital in relation to the women participants' sustainable capacity building, empowerment and the different types of the capital development process.

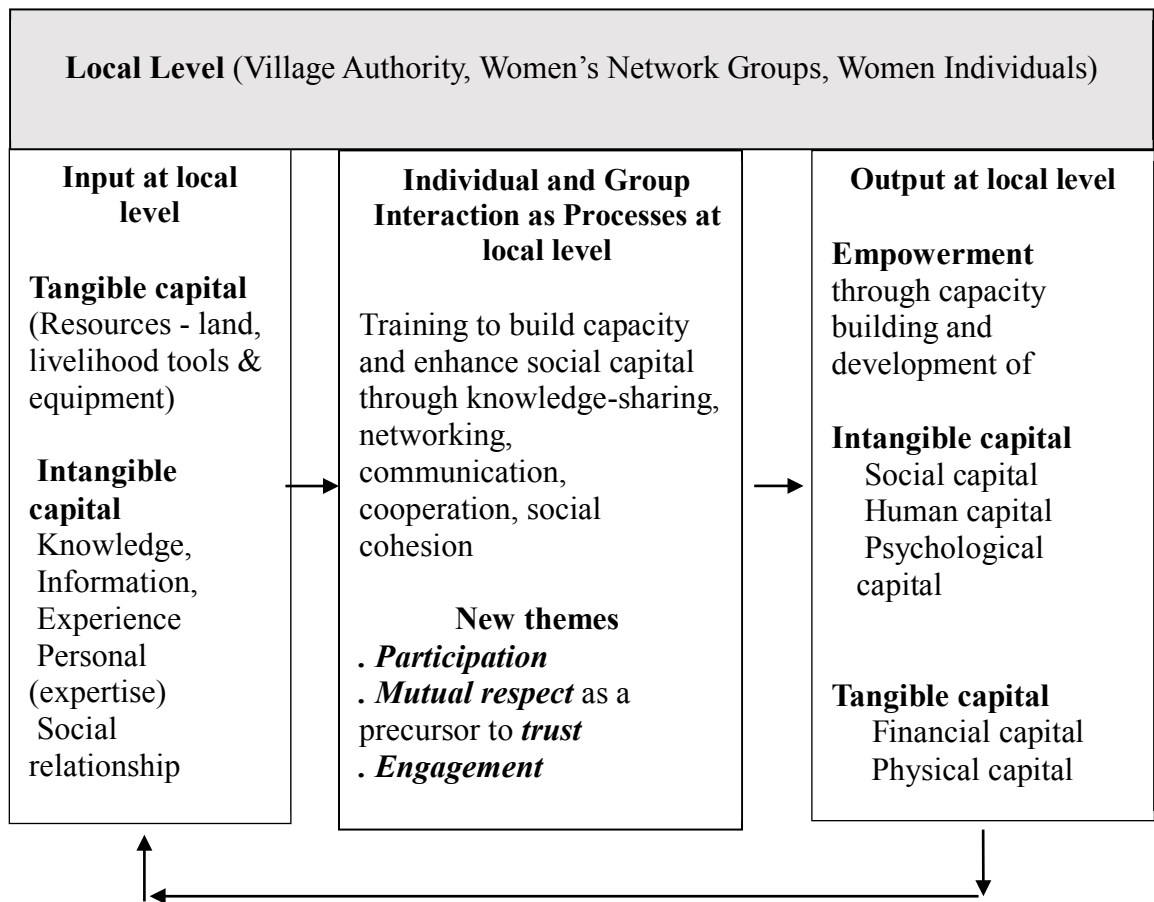| **Local Level** (Village Authority, Women's Network Groups, Women Individuals)		
Input at local level **Tangible capital** (Resources - land, livelihood tools & equipment) **Intangible capital** Knowledge, Information, Experience Personal (expertise) Social relationship	**Individual and Group Interaction as Processes at local level** Training to build capacity and enhance social capital through knowledge-sharing, networking, communication, cooperation, social cohesion **New themes** . *Participation* . *Mutual respect* as a precursor to ***trust*** . *Engagement*	**Output at local level** **Empowerment** through capacity building and development of **Intangible capital** Social capital Human capital Psychological capital **Tangible capital** Financial capital Physical capital

Figure 7.2: The adapted research framework

Importantly, the role of the INGO was replaced by the collective roles of the women interviewees (the V3 women in particular) who helped their fellow women villagers by supporting their capacity building and enhancing their social capital. Two years and four months after the INGO's departure, the village women were able to take on the various roles that had previously been undertaken by the INGO staff. This meant that they were in a position to help other women achieve what they had achieved. As a result, the conceptual framework used for this study was changed to include the three supporting themes as per Figure 7.2.

This chapter considered the sustainability of the project beyond the INGO's departure from the three villages. It also identified various factors related to the women villagers' empowerment, their levels of capacity building and the continuation of the women's network groups after the departure of the INGO.

7.4 Chapter summary

This chapter has focused on the village women's situation 28 months after the INGO departed (on 31 December 2011). It was determined that, over two years later, all but five of the 45 women continued to develop their capacity and become more independent in various ways. For example, as empowered women they gained agency and voice to access the market place for their business, negotiated sale prices with other shop owners, and justified the usage and protection of their social funds, particularly in V2, among other actions. As observed by Kabeer (2012), with consent, women have the ability and capacity to change their situation for the better when opportunities are provided.

The women's increased economic growth (financial capital) enabled them to buy radios and televisions (physical capital) to access information (social capital). This meant that they were no longer so dependent on the local authority figures in each village. The women maintained the women's network groups in the women friendly spaces in each village where all kinds of communication and information were exchanged. The TPEW also continued to train other women so their improved levels of confidence (psychological capital) facilitated their participation and engagement in collective work.

Thus, as empowered individuals they were supported by stronger social capital and the other four types of capital associated with it. The following chapter presents the conclusions, implications and contributions arising from this study.

CHAPTER 8: CONCLUSIONS AND IMPLICATIONS

8.1 Introduction

The final chapter of a doctoral thesis is like the completion of a jigsaw puzzle (Connell 1999; Perry 1998). It begins with the literature review, which outlines some missing pieces, while the following chapters present how the missing pieces may be found, and the last chapter describes how the new pieces fit to make the whole picture clear. This final chapter of the thesis describes how the findings of this study contribute to existing research literature on the topic as well as the potential for practical applications.

Using the jigsaw puzzle analogy, the research questions are addressed first, and then the findings from the data collection are presented in order to complete the picture. The limitations of the study and suggestions for further research, as well as the implications for theory, policy and practice are discussed in the light of the findings.

8.1.1 Background

Millions of people and local economies across the globe have suffered due to various natural disasters (UNISDR 2008, 2015; IFRC 2012). There is a particular dearth of studies by locals or official organisations concerning the recovery process of disaster-affected women (Kawanami 2013), Myanmar in particular, For example, data of devastated loss (particularly lives and resources) due to Cyclone Nargis were varied from different data sources such as the Myanmar government, the UN/INGO and the local communities (Honda 2009). Kawanami (2013, p 24) further points out that 'statistics and quantitative data are difficult to obtain in Myanmar because of the lack of systematic management; data is scattered'.

The findings of this study were intended to achieve two goals. Firstly, to contribute to research on the topic of women's capacity building, empowerment and social capital development, particularly during the process of recovery after disaster, and secondly, to inform women's capacity building and recovery projects following disaster.

8.2   Overview of the research design

The study met the intended aim of conducting qualitative research to analyse the situational changes of 45 women cyclone survivors from three Myanmar-based villages. Moreover, the results of the 30-month INGO project are presented from the village women's 'insider' perspectives. None of these components had been researched previously.

As discussed in Chapter 5, the INGO project documents were analysed prior to the selection of three villages used for the primary data collection. As proposed by Scott (2006), the document analysis offered a general overview of the outcomes following the 30-month INGO project. However, the document analysis was only able to analyse the quantitative results of the INGO project, which concerned the type and frequency of activities, as well as the number and frequency of the women's participation.

In common with Chenail's (2011) observations, the document analysis conducted for this study was not sufficient to identify the underlying causes of how and why the women cyclone survivors participated in the INGO's project, and what, if anything, had changed in relation to their capacity building, empowerment and social capital development. It was evident that documents alone would not support the identification of the women participants' underlying motives (Myers 2009; Silverman 2006), particularly in relation to the changes they experienced. Nonetheless, when document analysis was combined with the findings from two comparative methods: within-case (concerning women in the same village) and across-case analysis (concerning women from the three villages), it helped to strengthen and explain the research findings (as per Mahoney 2007).

To obtain rich, comprehensive and well-developed primary data for this study, different types of data collection methods were applied (Denzin 2006; Golafshani 2003; Johnson 1997; Patton 2015). The primary data was gathered from 22, one-on-one, semi-structured, in-depth interviews (15 women, 3 male authority figures (one from each of the three villages) and 4 INGO staff who were involved in the 30-month INGO project). Three focus groups were also held with 10 women from each of the three villages. The in-depth interviews and focus groups allowed the women to disclose their insights and present their different realities (Alshenqeeti 2014; Kvale 1996).

Participatory Process Maps (PPMs) – refer to a new method of data collection developed for this study. The PPMs were created to assist the 15 women interviewees in overcoming some of the challenges they might otherwise have experienced during the interview process. In particular, they assisted their recall and identification of experiences over time. In common with Rabionet (2009), it was determined that the data gathered from the three focus groups only served to support the general research themes (Cameron 2005) rather than provide in-depth information. The methods used to collect the primary data are shown in Figure 8.1 below which indicates how the different types of qualitative research methods were used to collect data and were triangulated with the intention of providing internal validity (Barbour 2001; Patton 2015).

One value of the PPM was to empower the interviewees in the process of telling their real life stories (Panek & Volk 2013). On a practical level, it helped them recall information and focus on relevant material, which also benefitted the interviewer. In so doing, it greatly reduced the time taken for the interviews.

Participatory mapping (PM) has previously been utilised widely in research for data collection (United Nations 2006) to help provide a sense of ownership (IFAD 2009). PM can also provide authentic information from individuals and communities in relation to areas of concern (Panek & Volk 2013). While a limitation of PM is that it is likely to capture a 'snapshot' of a point in time, PPM requires recall of a process unfolding over time. Another benefit of PPM is that it assisted the researcher as a guide for analysis following the interviews.
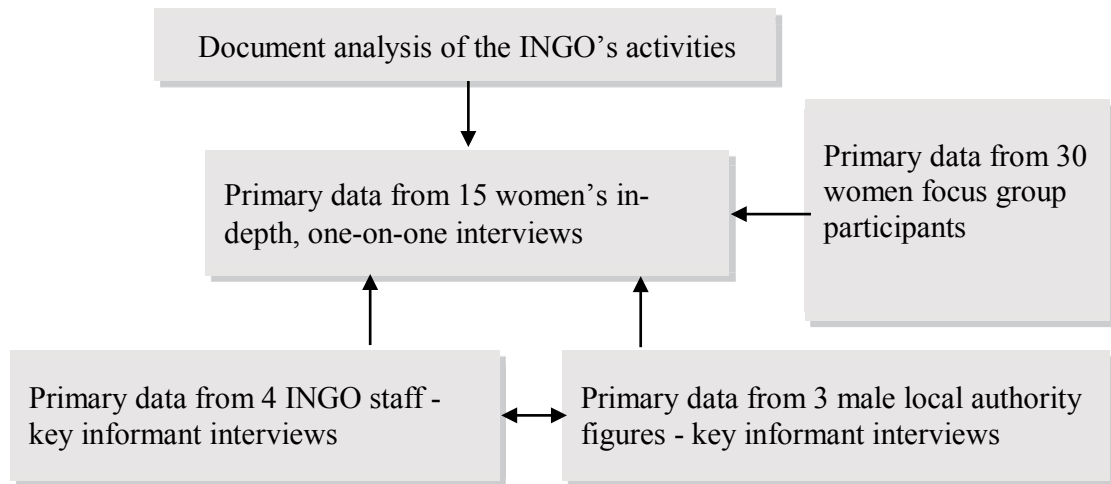
Figure 8.1: The combined research methods/sources used for this study

8.3   Contribution to research methodology

It has been proposed that the challenges of qualitative methods are the inability to generalise information, its interpretive nature, subjectivity concerns and the limited opportunity for reinterpretation because of the time that it takes (Drew et al. 2010). In order to address such criticisms, Tracy (2010) proposes what she refers to as eight 'big tent' criteria intended to assist quality in qualitative methodological research. These are: ' (a) worthy topic, (b) rich rigour, (c) sincerity, (d) credibility, (e) resonance, (f) significant contribution, (g) ethics and (h) meaningful coherence' (Tracy 2010, p. 849). Tracy argues that 'these markers provide a common language of excellence for qualitative research and a useful pedagogical compass. They can help us engage in dialogue with power holders who might otherwise regard qualitative research as just a good story' (Tracy 2010, p.849). It is proposed that this thesis meets the eight 'big tent' criteria, making a contribution to both the research methodology and to further research on the topic.

8.4 The research sub-questions

The principal research question is: **How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis?**

The three subsidiary research questions are as follows:

1) What were the drivers that assisted, and the barriers that restrained women's capacity building, and empowerment during and after the INGO project?

2)   How did the women cyclone survivors perceive the role of networks and tangible/intangible capital in the recovery process?

3)   How sustainable were the changes achieved as a result of the INGO project?

The research problem, as identified in the literature review, concerns how rural women based in Myanmar may not only survive after disaster, in this case the cyclone, but also thrive, achieving more and potentially taking on new responsibilities such as head of their household since many of the participants' husbands and other male family members had perished in the cyclone. Hence, the focus on capacity building and empowerment also takes into consideration the women's situations prior to the cyclone, which were, in many cases, found to influence the speed and effectiveness of their recovery.   Chapter 7 answers subsidiary research question three. Therefore, this section addresses the first two subsidiary research questions before responding to the principal question.

8.5 Drivers and barriers to women's capacity building and empowerment

This section refers to the drivers and barriers associated with the village women's capacity building and empowerment in order to answer subsidiary research question one. The primary data indicated that the policies and practices associated with the Myanmar government, the appointed local authority figures, and the traditional practices were all factors that could affect Myanmar women's capacity building and empowerment. Firstly, the Myanmar government restricted access to the National Registration Cards required for school registration, travel to other areas of Myanmar and access to private loans. Secondly, traditional practice favours access to education for boys, and encourages girls to undertake indoor, unpaid work while boys work outside and earn the family income as breadwinners. As a result, many women take on passive, subordinate roles and are dependent on men both socially and economically – a common situation

according to Harriden (2008) who states that Myanmar women are naturally encouraged to take passive roles at home and in the community.

Specifically, the social structures, social networks, and ability of individuals to interact within them are fundamental for capacity building and empowerment (Fatima 2017; Kabeer 2009, 2012). These observations are aligned with the World Bank's definition of capacity which covers three areas (McNeil & Woolcock 2004): social structure and the corresponding individual behaviours or group interactions (Coleman 1988), the social networks and norms for community productivity (Putnam 1993), and the role and policy of the State and community (Fred-Mensah 2004). The role of government, government policy and practice, which refers to social structures, is relatively easy to distinguish, whereas traditional practices and the role of women are not easily differentiated. This is primarily because, as Fatima (2017) and Kabeer (2009, 2012) maintain, they are embedded with regard to the socialisation of women, affecting their perceptions, beliefs and practices in terms of how they manage their day-to-day work and lives as per the findings reported in relation to this study.

As Field (2003) explains, the central concept of social capital is that 'relationships matter'. That is why a number of authors have linked a lack of social capital with gender (Eagly & Carli 2007; McAdam, Harrison & Leitch 2018). McAdam et al. (2018) posit that gender affects social capital accumulation so that women have less social capital than men. They further emphasise the particular problems women face in networks with mixed genders as they do not, or cannot, invest in building their social capital, largely due to their lack of influence thus leading to systemic disadvantage (McAdam et al. 2018). However, the networks referred to in this study comprised women only and took place in the Women's Friendly Spaces.

8.5.1 The influence of social structures pre-cyclone

It was evident that prior to the cyclone, some local and traditional practices hindered the village women's development, including those related to the government's formal policies and practices, especially the roles of the local authority figures. As explained in Chapter 2, the local authority figure is appointed as a local leader in each village and takes the 'middleman position' between the higher level of the government's administrative staff and the villagers.

Limited access to news and knowledge were other factors that operated as barriers for the women's capacity building. Chapter 4 and 6 discussed the traditional practice of the local authority figures using a loudspeaker to disseminate news and transmit government policies, rules and regulations. However, the authority figures did not disseminate any warning information prior to the cyclone and the villager's poverty and a lack of electricity meant that no news or information was disseminated via radio or television either.

Clearly, the traditional village practices favoured men more than women. Pre-cyclone, the men held more leadership roles in both the family and the community. Women from both poor and wealthy families were limited in their ability to attend school and in many cases both boys and girls dropped out of school after completing primary education. The majority (40) of the 45 women participants in this study were school dropouts and 5 women had not been to school at all. This is contrary to Coleman's (1988) concept of social capital whereby parents invest their money (financial capital) in their children's education (human capital) providing for their future income (financial capital). Consequently, lack of education was another barrier to the research participants' capacity-development towards empowerment, in common with Harriden's (2008) study of Myanmar women and power.

This study also determined that school dropouts, who stayed at home, rather than working outside, were more affected in terms of their communication and social skills. Social skills are keys to social interactions and the maintenance of social relationships (Lin 1999 a, b, 2005; Lin et al. 2004). Some of the women participants lacked the confidence to engage with others outside their immediate networks. This tendency was

noted by some social capital scholars who proposed that women may have more social relationships with family and personal friends than men who tend to have more work-based relationships (Aguayo-Tellez et al. 2014; Park-Yancy et al. 2008). Most of the women interviewees indicated that they would ask their male family members to communicate on their behalf with other men, and/or the wealthy villagers and local authority figures because they were afraid to do so. As Harriden (2008) points out, Myanmar tends to have a patriarchal, male-dominated culture where the social norms relate to traditional practices and formal policies. As a result, prior to the cyclone the lives of the village women were controlled and shaped by the male-dominated Myanmar culture (Knudsen et al.2008).

As pointed out previously in this thesis, social relationships were based on various levels of resource ownership. This meant that three different social classes were evident pre-cyclone. Lack of resource ownership was one of the most powerful and influential factors limiting the poor villagers, as the powerful and resource-rich did not allow the poor to gain access to their networks (Bourdieu 1986; Alfred 2009). Apart from business relationships, the wealthy villagers did not have social relationships with the poor because they socialised only with the villagers of the same status/social class as themselves (as per Bourdieu 1986).

Resource ownership and social class were, therefore, barriers to social networking among the women in each village. Economic factors influenced the women's lives, particularly with regard to the role of poor women as they had little power or agency. For example, they were likely to have arranged marriages and would be expected to serve both their husband and his parents once wed (Amar 2011). Some of the village women contributed by working unpaid in their family businesses or received minimal wages as manual workers in the paddy (rice) fields.

As a result, the primary data concerning the pre-cyclone period indicated that the formal policies and cultural practices did not favour the village women's capacity building, empowerment and social capital development. Consequently, it is concluded that the women experienced more barriers than drivers in terms of potential empowerment. The formal policies and traditional practices served to both control and influence their lives.

Pre-cyclone, the village women did not consider these factors to be problematic, because they lacked education, income and a voice at the household and community levels. Consequently, they were not aware that they were often without agency.

8.5.2 Social structures after the cyclone

Many of the women cyclone survivors suffered severe psychological problems (manifest in depression, shock, trauma, lost hope, anger and attempted suicide), in addition to physical/reproductive health issues (for example, their menstrual periods stopped, and some spontaneously aborted babies), and others suffered a range of symptoms such as vomiting, headaches, and weight loss. The V1 women participants reportedly suffered more severe psychological problems than those women in V2 and V3. As reported previously, this was attributed to them having been more resource-rich and enjoying considerably higher status than the women in the other two villages in the pre-cyclone period.

The loss of physical assets, financial resources and family members due to the cyclone resulted in severe psychological problems for some women and these became the biggest barrier for their recovery and rehabilitation. As Jigyasu (2002) argues, human development/human capacity building is inversely correlated to feelings of vulnerability in disaster-response situations.

The village local authority figures interviewed for this study operated as both supporters and barriers to the village women's development, depending on the village. The V1 local authority figure took a patriarchal stance with the V1 village women. He interfered with all of their issues instead of facilitating their group discussions and supporting the women's network groups (see Chapter 6). The V2 local authority figure tried to control the women aid recipients (see Chapter 6) attempting to use his power to transfer the INGO-provided social funds to his wife. Conversely, the V3 local authority figure provided assistance to the V3 women at all times, without interfering or using his authoritative power. This was another example of the way in which the V3 women were able to achieve the most successful outcomes of the three villages, given the V1 and V2

women received less support and faced more barriers because of the behaviour of their local village authority figures.

Following the cyclone, the loss of many of the breadwinner males was one of the main factors that led to changes in the village women's roles as they had to change from being passive to proactive. The previously established social classes were deconstructed when the cyclone destroyed all the resources and property that had previously determined social status. As a result, some of the previously wealthy women participants of V1 and V2 did not unite as closely with the other village women (see Chapter 6 and Chapter 7) because of their different social and economic status pre-cyclone. Conversely, the previously poor women villagers revealed that their resource-impoverished situation led to more equality in the aftermath of the cyclone.

Thus, while the previously wealthy women participants disclosed that the cyclone destroyed their lives and inheritances (such as lands and livelihood resources), the previously poor women, mainly from V3, believed it had created an opportunity for them to change their lives. Hence, the women participants 'capacity building, empowerment and the different types of capital development differed in relation to the time it took and the level they achieved during their recovery processes. Nonetheless, the women's lives were reconstructed through the provision of various types of resources - as reported in other studies following disaster (see Aldrich 2012; Becchetti & Stefano 2011; Durant et al. 2011; Gonzalez 2015; Tull 2009; World Bank 2002b).

Due to the psychological problems referred to earlier, some of the V1 women were not interested in attending capacity building training when the INGO project began (see Chapter 6). Following the counselling sessions offered by the INGO, however, almost all of the women, particularly in V1, were able to reduce their trauma so that they could attend different types of training and participate in the women's network groups. Hence, counselling appears to be a supporting factor for capacity building and empowerment, as well as the development of women's social capital and other types of capital, particularly following disaster. That said, as outlined previously, some V1 women were not as engaged in the INGO's counselling sessions in comparison to the V2 and V3 women.

To overcome the barrier concerning lack of access to official documents, the State issued citizenship documents to all of the cyclone survivors, including the seasonal workers who were Myanmar migrants. As a result, the pre-cyclone limitations barring school registration, access to loans and restrictions on free travel disappeared for the new citizens, mainly the women migrants from V3. However, all male local authority figures remained in the same positions of power, whereas the women were still not likely to be appointed at any time in the near future (Table 4.3, Chapter 4).

8.5.3 Empowerment

The research findings indicate that the village women's empowerment resulted from a number of factors including the development of different types of tangible/intangible capital. As discussed earlier, this study adopts Kabeer's (2012) definition of empowerment, which relates to empowerment requiring three elements – opportunities; knowledge and capacity building. In relation to these three elements, psychological and social capital were found to be important influences on other types of capital such as human, financial and physical capital which affected participants ability to make the most of opportunities, develop knowledge and capacity which is discussed next.

Psychological capital: The 45 women participants benefitted from the group counselling they received with other women from the same or different villages. Group counselling became the foundation of the women's network groups (social capital). Within the women's networks, through communication and group interaction, the women were able to reduce trauma (psychological capital), learn (develop human capital) and generate income (financial capital). All of these factors contributed to the development of positive psychological capital. Although the village women attended all the INGO-provided training to seek new ways of making a living, five of the previously wealthy V1 and V2 participants did not attend as regularly, nor were they as willing or engaged when participating. Findings indicated that some of the five women attended training only to obtain the INGO's loans and support. As a result, they did not benefit from the same level of capacity building as the other women or become peer educators and community educators.

Financial capital: The village women were only able to access loans from the INGO after they had attended different types of training. When the INGO provided different types of loans to generate income, some of the village women went on to run their own businesses, and generate income to support themselves and their families. As a result, they were able to make a living during and after the 30-month INGO project. Thus, the provision of financial knowledge and resources helped support the economic growth of the women, their families and villages. At the time of the data collection the village women had much less reliance than before on the local authority figures. As most of them had their own financial capital they were able to buy radios and televisions (physical capital) so the local authority figures were no longer as necessary a source of information (social capital).

Physical capital: The 'women friendly spaces (WFS)' facilitated both formal and informal meetings, where social capital was developed amongst the women in all three villages. Since their establishment, all of the WFS in each village were utilised for both formal and informal meetings. The WFS acted as a platform offering the women the opportunity to improve their communication skills, social relationships, knowledge and information and they also provided a sense of security. All of the women also now had the citizenship documents, such as the National Registration Card-NRC, that allowed them to travel and enable school registration for their children.

The value of a meeting place for the village women is identified as an important factor in the formation of the network groups that supported the women's capacity building, empowerment and the different types of capital development. The regular meetings initiated through the project served to assist in the building of stronger social relationships among the women, who later formed the women's network groups and ran collective businesses. These factors helped to enhance their social cohesion and supported better communication than they had experienced before the cyclone.

8.5.4 Section summary

The intention of this section was to answer subsidiary research question 1 regarding the barriers and drivers relating to the village women's capacity building and empowerment. Based on the findings, the formal policies, and traditional, social and cultural practices were found to be the main barriers to the village women's capacity building and empowerment in the pre-cyclone period.

However, the experiences of living without any emergency response and support during and after the cyclone until the commencement of the INGO project made women to be more united and built stronger social relationship among women in each village. Overall, their learning capacity was enhanced through training and this led to capacity building and other gains achieved through their economic growth. Most of the women became empowered through their capacity development, which was achieved through active participation and engagement, which is referred to here as 'capacity co-development'. The following section addresses sub-question two concerning the development of different types of capital.

8.6 The role of social capital

This section concerns the role of social capital (that is one of different types of capital) in relation to the capacity building and empowerment processes of the women participants. It focuses on their recovery process from their perspectives and, in particular, how some of the barriers identified later became drivers. This section concerns the first research sub-question: *How did the women cyclone survivors perceive the role of networks and tangible/intangible capital in the recovery process?*

The regular meetings and sharing of experiences supported by the Women Friendly Spaces (WFS) resulted in the village women building their social capital through collective power along with the other women in the group networks. The pre-cyclone gender divisions had limited women's communication, whereas after the cyclone the women had to lead their families as many had lost their male breadwinners. As a result, most women changed their roles to support the livelihood of their families and many of

the women's communication and negotiation skills improved within or beyond their network groups, thus building their social capital. Consequently, they gained confidence and began to solve problems and make decisions, together with other women from the same and different villages, thus exercising both their individual and collective agency.

Furthermore, the regular meetings and sharing experiences resulted in the women developing collective power from others within the network groups. Consequently, they gained confidence and began to solve problems and make decisions, together with other women from the same and different villages.

Before the cyclone, only 12 (mostly V1) women had previously worked in their family business, or were daily wage labourers so having the opportunity to participate in decision-making. After the cyclone, when they took on roles as head of their families and performed community work (see Chapters 6 and 7), tasks included rebuilding bamboo houses, cleaning up after the cyclone and seeking ways to generate income for their families when the INGO project commenced.

Pre-cyclone, social capital development was related to resource ownership and social class. After the cyclone all but five of the 45 women participants acknowledged that they had developed varying levels of social capital through saving lives during the cyclone, sharing the limited resources (food, shelters and so on) in the aftermath and more until the INGO project commenced. That said, two V1 women strongly stated that their preference was not to engage with the other women so they did not experience the same results.

Prior to the cyclone, the village women's traditional practices limited their social skills and educational opportunities. Nonetheless, most of the women participants made friends with other women when they attended the INGO's training sessions and meetings. Apart from the five women who were irregular participants in the INGO provided training, the women attended training and meetings on a regular basis. As a result, they built social capital, along with the other women members of the network groups. As indicated previously, their level of participation and engagement made a

significant difference to the women's level of capacity building, empowerment and social capital development.

An interrelationship pattern emerged from the primary data in relation to the social capital dimensions, which were illustrated in the research framework used for this study (see Figure 3.7). The research framework comprised the following dimensions: networks, trust, communication, co-operation/collective action, social cohesion and empowerment. Following coding, three new themes emerged from the primary data. These were participation, engagement and mutual respect as a precursor to trust in relation to the women's capacity building, and empowerment and social capital development. It was also determined that effective communication within the women's network groups also assisted their collective and cooperative work processes, thus supporting social capital development (see Figure7.1).

8.7 Different types of capital development

Twenty-eight months after the INGO's departure, all of the dimensions related to social capital were evident (see Figure 7.1). A finding emerging from this study concerned the role of individual women and their participation in the network groups at the WFS, for example, their attendance at training sessions. Specifically, the women needed a certain level of psychological capital (resilience and self-efficacy as suggested by Luthans et al. 2004) before they could start building social capital and become empowered. Following counselling, most of the women participants gained enough confidence to participate, communicate and engage with the other women in the network groups and cooperate in collective work. They then started to feel empowered and were able to benefit from the collective power and social cohesion developed within the network groups. As noted previously, however, the level of social capital development was not the same for every woman due to their varying degrees of participation, engagement, mutual respect as a precursor to trust. Those who participated and engaged least in the network groups developed the least social capital. The other types of capital development, such as human, financial and physical capital, were also found to be associated with social capital development.

8.8 The main research question

The main question underpinning this study is: **How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis?** This question could only be considered after the subsidiary research questions had been addressed. Thus far, responding to the subsidiary questions has determined that significant barriers affected the potential of most of the village women to build different types of capacity and become empowered pre-cyclone. The exceptions were some of the wealthier, businesswomen who lived in V1. The sub-questions also identified the factors that supported the village women's capacity building, empowerment and development of various types of capital. This section will focus on the inter-relationships between the different types of capital identified, capacity building and empowerment.

This study drew on Bourdieu's (1986) seminal work concerning social and economic capital, including financial capital, and Coleman's (1995) work in relation to social, human and physical capital, also including financial capital. Moreover, the concept of positive psychological capital was drawn from the work of Luthans et al. (2004) in relation to the capital and capacity development of the women cyclone survivors. The combination of social and positive psychological capital is not generally found in the extant scholarly literature, which tends to refer only to the need for social capital in relation to the development of human capital/capacity building (Nahapiet 2011; Gonzalez 2015).

The inter-relationships between the five different types of capital referred to in this study were discussed in Chapters 6 and 7. Positive psychological capital was found to be a necessary foundation (as input) for the village women to participate in the network groups and interact with others, prior to the development of other types of capital. Social capital was found to be integral to the development and integration of other types of capital (as a process). This was aligned with the work of Coleman (1995) who maintains that social capital acts as a catalyst to generate the same or different types of capital. As a result, the findings support the work of Bourdieu (1986) and Coleman (1995) who maintain that the development of social capital is not isolated in relation to the other types of capital.

8.9 Capacity building

As stated in Chapter 2, the INGO provided development activities as part of their recovery project for the women cyclone survivors. The aim of the recovery project was to reduce the physical and mental vulnerability of the disaster-hit population, improve their socio-economic status and work towards sustainable development (as per IFRC 2012). Although it was not articulated as an aim, the INGO project also provided the means to develop the village women's capital through the project (see Table 5.2, Chapter 5).

As part of the development the project also included disaster preparedness training. This knowledge, along with their ability to access information more quickly via radio or television (rather than relying on the local authority figures as before) meant the village women would be much more prepared in the event of any future disasters. They now knew that they needed to keep some provisions close at hand should they be needed; move the most vulnerable people, such as the elderly and children, to higher ground and stay in groups during and after the disaster. None of this knowledge or actions were shared before Cyclone Nargis.

8.9.1 Capacity building, human capital and empowerment

The training activities provided by the INGO resulted in human capital development for the women concerned. The INGO project provided the opportunity for knowledge-sharing and thus capacity building at the WFS. Most of the women worked co-operatively and collectively after they had built relationships and trust based on their participation at the WFS. The most engaged women became peer educators and underwent leadership training. Those who completed this higher-level training went on to become community educators who worked together with INGO staff (see Chapter 6). Aligning with the principle of 'capacity-co-development', the trained, peer educator women (TPEW) and other village women who worked as community educators (see Chapter 6) went on to conduct basic training with other women from the same, or different, villages both during the INGO project and after it had ended. These actions are evidence that the network groups provided sustainability with regard to capacity

building, empowerment and social capital development that was still evident 28 months after the INGO's departure (see 7.3, Chapter 7).

The findings indicated that mutual respect and trust were developed between the INGO staff and the village women. This was important because knowledge and resources were transferred from the INGO to the village women and led to sustainability. The respect between the two parties meant that the INGO staff did not exercise power or propose that there was only one best way (their way) to undertake activities. With consent, both parties came to trust each other and most of the village women took joint responsibility as peer educators and community educators for capacity-co-development. These processes enabled the village women to continue with the INGO-instigated activities as empowered individuals beyond the project (see Chapter 7).

Once the village women had developed positive psychological capital, most of them then built capacity through different types of physical, human, financial and social capital. Capital development was both a process and an output in accordance with the IPO model. Consequently, in combination with the INGO, the village women participated in capacity co-development which led to sustainable empowerment over time except for five of the 45 women, as explained previously.
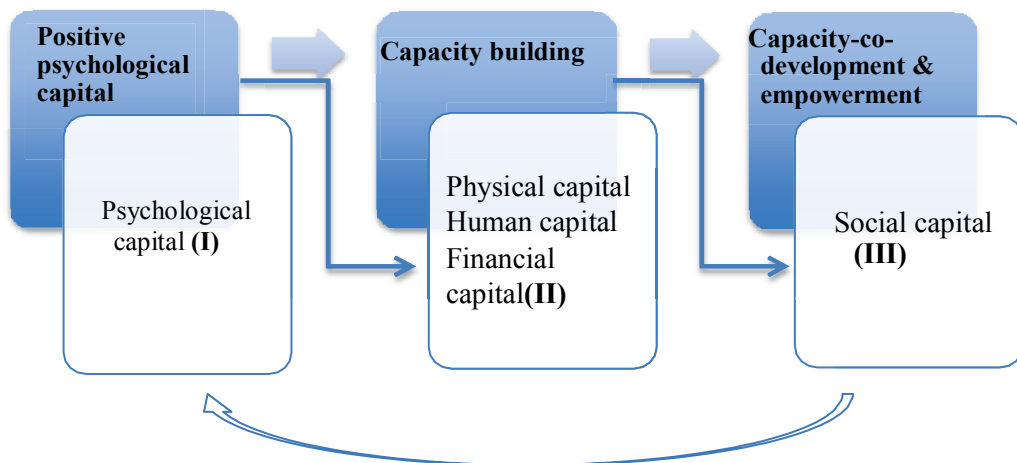

Figure 8.2: Capacity building, empowerment and social capital processes

Figure 8.2 shows the three steps that led to the integration of various types of capital, capacity co-development and empowerment. Positive psychological capital is shown in column I. Capacity building led to the development of different types of capital that Sen (1985) maintains generate a valued life – as per column II. Column III illustrates capacity co-development and empowerment, along with the other types of capital leading to the further development of social capital.

Those findings, are contrary to the work of Luthans et al. (2004) who argue that it is social capital and other types of capital (as input and process) that generate positive psychological capital (as output). That said, Luthans et al. (2004) were not referring to social capital that was generated following disaster situations.

8.10 Key research findings and contributions to topic areas

This study established that the development of different types of capital and particularly social capital comprises different layers. Referred to as 'dimensions' in this study, they are included in the research framework that was adapted from the World Bank (2011). This adaption included the addition of the empowerment dimension (see Figure 3.7, Chapter 3), which was necessary as an indicator of the women cyclone survivors' development over time. Molyneaux (2002, p. 169) argues that 'Social capital approaches have been remarkably reticent about gender: one only has to check the World Bank's website to verify this, but it is also true of the scholarly literature to date'. She goes on to refer to the World Bank's gender unit, where reference is made to 'rights, resources and voice' but where social capital is not discussed, although the World Bank website dedicated to social capital was set up in 1998. Thus, it was important to consider social capital and women bringing empowerment into the research framework.

Emerging from the primary data, the research themes of participation, engagement and mutual respect as a precursor to trust were identified as supporting the other dimensions towards social and other capital development. As a result, the findings from this study confirm the relevance of the six dimensions identified in the research framework towards social capital development.

Social capital dimensions and emerging research themes

The involvement of the village women participants in the INGO's project was identified as fundamental to support their communication and social relationships with the other women. Ongoing participation was also found to be necessary in the network groups for activities such as group counselling, meetings, training, knowledge-sharing sessions and more, and for continuous capital development.

The first key finding relates to the importance of participation, then secondly, the need for engagement. This became evident in relation to the five women from V1 and V2, as previously identified, who went to training sessions only in order to access the INGO loans and, to their own detriment, did not engage with the other women or activities. The village women who did fully participate and engage in all the INGO-provided activities went on to become volunteers, peer educators and community educators in their villages.

The networks were found to be important for social and other capital development among the village women. The women's participation in the network groups supported effective communication and social relationship building as well as the generation of collective power and trust.

Over time, relationship-building and communication within the network groups led to the slow development of trust amongst the village women when mutual respect was apparent in their social relationships and interactions with the INGO staff and others. As discussed previously, trust is not easily developed as per Putnam's (1995) social capital concept. Trust was found to be generated when mutual respect was evident through repeated meetings and multiple interactions. The research findings resulted in changes to the research framework utilised for this study. The new framework is shown in Figure 8.3 below.
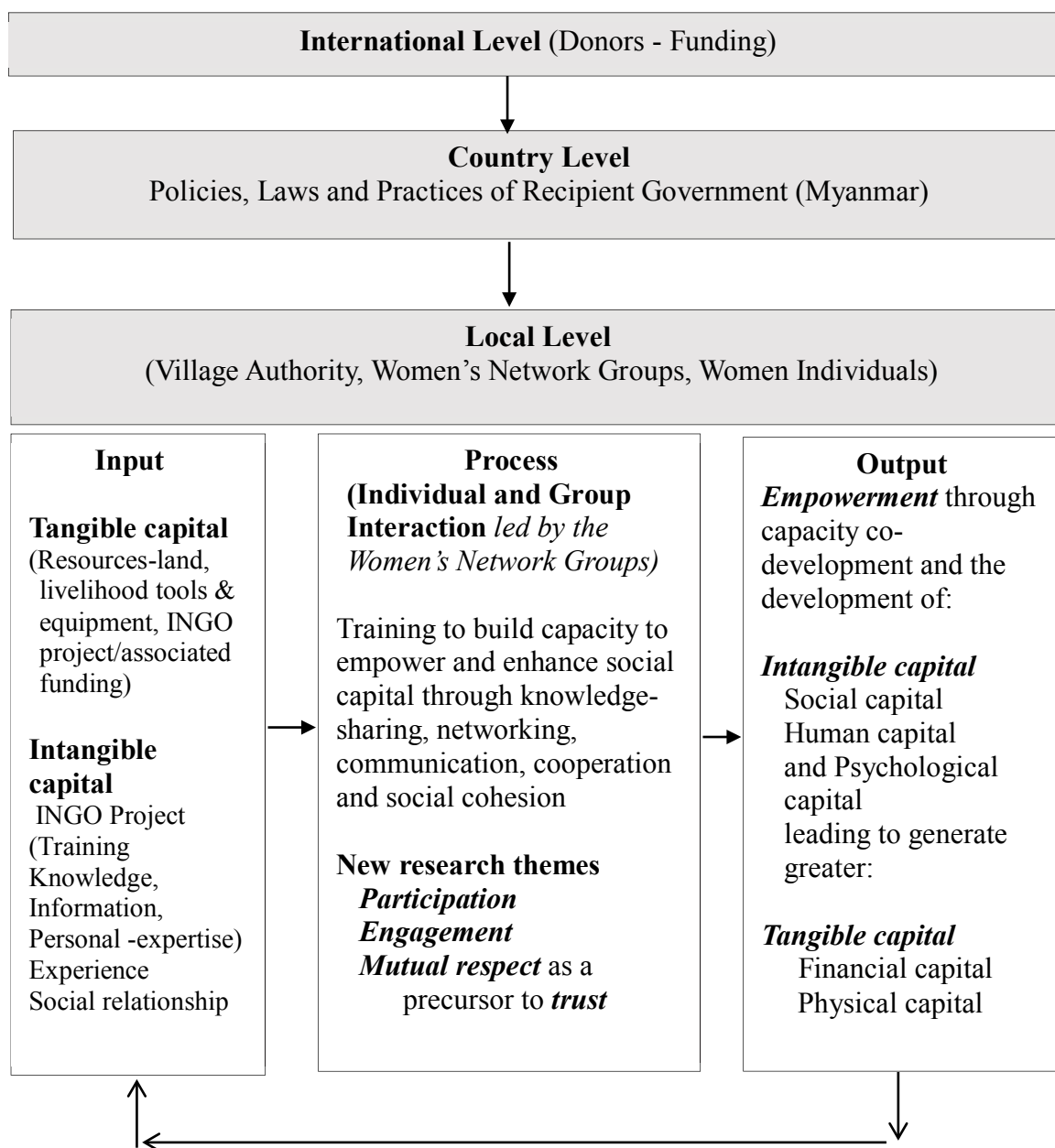
International Level (Donors - Funding)

Country Level Policies, Laws and Practices of Recipient Government (Myanmar)

Local Level (Village Authority, Women's Network Groups, Women Individuals)

Input	**Process** **(Individual and Group** **Interaction** *led by the* *Women's Network Groups)*	**Output** ***Empowerment*** through capacity co- development and the development of:

Tangible capital
(Resources-land,
livelihood tools &
equipment, INGO
project/associated
funding)
 	
Intangible
capital
 INGO Project
(Training
Knowledge,
Information,
Personal -expertise)
Experience
Social relationship
	Training to build capacity to
	empower and enhance social
	capital through knowledge-
	sharing, networking,
	communication, cooperation
	and social cohesion
	
	New research themes
	   Participation
	   Engagement
	   Mutual respect as a
	      precursor to ***trust***
		Intangible capital
		   Social capital
		   Human capital
		   and Psychological
		   capital
		   leading to generate
		   greater:
		
		Tangible capital
		   Financial capital
		   Physical capital

Figure 8.3: The new research framework

In this new research framework, Figure 8.3, the international and national levels of the framework remain the same. The local level has changed, however, with the addition of the three new research themes: participation, engagement, and mutual respect as a precursor to trust. In addition, the women's network groups stepped into the INGO's role as they organised group meetings, group counselling and training for the other village women. The inputs were largely represented by tangible and intangible types of capital. The tangible capital was represented by physical capital (resources – land and equipment) and financial support. Intangible capital included knowledge, information,

experience and personnel (expertise). The outputs (as per Figure 3.7, Chapter 3) resulted in greater levels of capital in terms of social capital, human capital, psychological capital, financial capital and physical capital. These changes are shown on the adapted new research framework - Figure 8.3.

As outlined in Chapters 6 and 7, selected women were trained as peer educators and community educators, known as TPEW, to manage the training activities previously facilitated by the INGO staff. These TPEW filled completely to the role of INGO staff when the 30-month project was completed. Figure 8.3 shows that this framework can support the analysis of capacity building, empowerment and different types of capital, particularly for other women based in Myanmar and other less developed countries (LDC).

The second key finding emerging from this study concerns the development of different types of capital. As illustrated in figure 8.3, the six previously identified dimensions: networks, communication, trust, cooperation and collective action, social cohesion and empowerment, were important factors that support the development of social capital. The three newly identified research themes: participation, engagement, mutual respect as a precursor to trust are also included. The women's group networks (network dimension) supported the development of social capital, while empowerment occurred through interactions amongst the other dimensions: networks, communication, trust, co-operation and collective action and social cohesion within the networks.

The third key finding from this study concerns the inter-relationships between different types of capital. Here, the importance of positive psychological capital is emphasised for disaster survivors before other types of capital can be developed. The fourth and final finding is outlined in Figure 8.2 where the inter-relationships of different types of capital are shown. These interactions led to capacity co-development – in this case created by the women cyclone survivors and the INGO staff. The inter-relationships concerned the combination of psychological capital (development of self) and social capital through the women's group network as supported by the INGO project. The combined result of positive psychological capital and social capital assisted in developing capacity (human capital) through different types of training and information sharing among peers within the networks groups.

Input-process-output (IPO) integration

For this study, the integration of the IPO model with the World Bank's social capital framework (2011) supported the analysis of the women participant's capacity building, empowerment and social capital development according to the five types of capital identified. As a result, it is proposed that the IPO model can be applied in social science to assess different types of capital and other relevant factors. For example, as per Herre (2010), it can also be used to assess the effectiveness and interactions of teams. Hence, it is recommended that future revisions of the 2011 World Bank social capital framework consider the inclusion of the empowerment dimension along with the five dimensions in their current framework.

8.11 Limitations

The limitations of this study are mainly related to the size of the study groups. While it was important to include those who were involved in the 30-month INGO project, only four INGO staff were able to participate as key interview informants for this study as others were not contactable since the project had completed by the end of December 2011. That said, the four INGO staff were able to provide access to a range of documents that were relevant to the INGO project, allowing for the document analysis to be completed for this study.

Another limitation concerned the inclusion of only three of the 27 villages that were involved in the INGO project as the number of villages had to be restricted due to time and resource constraints. The selection of the three villages from the range of 'best, medium and worst' performing, as ranked by the INGO, was supported by the document analysis and the selection of the geographical area, as explained in Chapter 5.

Thirdly, the research was qualitative in nature and, as a result, the study group numbers limit the opportunities for generalisation. Nonetheless, it is maintained that the findings will prove useful for future research and practice, as explained before.

8.12 Recommendations

This study proposes some opportunities for further research for both scholars and practitioners, particularly those engaged in research and work in disaster areas. Two main areas are recommended for further work.

First, it is suggested that a longitudinal study and/or comparative study be conducted related to women's capacity building, empowerment and different types of capital development. It is proposed that the findings may be beneficial for studies that focus on women who live in Myanmar and elsewhere.

Secondly, it is proposed that the newly adapted research framework (see Figure 8.3), and the integrated capital approach may prove to be useful for both researchers and practitioners working in disaster areas.

Thirdly, the effectiveness of the PPM as a supporting tool/process for data collection and data triangulation may also benefit from further trials with different populations in different contexts. Multiple data crosschecking and triangulation of the document analysis with the interview data from in-depth interviews and focus groups assisted in enhancing the validity of the data gathered. Triangulation not only helped to validate the data, but also helped to provide a deeper understanding of the women's situational changes following the cyclone and the INGO project. In addition, the multiple methods offered benefits for the researcher apart from data reliability and triangulation data. For example, from the findings of the document analysis, I became aware of the relationship patterns between the village women and the INGO before the primary data was collected from the women participants. Also, the important role of the local authority figures was also made apparent when the primary data was being collected.

8.12 The Last Word

The focus of previous research in the scholarly literature has been on disaster-related studies across the globe such as those conducted by Aldrich (2012); Edoun, Balgah & Mbohwa (2015) and Tull (2009). However, the recovery of survivors, particularly cyclone survivors such as the rural Myanmar women studied here, has been limited to date. This study has added to the literature by analysing the situational changes experienced by a study of women cyclone survivors based in Myanmar as they moved from being resource-impoverished to becoming resourceful, independent women.

This study confirms that the capacity building approach undertaken by the INGO was appropriate to support sustainable capacity building, empowerment and the different types of capital development for the women concerned. However, the findings also indicate that training provision alone is not sufficient for ongoing capacity building and empowerment. The three newly identified themes of participation, engagement, and mutual respect as a precursor to trust indicate that more is required to gain the most benefit from development. These processes, in combination with the establishment of the women's network groups, also assisted the generation of collective power. As a result, this study identified that sustainable empowerment requires dual effort from both the providers, in this case, the INGO, and the receivers, the village women, to achieve capacity co-development. Moreover, the newly identified research themes indicate the need for individuals to take some responsibility for their own capacity building and different types of capital development towards empowerment. Hence, the need is identified for participation and engagement, as determined in this study, through making the most of opportunities, building knowledge and capacity (as per Kabeer 2009, 2012).

A significant finding emerging from this study, where the cyclone survivors are the targeted groups, is that social capital can be developed when social class and resource-ownership are depleted and social resources destroyed. This finding is contrary to Bourdieu (1984) as he maintains that social capital is developed through resources and social class. Social capital development occurred even though the traditional and cultural practices commonly associated with women from LDCs such as Myanmar can prove a hindrance, particularly because of their limited educational (intangible capital) and

economic (tangible capital) status. It is important to note that, according to the INGO's evidence-based indicators, the majority of the women achieved more after the INGO project than they had achieved pre-cyclone. This was evident in relation to their improved social, educational, and economic status demonstrated by all but five of them starting their own businesses, paying back their loans, and educating themselves and their children. A total of 12 of the 45 women participants (1 from V1, 3 from V2 and 8 from V3) continued their volunteer work as peer educators in the villages. In these leadership roles they took on responsibility for educating others. Consequently, as Nakagawa and Shaw (2004) maintain, post-disaster situations can create opportunities for development.

As previously stated, during the INGO project, the women survivors gained positive psychological capital (as per Luthans et al. 2004) that helped to reduce their trauma and depression following the cyclone. Once they had gained positive psychological capital, the women had enough confidence to participate in the women's group networks where they benefitted from collective power from the other members. Importantly, the changes in their traditional practices were made over time through the progressive development of their capacity building, empowerment and different types of capital development. Through empowerment, the majority of the women were able to lead their families and focus on their children's education as they earned their own income and managed their own businesses. Importantly, most of the 45 women indicated that they not only continued with the INGO-instigated activities after they had departed, but also were able to generate their own activities with the help of other women from the same or different villages. These activities continued to aid their own and other women's development and empowerment which is particularly important for an LDC country such as Myanmar because, as pointed out in Chapter 1, the focus of this study includes three of the United Nations Sustainable Development Goals (UN, SDGs) towards 2030. These are: Goal 1 (to end poverty), Goal 5 (gender equality and empowerment for women and girls) and to a lesser extent, Goal 4 which addresses education and lifelong learning (United Nations 2018). As per the traditional Myanmar culture, the trained peer educator women (TPEW) first 'helped the self to help others' which in the Myanmar language is '*Ko-Htu Ko-Hta*' a philosophy derived from a traditional Myanmar proverb.

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APPENDICES

Appendix 1: Semi structured interview and focus group questions

Title of project: Capacity building in women's networks based in Myanmar: The role of empowerment and different types of capital

Candidate name: Kathy Shein (Student ID: 15907769)

Types of interviewees: INGO staff, rural women and rural men from the cyclone affected villages in Labutta, Myanmar

Main research question and sub-questions: Interviews will be based on the following main research question and sub-questions.

Main research question: How did the women cyclone survivors become empowered and build capacity following Cyclone Nargis?

Sub questions:

1. What were the drivers that assisted, and the barriers that restrained women's capacity building and empowerment during and after the INGO project?

2. How did the women cyclone survivors perceive the role of networks and tangible/intangible capital in the recovery process?

3. How sustainable were the changes achieved as a result of the INGO project?

Total number of research participants targeted for interviews:

INGO staff	Total	Rural Women/Network Community	Total
2 Senior staff Key informant interview	2	3 Male Network Community Leaders (1 per village network)- a story telling method	3
		15 women beneficiaries- a story telling method	15
3 Field Educators	3	8-12 women from each village network (3 villages) - (24-36 women for Focus Group Discussion	24-36
Total staff	5	Total participants of the rural network	42 to 54

Interview questions:

a)   One-on-one, face-to-face semi-structured key informant interview
Targeted population and number of interviewees: Using one-on-one, face- to-face semi structured key informant interview methodology with regards to 5 ex-staff members of the project employed by the INGO.

Background: The purpose of the interviews is to generate data from INGO staff members through their accounts of the capacity co-development experience with the rural women how they supported rural women during the project periods through the various processes from being resource- impoverished or resource-less (following the cyclone Nargis) to becoming resourceful over time.

1.   Can you please share your experience concerning how you went about building capacity for the rural women of Labutta following the aftermath of the cyclone Nargis?

Issues to be covered by the questions below:
•   *How did people in the villages respond to the emergency situation and the changes throughout the project periods and beyond? What was the women's response in particular?)*(to understand the pattern of the self- help rural response to emergency situation just after the cyclone and the project starting date, women in particular)

•   *Do you think that did villagers help to each other during the cyclone, meaning social capital develops in emergency situations (such as the aftermath of the cyclone?) If so, how?* (to triangulate their understanding what are the characteristics of social capital, its meaning and action among women and people in emergency situation)

2.   How were the rural networks facilitated for self-renewal and transformation developed on the existed rural community network and how did leaders of the network for capacity development emerge?

Issues to be covered by the questions below:
•   *How did you mobilize the villagers to participate in the various activities?*
•   *Why did you decide to conduct particular activities at various stages of the project?*
•   *How did you assess the effectiveness of the project to evaluate levels of capacity building and development?*

3.   Do you believe that the overall project goals were met throughout the project periods? What do you believe was the key achievement of the project and why?

Issues to be covered by the questions below:
- *Can you explain how the rural women became empowered overtime?*
- *What do you believe was the role of the networks and social capital in:*
  - ❖ *empowering the rural women?*
  - ❖ *And building capacity?*
- *What would you identify as the key drivers of change in the capacity building and its development in the empowerment process?*
- *What would you identify as the key barriers blocking change in the capacity building and its development in the empowerment process?*
- *What do you believe could have further enhanced the drivers and reduced the barriers?*

Sub- questions:

- What does the term "social capital" mean to you/the INGO? *(to understand an operational definition of social capital in Myanmar context from the provider's point of view)*

- What does the term "capacity building and capacity development" mean to you/the INGO? *(to understand an operational definition of capacity building and its development in Myanmar context from the provider's point of view)*

- What does the term "empowerment" mean to you/the INGO? *(to understand an operational definition of empowerment in Myanmar context from the provider's point of view)*

b) One-on-one, face-to-face interviews using in-depth interview methodology

Targeted population and targeted number:

Rural Women/Network Community of the cyclone affected areas	Total
3 Male Local Authority Figure (1 per village network)	3
15 women informants	15

Background: The purpose of these interviews is to offer the rural men and women the flexibility for telling the stories of how they survived the aftermath of the cyclone Nargis through the project (and otherwise) of the INGO project without noticing they are being interviewed, especially the case of changing from the state of being resource-less or resource-impoverished (following the cyclone Nargis) to becoming resourceful over time by drawing with the story telling method to grasp a broader context of social,

economic, cultural, and political power. To ensure a sufficient scope and depth in the informants' a list of key research concepts and issues will be used as a check-list and a tool to keep unfolding stories on track.

Warm-up question *(a process of building trust between an interviewer and interviewees)*
Where do you stand now? *(to establish a clear starting point for the "retrospective" exercise for attaining a better understanding of the process of self-evaluation of their current life situations so it is a starter of the interview with the recovery position)*

Main question and the sub-questions:

1.   Could you please share your experience of what situation happened beforeand after the cyclone Nargis hit Labutta?

Issues to be covered by the questions below:
*How did people in the villages respond to the emergency situation? What was the women's response in particular? (*to understand the pattern of the self-help rural response to emergency situation just after the cyclone and the project starting date, women in particular)

- *How was your life like before thetragedy?*
- *What happened to you when hit by the cyclone? (How wereyou affected? What did youlose?)*

2.   What were the main changes that occurred in your life immediately following the cyclone Nargis? Can you tell the story of how this situation changed over time and the role of the INGO project in bringing about these changes throughout the projectperiods?

Issues to be covered by the questions below:
- *How have you managed to come this far following the tragedy?* (to understand the process of self-transformation from resource-less to resource-full through their participation of the capacity co-development programs)
- *Who are the main enabler(s)? What was/were the catalysts, drivers, barriers of the transformation and why?* (General and Specific in relation to the capacity co-development programs)

2.1   Could you please share the reason why you chose to participate (or not to participate) in the activities, which were initiated by the INGO project team?

Issues to be covered by the questions below:

• What was your situation (and your family's situation) aftermath of the cyclone? What did you do for survival? How did you do it? For how long? What were the main challenges? Who/what helped you and how? What was/were the main enabler (s), main driving force(s) or barriers of the survival and why?

2.2 Can you explain the role and function of the network meetings with your friends and neighbours in the change process? How regularly did you meet following the project by the INGO and where did you meet? What happened at the meetings and soon?

Issues to be covered by the questions below:

• How did you see yourself and your family after you were in the network? What was the significant incident while you were participating in the network? What did you do for self-renewal? How did you do it? For how long? What were the main challenges? Who/what helped you and your group, and how? What was/were the main enabler(s), main driving force(s) or barriers of the self-renewal and why?

2.3 How important do you think it is to receive training to help build your capacity and what was the role of micro-loans for generating income? What activities did you undertake to generate income?

Issues to be covered by the questions below:
• Who suggested you to attend trainings led by the project or did you make your decision to attend trainings? Why? How did you understand your qualification after training? What did you do for self-transformation? How did you do it? For how long? What were the main challenges? Who/what helped you and how? Did you apply knowledge from training in your day-to- day life? If so, how? What was/were the main enabler(s), main driving force(s) and barriers of the transformation and why?

2.4 Do you believe that your life has changed since cyclone Nargis? If so, please describe why and how?

3. What do you believe are the drivers that assist and the restraints that block/detract from the capacity building/ capacity co-development and empowerment of women within the rural networks? If so, please give some examples.
3.1 What are the supportive measures enhancing assistance and the preventive measures related to the overcoming of obstacles?

Sub-questions:

(to understand their insight relating to the technical terms associated with the local context of Myanmar at the rural women level, particular to define the meaning between "capacity building" and "capacity co-development")

- What does the term "social capital" mean to you? Can you explain it? Do you believe social capital was developed through the networks set up following cyclone Nargis? If so, what role do you think it played and how was it evident?
- What does the term "capacity building" and "capacity co- development" mean to you? Can you explain it? Do you believe your own/the village capacity was developed following cyclone Nargis? If so, how did this occur and how is it evident?
- What does the term "empowerment" mean to you? Can you explain it? Do you believe that you became more empowered following cyclone Nargis? If so, how did this occur and how is it evident?

c) Focused Group Discussion (3 women FGD for 3 networks- from 8 to12 women per network)

Targeted population and number of interviewees: Using a focus group discussion methodology for three village networks, which consisted with 8-12 women per network for total 42-54 participants in total.

Background: The purpose of conducting the focus group discussion is to gain a better understanding of how they perceive that networking has influenced social capital/capacity building/capacity development and empowerment, through their collective action or the group's work for the changes in their life and their communities at large. The focus group discussion will broaden the level of information gained, particularly to help to increase interaction and reciprocity among the members of the groups and networks, concerning how they survived the aftermath of Cyclone Nargis. The lessons from the INGO are needed to stimulate action and how they overcome obstacles and enhance drivers of the process of the change during the INGO project. From the group discussion, the issues of the group's participation will be identified together with drivers, barriers and catalysts.

1. What were the main changes that occurred in your community life immediately following Cyclone Nargis? Can you discuss how this situation changed over time and the role of the INGO project in bringing about these changes?

**Issues to be covered by the questions below:**

- Could you please describe your group and why you chose to participate actively (or not to participate) in the group activities which were initiated by the INGO project team? Why and how?

2. Could you please share the story of your network step by step, such as how the networks were created; who was involved; how to mobilize them to participate in a group and why they agreed/disagreed to join in the group activities; how the network meetings take place and how many times a month /quarter/project period; and how the change process took place? (For example, who were in your groups and what were your groups doing? How regularly did you meet following the project by the INGO and where did you meet? What happened at the meetings and so on?)

- How do you express your feeling or perception of togetherness as a member in the group to perform the group work or the community work?
- Can you tell the story of why you decided to join training (or trainings), how you received training, and the activities you undertook to generate income? What are drivers, barriers, supporting factors to be a member of the team?
- Do you believe that your life and the Labutta community have changed since Cyclone Nargis? If so, please tell the story of why and how

Appendix 2: PPMs of 5 women in-depth interviewees from V1

1.   **PPM of W1 woman in-depth interviewee,V1**

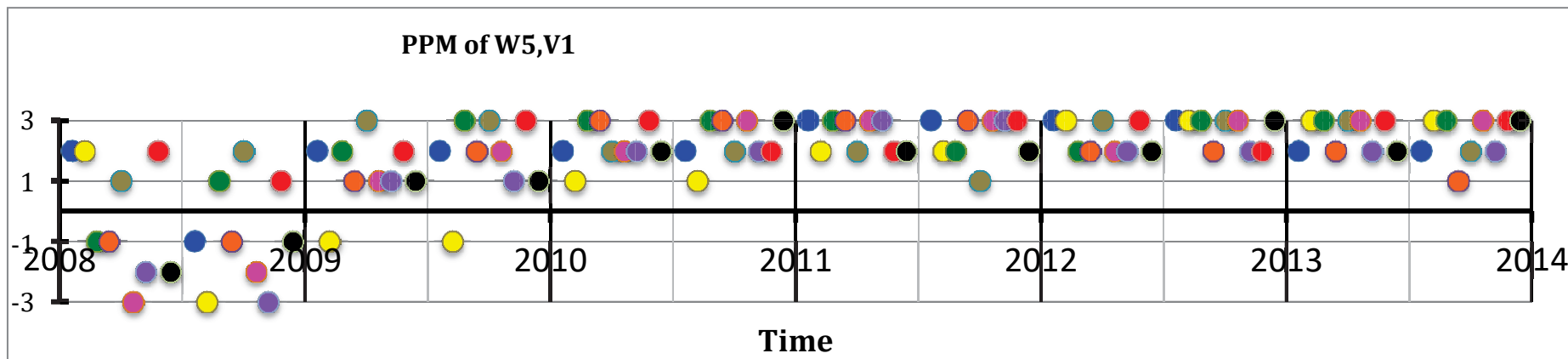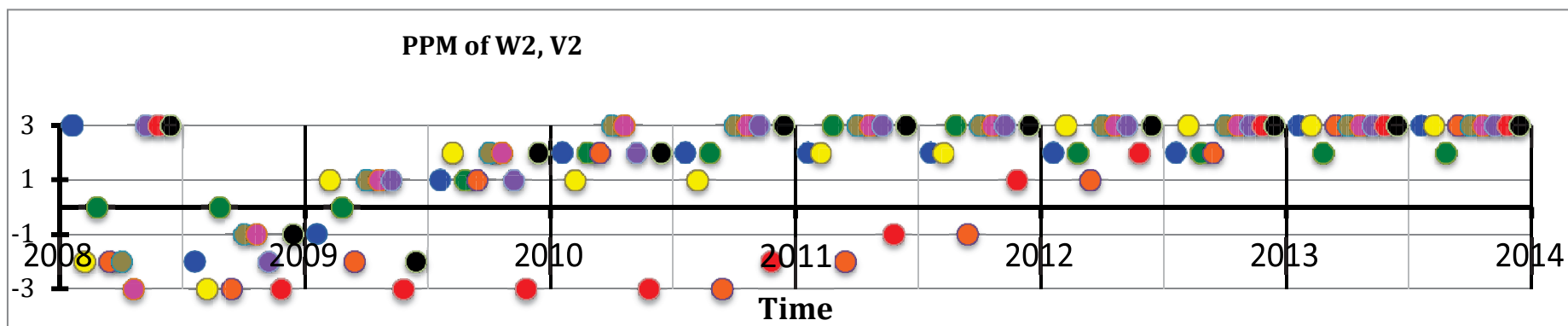PPM of W1, V1
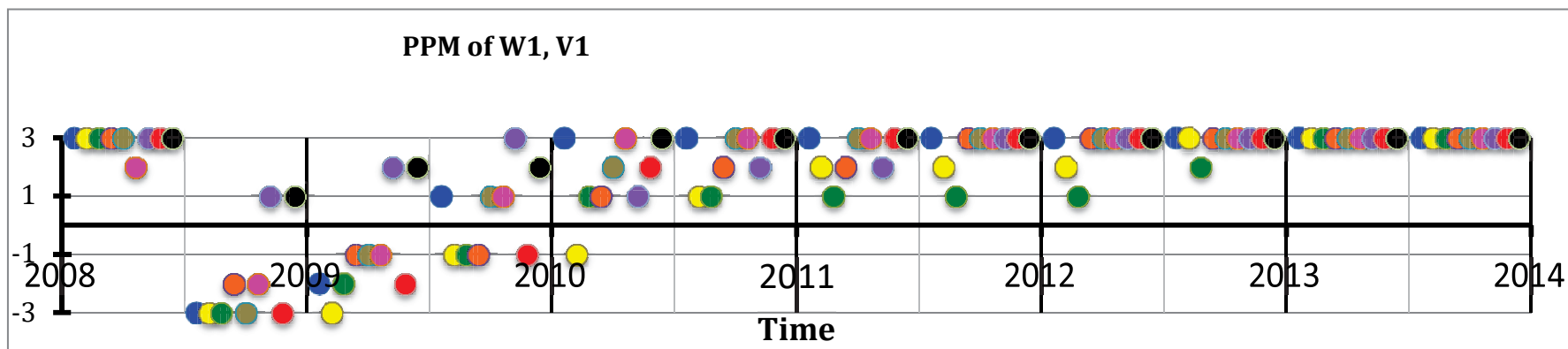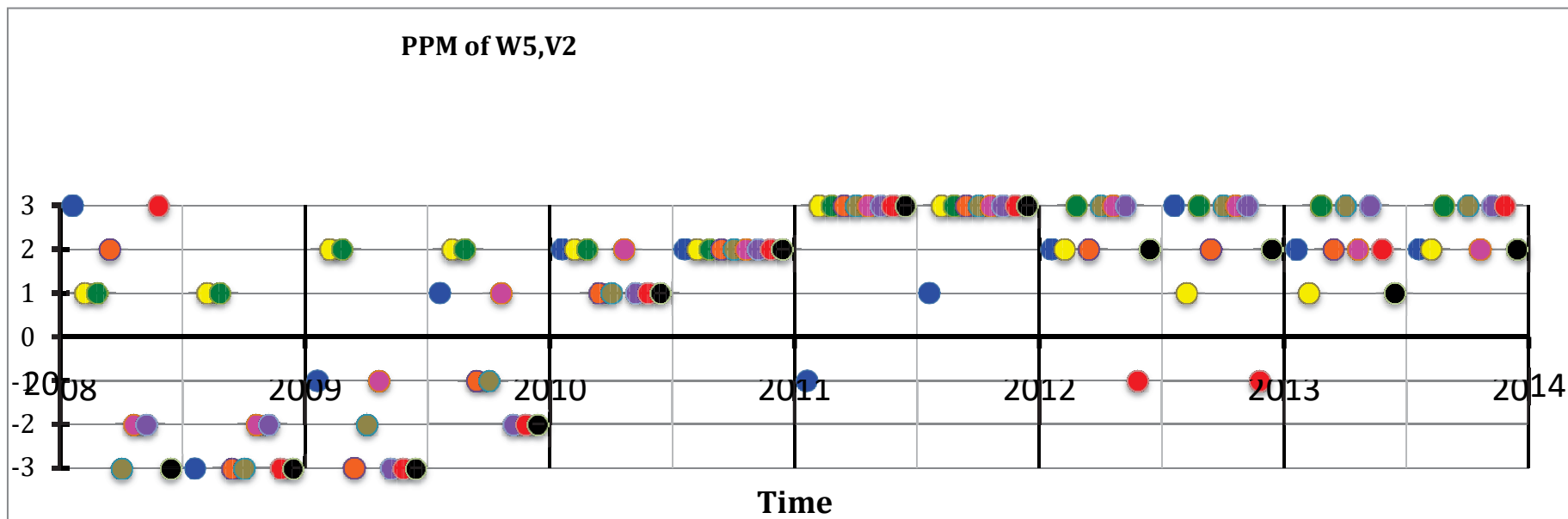
2.   **PPM of W2 woman in-depth interviewee,V1**

PPM of W2, V1
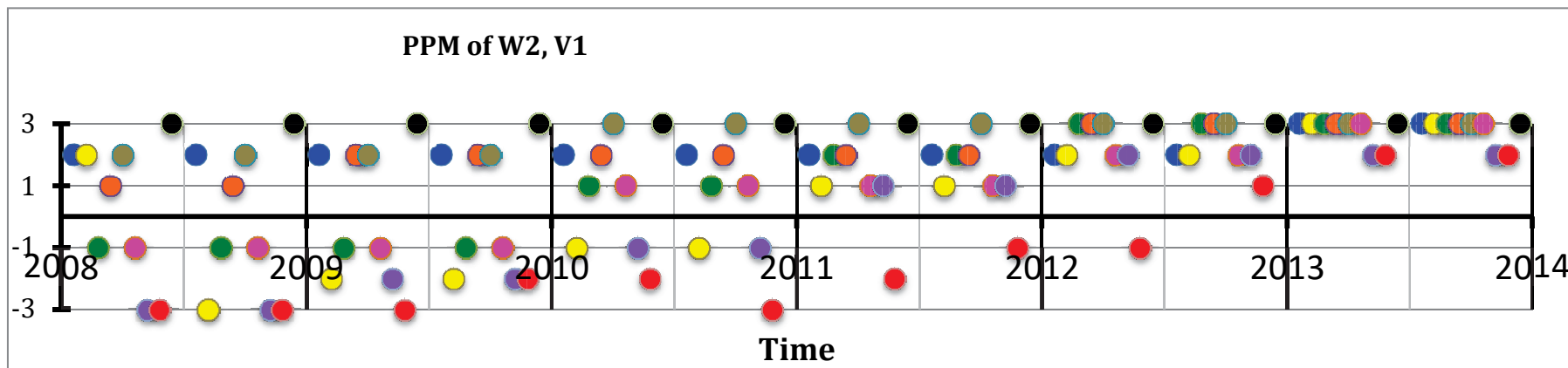
3.   **PPM of W3 woman in-depth interviewee, V1**

PPM of W3, V1
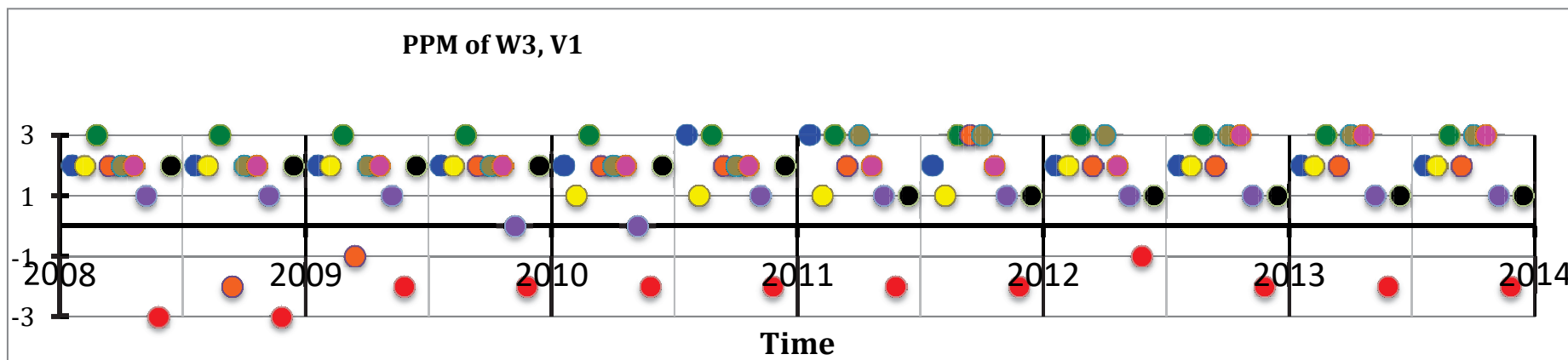
4.   **PPM of W4 woman in-depth interviewee,V1**

PPM of W4, V1
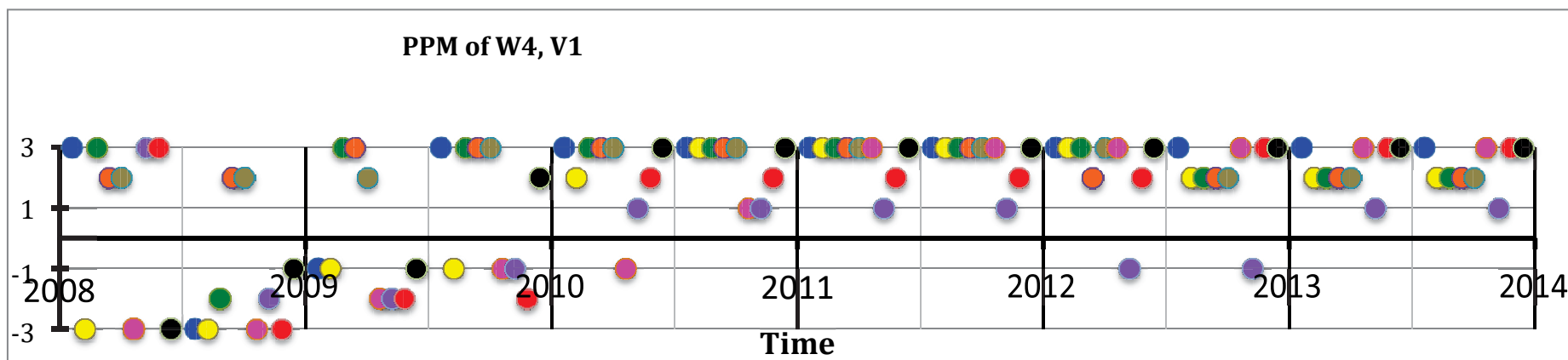
5.   **PPM of W5 woman in-depth interviewee,V1**

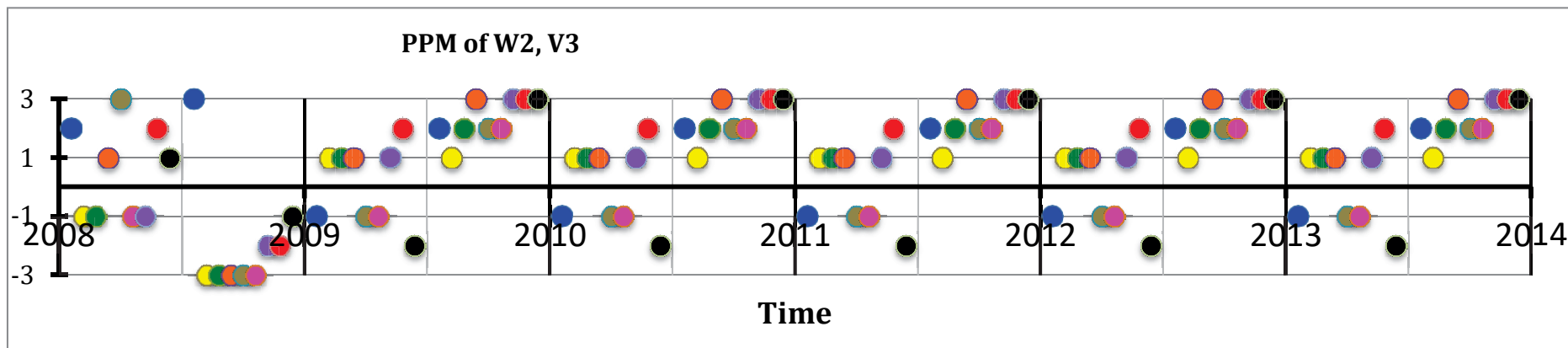PPM of W5,V1

Appendix 3: PPMs of 5 women in-depth interviewees from V2

1.   PPM of W1 woman in-depth interviewee,V2

PPM of W1, V2
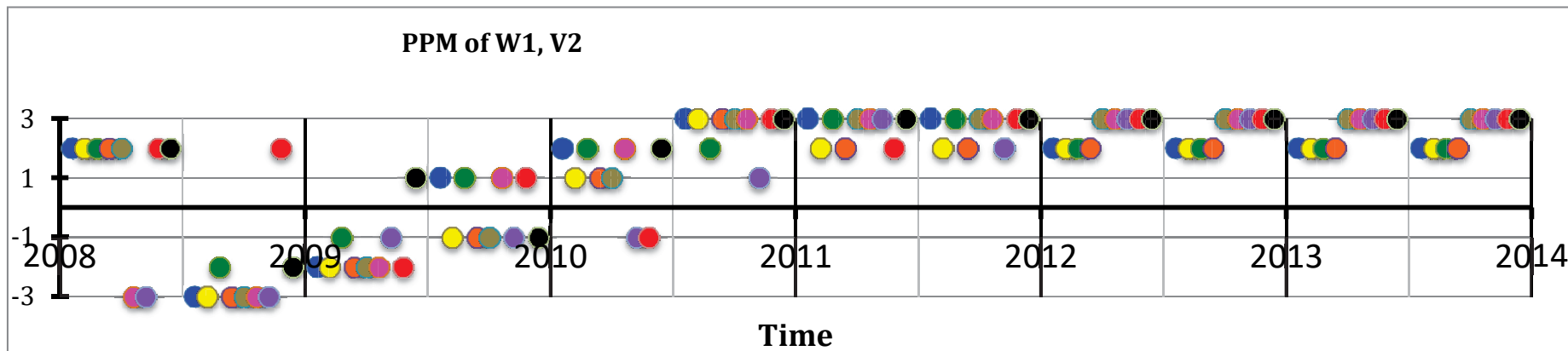
2.   PPM of W2 woman in-depth interviewee,V2

PPM of W2, V2

3. **PPM of W3 woman in-depth interviewee,V2**

PPM of W3, V2
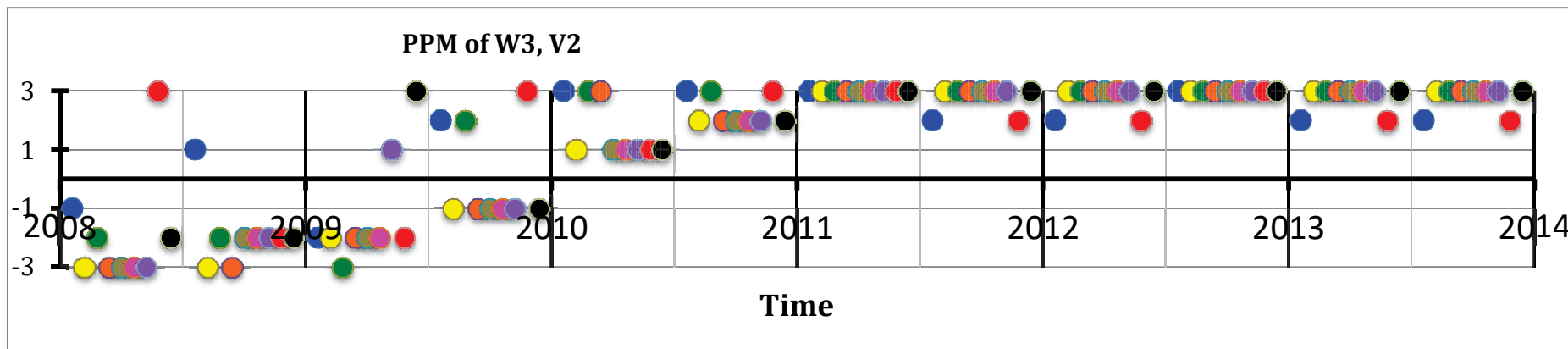
4. **PPM of W4 woman in-depth interviewee,V2**
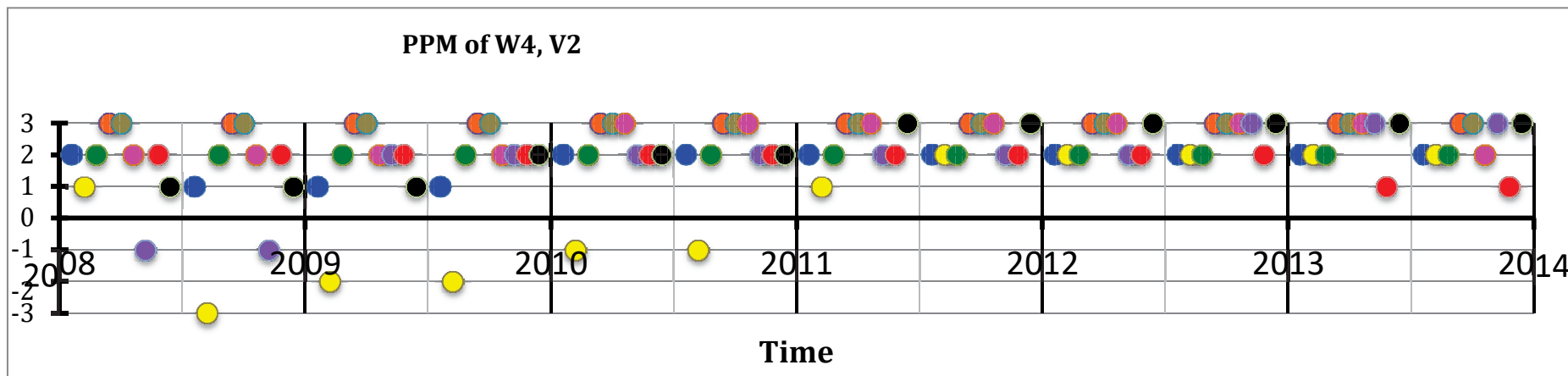
PPM of W4, V2

5. **PM of W5 woman in-depth interviewee,V2**

PPM of W5,V2

Appendix 4: PPMs of 5 women in-depth interviewees from V3
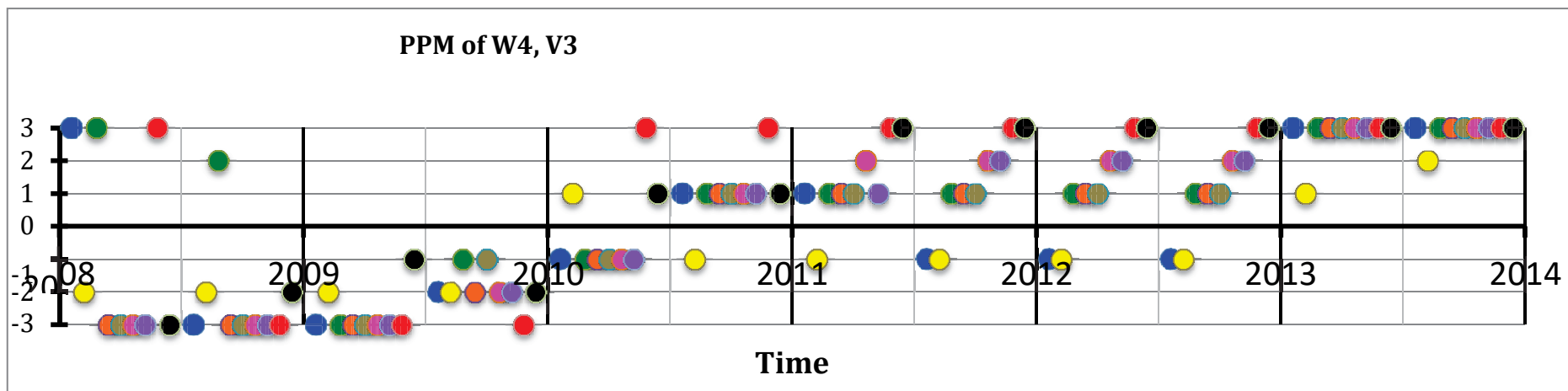
1.   **PPM of W1 woman in-depth interviewee,V3**

PPM of W1, V3
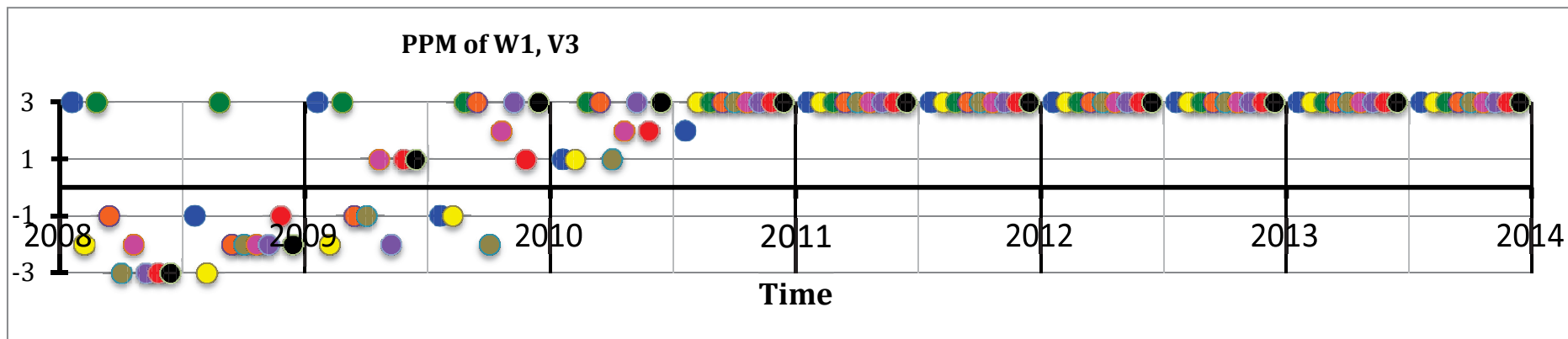
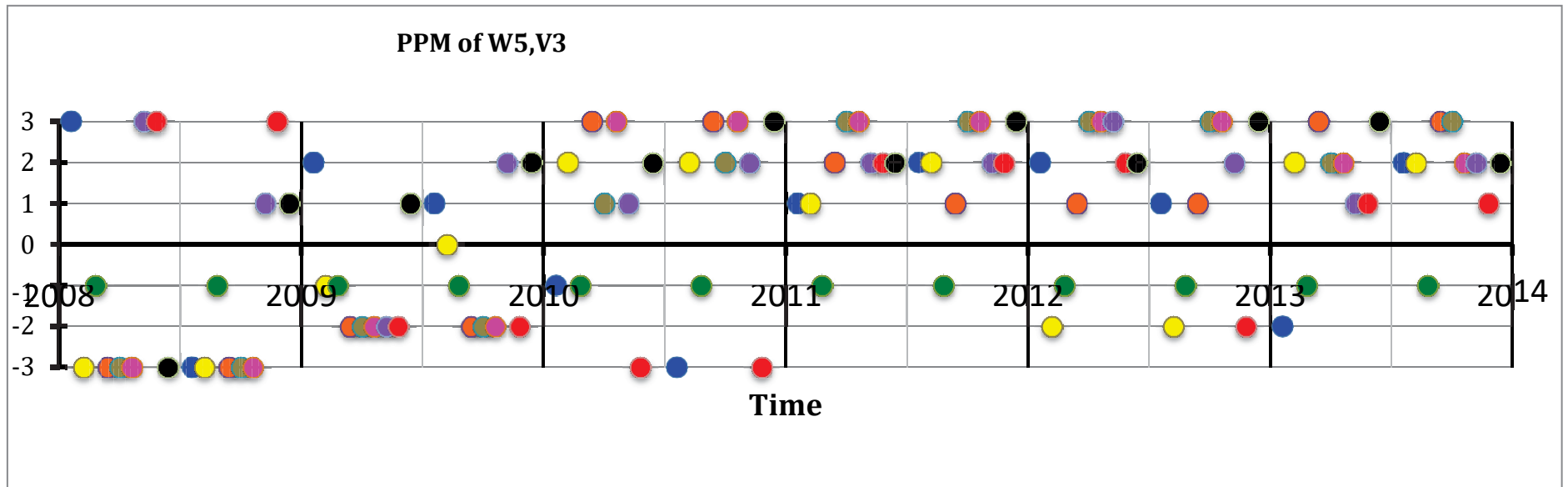2.   **PPM of W2 woman in-depth interviewee,V3**

PPM of W2, V3

3.   **PPM of W3 woman in-depth interviewee,V3**

PPM of W3, V3
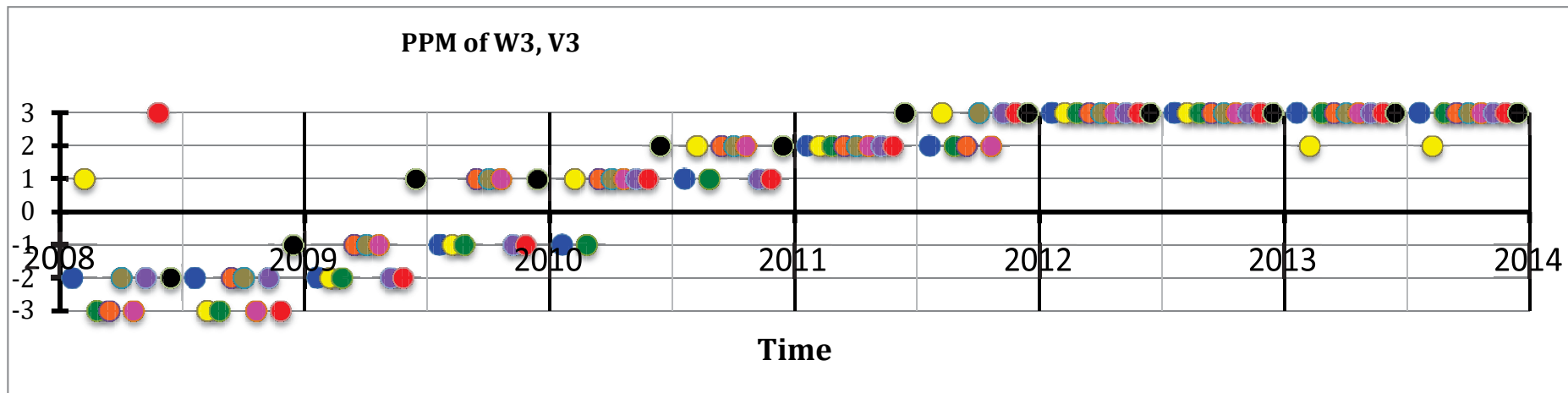
4.   **PPM of W4 woman in-depth interviewee,V3**

PPM of W4, V3

5.   **PPM of W5 woman in-depth interviewee.V3**

PPM of W5,V3

Appendix 5: Participatory Process Map (PPM) analysis of W1, V1

Colour coding in different types in the PPM

Based on Table 4.2 (see Chapter 4), the PPM of W1 interview participant of V1 is analysed and presented in Appendix 5. The six different types of capital are represented by nine colours: social capital (five colours for different dimensions), social capital (red colour), psychological capital (orange colour), human capital (green colour), and physical and financial capital (yellow colour). The dimensions of social capital are also represented in five different colours: social relation/social norms (blue), social relationship/networks (black), communication/mutual respect/trust (purple), collective work/cooperation/social cohesion (pink), and decision-making/empowerment (brown).

| Code-Colour	Different types of capital	PPM indicators
Blue	Social capital	Communication within networks–social relationship Groups' relationships and interaction within networks
Black	Social capital	Trust within networks
Pink	Social capital	Group – collective/cooperative work
Purple	Social capital	Social cohesion
Brown	Social capital	Empowerment (decision making)
Yellow	Financial capital Physical capital	Economic status – income and resource ownership
Green	Human capital	Capacity building training/knowledge sharing within networks/peer education/on-the job training (knowledge transfer)
Orange	Psychological capital	Confidence, hope, esteem, happiness, resilience, well-being (physical/mental health)
Red	Social capital	Social status

One example of PPM is shown below. The following part explains how the individual women indicated their situation in relation to different kinds of capital in each six-month interval. Among the five women key informants from V1, the PPM of woman informant 1 is selected and analysed.

PPM of woman informant 1, V1

As presented in Chapter 7, this informant is in the age group 25-44 years and is the mother of two children. She completed primary education to fifth grade. Her current business is rice trading, as stated in the consent form completed as part of the PPM preparation. She prepared individually the PPM below (that is figure 7.1, Chapter 7) by using the nine-colour pens and this took fifteen minutes while another five minutes was taken to give her feedback on the PPM preparation.

Her feedback on PPM preparation and its impact

PPM preparation assisted in the interview process. Though she voluntarily nominated her name as a key informant, when the time came, she became nervous, as she had no prior interview experience in her entire life. She worried about her interview skills when she was alone with the interviewer and as she wished to complete the interview successfully, she asked her family members to help her if necessary. All her worries went away after the PPM preparation and she felt happy to share her life experience with all of its changes. After giving her feedback, she was ready for the one-on-one interview without her family members. The interview took less than 90minutes.
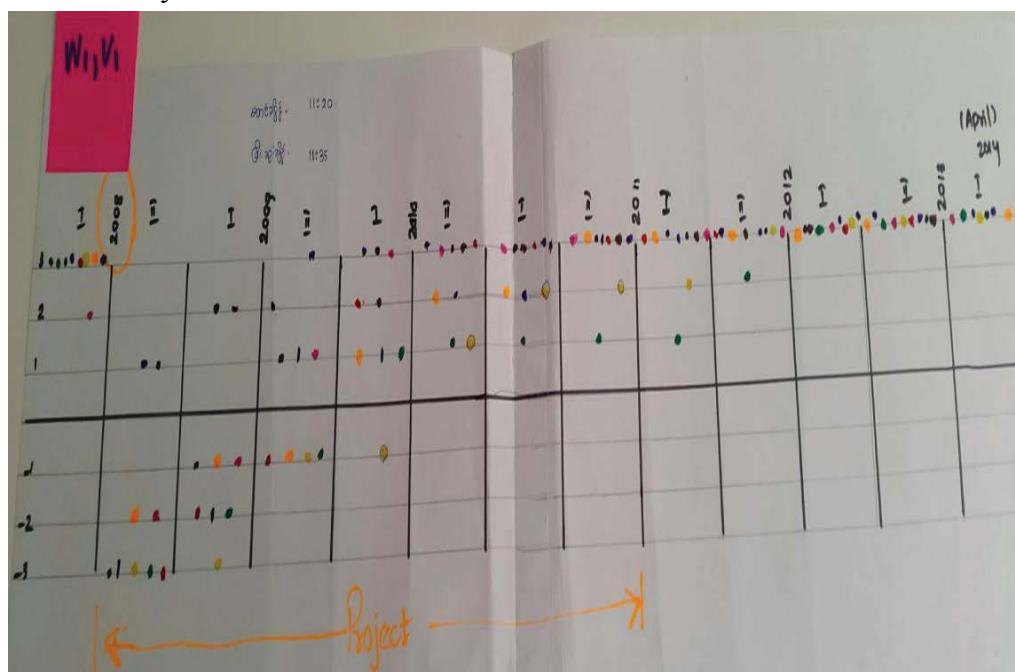
PPM of the woman informant W1, V1

The first interval of PPM

The first interval referred to the pre-cyclone period. Chapter 4, 'Context Chapter', indicated that Cyclone Nargis hit Labutta, Myanmar on 2 May 2008. Therefore, this first interval was nearly five months from January to May 2, 2008. For the pre- cyclone period, Woman Informant 1, V1 indicated all colours at the highest p3 level except the pink, to identify her social capital (norms and social relationship, networks, communication, decision-making), social capital (social class, power), psychological capital (confidence, hope, esteem, happiness, resilience, well-being), and physical and financial capital (economic status) maintained at the highest level. She made a bigger size for yellow (represented to economic status, meaning the ownership of physical and financial capital), orange (represented to psychological capital), and blue colours (represented to social relationship/social norms).

The pink colour was the p2 level and represented the collective work and social cohesion of social capital. It reflected her interview data about her pre-cyclone situation, as she was the wealthy, powerful, farm-owner and loan-lender woman in the village. As the powerful loan-lender, her skills in cooperation for social cohesion with others were not good, as she was a commander of others to do the collective work/cooperation. Hence, she marked the pink colour at the p2 level in her PPM. The indications in the first interval of PPM reflected her interview data regarding the pre- cyclone situation.

The second interval of PPM

The second interval was from 4 May to 31 December 2008, which was nearly eight months. Therefore, the second interval spanned two periods: from the post-cyclone (May 4, 2008) until the INGO project (early August 2008), and the first five- month pilot project of the 30-month INGO project (from late August/early September 2008 to 31 December 2008).

In the second interval, her informant's situation regarding different types of capital showed a significant decline. The blue colour (social relationship) and the black colour (networks) dropped down from the p3 (of the pre-cyclone) to the p1 level. It showed that

her social relationship and networks with others were not strong as before, however they still remained positive after Cyclone Nargis.

The orange colour (psychological capital) and the pink colour (collective work and social cohesion) dropped down from the p3 (of the pre-cyclone) to the m2 level, indicating that her psychological status was affected by the cyclone and she did not participate in the collective work to get social cohesion with other women.

The brown colour (decision-making- empowerment), the purple colour (communication), the yellow colour (economic status - ownership of physical and financial capital), the green colour (information, knowledge - human capital), and the red colour (social class, power - social capital) declined from the p3 (of the pre- cyclone) to the lowest m3 level. This indicated that her economic status including physical and financial resources, her social class and the control power, was completely destroyed by the cyclone. Regarding the size of colour, she made a smaller size for the yellow indicating a loss of land. She did not access information and did not communicate with others. Her decision-making power reached the lowest level. The situation of different types of capital after Cyclone Nargis of the PPM reflected her interview data relating to the post-cyclone situation until the INGO project. Her involvement in the second interval of PPM confirmed the data from INGO documents and reflected her interview data regarding the pilot project of INGO in 2008.

The third interval of PPM

The third interval was the six months January to June 2009, which was the first part of the second main project of the 30-month INGO project as indicated in in Chapter 4. During that interval, the informant showed the black colour (social relationship/ networks - social capital) and purple colour (communication/mutual respect/trust- social capital) went up from the p1 to p2 level. This indicated that her level of communication was improved and that she built networks with others.

She further indicated that pink (collective work-cooperation/social cohesion- social capital), orange (confidence, hope, esteem, happiness, resilience, health-physical/mental

- psychological capital), and brown (decision making/empowerment- social capital) went up from the m3 and m2 levels respectively to the m1 level. This shows that her psychological capital and collective work with others were increased, together with her decision- making skill.

The colours of blue (social relationship/ social norms - social capital), green (capacity building, knowledge, information, education - human capital), and red (social class, power holders, social capital) also went up from the m3 level to the m2 level. This shows that her social relationship/social norms, knowledge, information, education, physical and mental health had increased from the lowest level. All of them, however, remained under the ground level. She further indicated that her psychological status was down as the yellow colour remained at the m3 level. It indicates that her confidence, hope, esteem, happiness, and resilience were not at the same level as in the post-cyclone period. The nine colours demonstrated the changes in different types of capital to show her situation during the five-month pilot project of INGO, and reflected the interview data about her experience during the pilot project.

The fourth interval of PPM

The fourth interval was the six months July to December 2009, which was the second part of the 2009-second main project of the 30-month INGO project as indicated in Chapter 4. The second main project ended in 31 December 2009.

In the fourth interval of PPM, none of the nine colours was indicated at the m2 and m3 levels as they had been for the last two intervals. The red colour (social class, power holders, health-physical/mental- social and human capital), and the orange colour (confidence, hope, esteem, happiness, resilience - psychological capital) remained at the m1 level. However, yellow (economic status including resource ownership of physical and financial capital) went up from the m3 to m1 level, and the green colour (capacity building, knowledge, information, education - human capital) went up from the m2 to m1 level. This shows that the informant's psychological status was improved; however it had not reached a normal level. Her knowledge, information and capacity- building

were also promoted (through training of INGO). Though her social class had improved from the m2 to m1 level, it was yet to reach the normal situation.

The purple colour was at the highest level as p3, showing that the informant communicated more with other people through mutual respect and gained trust. The black colour remained at the p2 level and represented social relationship/ networks of social capital. It shows that she was involved normally in networks.

The blue colour (social relationship/ social norms - social capital), brown (decision-making/empowerment- social capital) and pink (collective work-cooperation/social cohesion - social capital) went up from m1 to the p1 level. It shows that her collective work, social cohesion with other women and her individual social class were restored. All analysed finding of PPM reflected her interview data in Chapter 6.

The fifth interval of PPM

The fifth interval was the six months from January - June 2010. The INGO did not operate in the three villages during this period but women from the three villages themselves continued the INGO activities independently. The results relating to this interval show the sustainability of the eleven-month second project (see Chapter 4).

The yellow colour (economic status including resource ownership of physical and financial capital) remained at the m1 level, as in the previous interval. It shows that her economic status had not increased significantly, however the underlying reason for her making the bigger size of yellow colour was not clear.

The blue (social relationship/ social norms - social capital) remained at the p1 level. It showed that her social norms were not improved from the previous interval.

The orange colour (confidence, hope, esteem, happiness, resilience, health-physical/mental - psychological capital) and green (capacity building, knowledge, information, education - human capital) went up from the m1 to the p1 level.

The red colour (social class, power holders, - social capital) and the brown colour (decision making/empowerment - social capital) went up from the p1 to p2 level. It shows that her decision-making skill and her identity regarding physical and mental status were higher than during the previous interval.

The pink colour (collective work-cooperation/social cohesion - social capital), the black (social relationship/ networks- social capital) and the purple (communication/ mutual respect/trust - social capital) stood at the p3 level. It shows that networks, communication, mutual respect, trust, collective work and social cohesion in V1 reached the highest level among women of V1.

The fifth interval of her PPM showed that while the informant's situation in relation to social capital, human capital and psychological capital were restored after the cyclone hit, her economic status and the ownership of physical and financial capital did not reach the normal level.

The sixth interval of PPM

The sixth interval was the six months from July - December 2010. The third INGO project started in November and December 2010 in the three villages, as indicated in Chapter 3. In this interval, no colour was under the ground level and all colours went up above the ground level.

The green colour (capacity building, knowledge, information, education - human capital) remained and the yellow colour (economic status including resource ownership of physical and financial capital) went up to the p1 level. It shows that the informant's capacity building, information and knowledge remained at the previous level.

Both orange colour (confidence, hope, esteem, happiness, resilience - psychological capital) and blue (social relationship/ social norms - social capital) went up from the p1 to the p2 level. It shows that her psychological status and social relationship regarding social norms were increased compared with the previous interval.

The other five colours: black, pink, red, purple and brown reached the highest level of the p3. This shows that her social networks, communication, collective work/cooperative work, social cohesion, reached the highest level, together with her decision-making skill. The nine colours indicated that the majority of capitals were restored for her social status only in the sixth interval, but the resource-ownership did not reach the pre-cyclone situation. It seems that the women cyclone survivors required at least 24 months to recover and restore different types of capital by themselves.

The seventh interval of PPM

The seventh interval of PPM refers the period from January to June 2011 when the INGO implemented the third project in the three villages. The informant indicated that the highest-level p3 was occupied by six colours: black (social relationship/ **networ**ks - social capital), purple (**communication/mutual respect/trust -** social capital), pink (**collective work-cooperation/social cohesion -**social capital), brown (decision making/empowerment - social capital), and red (social class, power holders, identity- social capital). It shows that her networks, communication and mutual respect, trust, collective work/cooperation, social cohesion, identity, social class, power and decision-making reached the highest level. However, her psychological status and economic status including resource-ownership of physical and financial capital were not a full-bloom success because the orange colour (confidence, hope, esteem, happiness, resilience, mental- psychological capital), blue (social relationship/ social norms - social capital), yellow (economic status including resource ownership of physical and financial capital) were at the p2 level.

The informant indicated that her knowledge, information and capacity building training were not high as other types of capital because the green colour (capacity- building, knowledge, information, education - human capital) was at the p1 level. In the seventh interval, apart from the four colours, the remaining five colours went back to the highest level, p3, as in the pre-cyclone situation. This analysis also reflected her interview data.

The eighth interval of PPM

The eight interval of PPM covered the last six months of the 30-month INGO project, which refers the period from June to December 2011. Apart from two colours, the remaining seven reached the highest level, p3, in this interval. The informant was able to restore almost all types of capital as per the pre-cyclone status as the blue (social relationship/ social norms - social capital), black (social relationship/ networks - social capital), purple (communication/mutual respect/trust - social capital), pink (collective work-cooperation/social cohesion- social capital), orange (confidence, hope, esteem, happiness, resilience- psychological capital), brown (decision making/empowerment-social capital) and red (social class, power holders, identity, - social capital) were all at the p3 level.

Her economic status had not reached the highest achievement as the yellow colour (economic status including resource ownership of physical and financial capital) stood at the p2 level.

Knowledge, information, capacity building and education represented the lowest achievement because the green colour (capacity building, knowledge, information, education-human capital) was the p1 level. In the last six months of the 30-month INGO project, Informant 1 of V1 restored different types of capital as per harper-cyclone situation except for her economic status and human capital. The PPM analysis of this interval reflected her interview data.

The ninth interval of PPM

The ninth interval of PPM covers the six-month period from January to June 2012. It is the first interval after the 30-month INGO project when women from the three villages conducted activities by themselves. For this interval, the informant indicated the same pattern for all nine colours so her situation during this interval was the same as during the eighth interval.

The tenth interval of PPM

The tenth interval of PPM covers the period from July to December 2012. In this interval, Informant 1 of V1 operated her business and continued the activities from the 30-month INGO project. In this interval, knowledge, information, capacity- building and education went up from the p1 to p2 level because the green colour (capacity building, knowledge, information, education - human capital) was at the p2 level. The other eight colours stayed at the highest level - p3. This shows that the informant restored her pre-cyclone status in the tenth interval of PPM except for her human capital.

The eleventh, twelfth, and thirteenth intervals of PPM

The period of the three intervals was January 2013 to April 2014 when the primary data was collected in the three villages. In the three intervals, Informant 1 of V1 restored her pre-cyclone status regarding social capital, psychological capital, human capital, physical and financial capital at the highest level - p3.

Summary of one PPM analysis

This PPM analysis related to woman informant 1 from V1 reflected the interview data. The PPM indicates that W1 of V1 has changed her life regarding different types of capital/dimensions since Cyclone Nargis. As explained previously, the PPM was the supporting tool for collecting data from the woman in-depth interview or women interviewees. Moreover, in the data analysis, it became a useful tool for triangulating the interview data from the woman individuals to examine the situational changes in their lives between the pre-cyclone period and the data collection in April-May 2014.

The strength of PPM is as an icebreaker between the interviewer and interviewee before the formal interview (thus may also reduce power between interviewer and interviewee), exploring the relevant information, shortening the interview hours, and assisting in data collection and data triangulation. The instructions for PPM are not difficult to follow and the costs are minimal. The significance of PPM is to be able to reflect on the general situation of women in relation to different types of capital within the relevant interval.

However, the detailed changes of different types of capital/dimensions within each interval are difficult to present in PPM. The weakness of PPM is that it is difficult to demonstrate detailed information, but it can show the general longitudinal process and the related achievements. Another weakness of PPM is it can only reflect the woman's social world at a particular period and ignores other influential factors (such as family, society, and so on). PPM needs to be explored more in further research.