EMPOWERING WOMEN DURING POST DISASTER RECONSTRUCTION

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DEDICATION

This piece of research is dedicated to my wonderful parents

Mr. & Mrs. Thurairajah

DECLARATION

This thesis is submitted under the University of Salford rules and regulations for the award of a PhD degree by research. While the research was in progress, some research findings were published in refereed papers prior to this submission.

The researcher declares that no portion of the work referred to in this thesis has been submitted in support of an application for another degree of qualification of this, or any other university or institution of learning.

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Nirooja Thurairajah

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank	
AGA	Assistant Government Agents	
CBC	Community Based Council	
СВО	Community Based Organisation	
CEDAW	Convention to Eliminate All Forms of Discrimination Against Women	
CENWOR	Centre for Women's Research	
CEO	Chief Executive Officer	
CRED	Centre for Research on the Epidemiology of Disasters	
DEVAW	Declaration on the Elimination of Violence Against Women	
DRMU	Disaster Relief Monitoring Unit	
GBV	Gender Based Violence	
GCE	General Certificate of Education	
GDP	Gross Domestic Product	
IDP	Internally Displaced People	
ILO	International Labour Organisation	
INGO	International Non-Governmental Organisation	
ITDG	Intermediate Technology Development Group	
MS Excel	Microsoft Excel	
Kg	Kilograms	
NGO	Non-Governmental Organisation	
PDR	Post Disaster Reconstruction	
RADA	Reconstruction and Development Agency	
Rs.	Sri Lankan Rupees	

SHRDC	South Asian Association for Regional Cooperation
TAFREN	Task Force for Rebuilding the Nation
UK	United Kingdom
UN	United Nations
UNFPA	The United Nations Fund for Population Activities
UN-HABITAT	United Nations Human Settlements Programme
UNISDR	United Nations International Strategy for Disaster Reduction
USA	United States of America

ABSTRACT

The frequent occurrences of unprecedented natural disasters continue to pose the greatest threat to many countries around the world. The 'shock' that these natural disasters give has taken a toll especially on developing countries' economies. Many vulnerable groups within these countries are the most severely affected by disasters. Among them, women face many difficulties during the post disaster phase. Apart from poverty, environmental degradation and different needs of men and women, the marginalised role of women in post disaster reconstruction further contributes to women's vulnerability in post disaster situations. In most of the instances, although disaster management efforts are designed to benefit both men and women, in practice a larger share of benefits and resources go to men while women continue to remain marginalised.

One of the main sustainable means to overcome the marginalised conditions of women is through an adjustment process to allow them to fulfil their basic human development needs. The concept of empowerment is based on the understanding that those who have been denied the ability to make strategic life choices can acquire such ability through this concept. The concept of empowerment facilitates a process whereby individual attitudes and capabilities, combined with collaborative actions result in a transformation to the desired achievements.

In this context, the research aims to explore and investigate the concept of empowerment for women within post disaster reconstruction in order to formulate a strategy that integrates community women's empowerment in disaster reconstruction activities. This research takes a position in between a positivism stance and a social constructionism stance in the continuum of philosophy and adapts a survey research strategy with mixed methods of research techniques. The research data collection was conducted in three phases. During the first phase, semi-structured interviews were conducted among experts in Sri Lanka while the second phase focused on collecting the perspectives from disaster affected communities using structured interviews and questionnaires. The third phase gathered information from groups of the affected communities' members. Data was then analysed using content analysis, cognitive mapping and descriptive statistical techniques. The research investigated women's status in post disaster situations; effects of post disaster reconstruction on women; and established factors that influence women's empowerment in post disaster reconstruction. In addition, the research recommended strategies that could empower women during post disaster reconstruction. It is expected that the research will add empirical evidence on the process of women's empowerment in post disaster reconstruction to the existing body of knowledge, and will benefit the government, humanitarian organisations and research institutions working on women's empowerment.

CHAPTER 1 INTRODUCTION

1.1 Background of the study

The world today is witnessing many recurring natural disasters and the magnitude of impact has increased tremendously (CRED, 2012; Ferris, Petz and Stark, 2013). The obstacle of increasing global temperature, which is currently projected to rise up to 6.3 degrees Fahrenheit by the end of the century (United Nations Environment Program, 2009), causes problems for many countries. The United Nations quotes that even if the countries achieve their most ambitious climate promises, they will not be able to reduce the temperature rise. This indicates an increase in occurrences of tropical cyclones and heavy rainfall. In addition, the United Nations predicted that the sea level will rise by up to nearly a metre. This would ultimately increase the probability of future natural disasters. The population growth and infrastructure development also contribute to increasing the world's exposure to natural hazards (Bournay, 2007).

Among many countries, developing countries are considered to be particularly hard hit by natural disasters (Da Silva and Cernat, 2012). Lee and Logez (2005) state that the smallest countries are heavily affected in economic terms and they are less capable of overcoming the adverse effects of disasters without external assistance. According to the Centre for Research on the Epidemiology of Disasters report (CRED, 2012), the Asian continent is most often hit by natural disasters. In 2011, this amounted to 44% of total natural disasters while other continents were observed as follows: America - 28%, Africa - 19.3%, Europe -5.4% and Oceania - 3.3%. It further noted a profile of regional distribution of disaster occurrences, observed from 2001 to 2010. In certain instances, there is more than one hazard which occurs within the same year. In 2012, seven Asian countries experienced two different natural disasters within the same year. Afghanistan had drought and flood; Bangladesh and Vietnam had flood and storm; and, India, Malaysia, Pakistan and Sri Lanka had flood and earthquake. According to the CRED report (2012) 52.1% of disasters were hydrological disasters, 21.2% meteorological, 19.2% geophysical and 7.5% climatological disasters in Asia in 2011. Among many disasters in Asia, the '2004 Indian Ocean Tsunami' was one of the deadliest natural disasters ever, which hit 14 countries along the coast of the Indian Ocean. It killed over 230,000 people in fourteen countries and inundated coastal communities (The American National Red Cross, 2009). Sri Lanka was the second hardest hit country among those 14 countries. Sri Lanka is mostly affected by floods due to monsoonal rain or low pressure and drought. Sri Lanka is also prone to landslides and storms, and has witnessed many natural disasters. However, people from Sri Lanka have no living memory of a tsunami on such a scale, although there is a mythological reference to a very severe tsunami about 2075 years ago, which was considered as an 'Act of God' to punish the king for the brutal murder of a monk (Panagoda and Withanage, 2005).

Although Sri Lanka is not new to disasters, the '2004 Indian Ocean Tsunami' took people's breath away by its devastation. The tsunami ceased many opportunities and took many lives. However, the lives of survivors did not cease in the disaster affected areas. Thus, the government of Sri Lanka had the responsibility to enhance the status of affected community members and to protect them from future disasters. In this context, the undertaken research focuses on management of natural disasters, especially considering the development of the affected communities in Sri Lanka. The following section sets out the focus of the research with its justification.

1.2 Justification of the research

1.2.1 Need to focus on local communities in natural disasters

The increase in natural disaster occurrences (Altay and Green, 2006) has drawn the attention of policy makers and researchers to focus more on enhancement of society's capacity to withstand disasters. This would facilitate the countries to reduce damage to both human and material resources. Most often the damage that a single event could bring to a country is considerable and it particularly affects developing countries' economies badly. During the 2004 Indian tsunami, more than 35,000 people died, 100,000 houses were damaged and 500,000 people were displaced in Sri Lanka (Ratnasooriya *et al.*, 2007). The cost of damage caused to infrastructure and environment exceeded US\$ 900 million (Ratnasooriya *et al.*, 2007). Among many stakeholders, local communities are an important group for disaster management as they are the first responders when a disaster

happens. In addition, in certain instances, when disasters happen in small scale, people are left alone to deal with the consequences.

Haghebaert (2007) states that top-down disaster risk reduction programmes often fail to address specific vulnerabilities, needs and demands of at-risk communities. Haghebaert further mentions that these vulnerabilities and needs can only be identified through a process of direct consultation and dialogue with the communities concerned, because those communities understand local realities and contexts better than outsiders. Vulnerable communities possess skills, knowledge, resources and capacities and these are often overlooked and underutilised (Aldunce and Leon, 2007); and, in certain situations, they are even undermined by external actors. Generally, elderly people, women, children and disabled people are considered as vulnerable people among the communities. This bespeaks the need to consider the needs and capabilities of local communities, and especially the vulnerable people in disaster management activities.

1.2.2 Need to focus on post disaster reconstruction

Literature on disaster management depicts the process of rebuilding the affected areas through a model called a disaster management cycle. In the disaster management cycle, the post disaster reconstruction (PDR) phase plays a major role in rebuilding the disaster affected communities. Post disaster reconstruction provides windows of opportunity for physical, social, political and environmental development, not only to reconstruct the impacted areas, but also to improve the socio-economic and physical conditions of the impacted community (International Labour Organisation, 2003). Nevertheless, too often disaster responses have not contributed to long-term development and in real practice, they actually sabotage or destabilise it (Bradshaw, 2001; Anderson and Woodrow, 1998). This has also resulted in prolonged reconstruction activities which ultimately result in the loss of development opportunities. An earlier study found that despite the improvements in the emergency response to natural disasters, permanent reconstruction is often inefficiently managed, uncoordinated and slow to get off the ground (Jones, 2006).

The construction industry is a major player in reconstruction activities and the amount of investment that it makes on reconstruction is vast. Hence, the loss of opportunities from reconstruction activities would be an enormous loss to the local communities and to the

economy of the country. The estimated cost of post tsunami rehabilitation and reconstruction for Sri Lanka was nearly US\$ 2.2 billion and was planned over 3-5 years (Ratnasooriya *et al.*, 2007). This reflects the need to adapt strategies to improve effectiveness and efficiency of reconstruction activities which could facilitate utilisation of opportunities that PDR could offer to the communities.

1.2.3 Need to focus on women and suitability of the concept of empowerment

Studies have reflected the need for gender consideration in disaster management, and emphasised its importance in building disaster resilient communities (Ariyabandu and Wickramasinghe, 2003; Delaney and Shrader, 2000). Ariyabandu and Wickramasinghe (2003) state that disasters affect women and men differently due to the different roles and responsibilities undertaken by them and, the differences in their capacities, needs and vulnerabilities. In most of the instances, although disaster management efforts are designed to benefit both men and women, in practice a larger share of benefits and resources go to men while women continue to remain marginalised (Ariyabandu and Wickramasinghe, 2003; Thurairajah and Baldry, 2011). In many instances, after the occurrence of disasters, women's economic dependence on men increases (Kottegoda, 2001). This ultimately reduces their security.

During or after a disaster, as job opportunities dry up, men have the option of migrating to find work (Ariyabandu and Wickramasinghe, 2003). In certain cases when women are less able to migrate due to their domestic responsibilities, it leaves them in a more vulnerable position (Centre for Policy studies, 2001; Enarson, 2001; Ariyabandu and Wickramasinghe, 2003; United Nations, 2006). A very recent report from the London School of Economics recognised the importance of gender sensitive approaches in reconstruction as a smarter approach (Ferris *et al.*, 2013). Their study identified that women are at greater risk from natural hazards than men especially in low income countries and the existing inequalities and discrimination including the ones in terms of gender are exacerbated by natural disasters (Ferris *et al.*, 2013). This indicates the necessity to identify women's difficulties and needs in post disaster contexts and include them in post disaster reconstruction for their betterment.

Since Sri Lanka is an island in the Indian Ocean with a strong population growth in coastal areas, there is a need to build disaster resilient communities in order to protect the people and country from future disasters. During the Yokohama World Conference on Natural Disaster Reduction, it was recognised to stimulate community involvement and the empowerment of women at all stages of disaster management programmes as an integral part of reducing community vulnerability to natural disasters (United Nations, 1994). Jayaraj (2006) states that most vulnerable and marginalised sections of society like, women, children, and the poorest sections of society are the primary stakeholders and partners in the empowering process in reconstruction.

According to the International Strategy for Disaster Reduction (United Nations, 2005) women are often left out of formal planning and decision making, and marginalised from community authority. As such, their needs and concerns are often overlooked, and their profound contributions frequently go unrecognised. The concept of empowerment is viewed as an active multidimensional process that facilitates women to recognise their full identity and powers in all aspects of their existence (Pillai, 1995). The concept can be illustrated as a social process in addressing women's concerns and also as an outcome that can be enhanced and evaluated against expected accomplishments (Parpart *et al.*, 2003).

The United Nations, (2005) states that ensuring female property and inheritance rights would help to empower women both economically and socially, and would rectify the fundamental injustice. The UN also suggested other strategies for economic opportunities like improving women's access to employment and conditions of work by offering job training, improving pay and working conditions, and providing child care. As per the United Nations Development Programme (United Nations, 2005), 'Eliminating gender inequalities in employment' is one of the strategies within the millennium development goal to 'promote gender equality and promote women' that seeks to improve women's economic opportunities.

Furthermore, UN-HABITAT (2007) found that when women are empowered, they have the capacity and the inner will to improve their situation and gain control over their own lives. This can lead to an equal share in economic and political decision-making, and control of economic resources which will reduce their vulnerability in disaster situations. This reflects the strong need to empower women who are from the affected community within post disaster reconstruction to develop long term disaster resilient communities. Accordingly, the need to empower women (during post disasters) can be considered as a stepping stone to not only eliminating gender inequalities in employment but also to reduce poverty. In this context, the following section sets the aim and objectives of the undertaken study.

1.3 Aim and objectives

The study aims to explore and investigate the concept of empowerment for women within post disaster reconstruction, in order to formulate strategies that integrate community women's empowerment during disaster reconstruction activities. The following objectives were formulated from the aim of the study.

- 1. Understand the concept of empowerment for women
- 2. Determine the importance of women's empowerment during post disaster reconstruction
- 3. Establish the key factors that enable or hinder women's empowerment within post disaster reconstruction
- 4. Explore and investigate the current practices of empowerment of women within post disaster reconstruction
- 5. Formulate strategies to integrate empowerment of women during post disaster reconstruction

1.4 Research methodology

The research methodology of the study provides an overall approach used in the research process from the theoretical underpinning to analysis of the data. The research takes a position in-between a positivism stance and a social constructionism stance in the continuum of philosophy. It adapts a survey research strategy with a mixed method of research techniques (refer to section 3.3.3). The undertaken research consists of three phases of data collection. Considering the nature of the study and availability of data, each individual was treated as a unit of analysis in the study. Since the study investigates the challenges that women face in post disaster situations and how they could be empowered

using post disaster reconstruction, the researcher, together with previous studies believes that it is important to understand the perspectives of disaster affected community members as the reality of the phenomena, and this lies mainly within the communities. In order to avoid any disempowerment of men by the attempt to empower women, the study considered both women and men's perspectives in the second phase. In addition to the community's perspective, the research also gathered perspectives from experts who have worked in disaster management, women's issues and development, and construction. This provided information from the implementers' point of view on women's status, the effects of post disaster reconstruction and practical issues of strategies.

The first phase of data collection comprised of semi-structured interviews with 15 experts while the second phase comprised of structured interviews and questionnaires with individual community members from the disaster affected communities in Sri Lanka. The third phase comprised of structured interviews with groups of community members. The data analysis was done using content analysis, cognitive mapping and descriptive statistics. The analysis process was further supported with NVivo (version 9) and MS Excel (2010).

1.5 Contribution to knowledge and practice

Although women's empowerment in post disaster activities has been widely highlighted among related studies, little research has been done on the method of integrating women's empowerment in post disaster reconstruction. Furthermore, the literature hardly contains any empirical evidence on the elements in the process of women's empowerment within the reconstruction context. Hence, this study attempts to explain women's status in post disaster situations and presents routes to empower them by considering the factors that could assist them in the right circumstances during post disaster reconstruction. Therefore, it is expected that the undertaken research will add a greater contribution to the existing body of knowledge by providing an understanding on the process of women's empowerment within the reconstruction context. In addition, the study provides suggestions for strategies that integrate women's empowerment into post disaster reconstruction. It is believed that this contribution would benefit the ministry of child development and women's affairs in Sri Lanka; NGOs or INGOs, and research institutions that are involved in disaster reconstruction and women's development in Sri Lanka.

1.6 Structure of the thesis

The thesis is structured under seven chapters and the structure of the thesis is as follows:

Chapter 1: Introduction

Chapter 1 provides an introduction to the whole thesis including background information on the areas considered for study, the justification for the study, aim and objectives, a brief outline of the research methodology and the contribution to knowledge and practice.

Chapter 2: Literature review

Chapter 2 presents a thorough review of literature on the key issues of the study. This includes women's status in the post disaster phase, women's empowerment and post disaster reconstruction.

Chapter 3: Research methodology

Chapter 3 provides detailed information on the research methodological process of the research. It includes establishing the aim, objectives and research questions; research philosophy; research approach; research techniques; thesis write up process; and credibility of the research design.

Chapter 4: Conceptual framework

Chapter 4 presents the conceptual framework for the study. In includes information on the phenomena, main concepts involved and relationships between the concepts.

Chapter 5: Data analysis

Chapter 5 presents the analysis of the data that were collected during the three phases. It presents the analysis of data from experts working in relevant fields, individual community members and groups of community members.

Chapter 6: Findings

Chapter 6 reports the empirical research findings of this research, drawing the findings from Chapter 5. It also provides an insight into different stakeholder's views on the issue.

Chapter 7: Conclusions

Chapter 7 presents the conclusions of the study. It also presents the limitations of the study and future research areas.

1.7 Summary and link

Chapter 1 presents an overview of the research area and it's justification towards the research problem. It presented the aim and objectives of the study. Following that, a summary of research methodology, expected contribution to knowledge and practice, and a brief to the structure of the thesis are presented. This chapter sets the scene for the research which is discussed in the following chapters. The following chapter will present a thorough review of literature.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

Chapter 2 presents the comprehensive literature synthesis for the research which was carried out from the beginning of the study. The literature review has facilitated the researcher to gain a thorough understanding of the area, identify potential key research issues, identify similar work that has been already carried out, and recognise the knowledge gaps that call for further research. Accordingly, the chapter is structured as follows:

- A brief introduction is given initially on disasters, types of disasters and the importance of research on natural disasters. In addition, a detailed description about disaster management and its cycle is presented in the initial sections. Following that, a description on the importance of studying PDR, its activities and the state of PDR after a tsunami in developing countries, especially in Sri Lanka, are presented.
- Secondly, the chapter focuses on women's status during the post disaster period and the roles that they play in PDR. In terms of women's status in their communities, women's vulnerabilities and the causes of those vulnerabilities are synthesised from the literature. Furthermore, various cases where women have participated in PDR activities are also gathered in this section.
- Thirdly, a detailed description the concept of empowerment, its path and its ingredients and application for women are presented. A detailed synthesis of how the concept is viewed within developed countries and developing countries is also presented within section 2.4.3.1.
- Section 2.5 focuses on the construct of women's empowerment within the post disaster reconstruction context. The influences on women's empowerment during PDR was analysed within this section. Furthermore, the strategies on women's empowerment that were adopted within the post disaster period in Sri Lanka were analysed in detail.

- Section 2.6 analyses the probable integration of the concept of empowerment for women during the post disaster reconstruction period. A framework is presented to depict the concepts involved and the main areas identified for the research.
- Finally, the chapter summarises the literature synthesis with the identification of the gaps in the knowledge, based on which the aim and objectives of this research have been developed.

2.2 Disasters

Disasters are defined in many ways by many scholars and institutions. Since disaster definitions differ depending on the field of study, there is no universally accepted definition for disasters (Turner and Pedgeon, 1997). UNISDR (2009) describes a disaster as a consequence of the following factors: the exposure to a hazard; the conditions of vulnerability that are present; and insufficient capacity or measures to reduce or cope with the potential negative consequences. The Oxford dictionary (2009) defines disaster as 'a sudden accident or a natural catastrophe that causes great damage or loss of life'.

Shaluf et al. (2007) states that disasters can be natural, man-made or hybrid disasters. They further explained that natural disasters are unplanned and socially disruptive events with sudden and severe disruptive effects, whereas man-made disasters occur due to interaction between 'Human, Organisational, and Technological' (HOT) factors and 'Regulatory, Infrastructural and Preparedness' (RIP) factors. Although Shaluf et al. describes RIP as 'factors', Shrivastava et al. (1988) identified them as 'failures'. Shrivastava et al. (1988) identified HOT factors as: operator and managerial errors; purposive acts such as terrorist attacks or war; policy failures; inadequate resource allocations for safety; communication failures, misperceptions of the extent and nature of hazards; inadequate emergency plans; cost pressures which curtail safety; faulty design; defective equipment; etc. Meanwhile RIP factors are: hazardous technologies entering communities; weak physical and social infrastructure that determine a community's capacity to prevent and cope; inadequate essential services such as water, electricity, transportation, communication, etc. that allow hazardous conditions to exist within communities; inadequate on- and off-site emergency plans; lack of emergency medical capacity; and ill-prepared civil defence authorities. When describing natural disasters,

Shrivastava *et al.* (1988) said that they are acts of nature and the impacts of natural disasters are localised to a geographic region and specific time period.

As per the Disaster Management Act (2005) of Sri Lanka, disaster is defined as the actual or imminent occurrence of a natural or man-made event, which endangers or threatens to endanger the safety or health of any person or group of persons in Sri Lanka, or which destroys or damages or threatens to destroy or damage any property (Government Publications Bureau, 2005). Since the act was created for a nation, the disaster has been limited within the geographical area. Meanwhile, the organisations that deal with disasters at international level have 3 levels of management for information collection, they are community level, country level, and their organisation's level.

The world is confronted with rising obstacles to protect the earth from increasing global temperatures which is currently projected to rise up to 6.3 degrees Fahrenheit by the end of the century (Eilperin, 2009). Even if the countries achieve their most ambitious climate promises they will not be able to reduce the temperature rise. This indicates that there will be an increase in occurrence of storms, floods, droughts, and heat related deaths, tropical cyclones, etc. (Broadbent and Broadbent, 2007). In addition, it is predicted that sea levels may rise by up to a metre. Further, the gap between the earth plates and continuous settlement of those plates between countries and continents may create earth-quakes. This has been well observed during the last decade. Further, settlements between these earth plates are predicted and which could create more earth quakes and volcanoes. In addition, the mining of natural resources and deforestation could contribute to further disasters. Thus, there is a greater probability of occurrences of natural disasters which may not be avoided. This bespeaks the need for research on natural disasters and its management. The following section explains about natural disasters and the importance of considering natural disasters for further research.

2.2.1 Natural disasters

The globe has witnessed many disasters around the world and the occurrences of natural disasters have gone up (Altay and Green, 2006). Some of the nineteenth century's most devastating quakes were: in October 1948, an earth quake of 7.3 Richter scale, rolled through the area around Ashgebat in Turkmenista causing more than 110,000 fatalities.

Later, in July 1976, another one with a magnitude of 7.8 hit the city of Tangshan in north east China. In December 2003, an earthquake devastated the ancient city of Bam in central Iran. The following year, a magnitude of 8.6 quake struck off the coast of Sumatra and this triggered tsunami waves which swept through the coastal regions of many countries bordering the Indian Ocean. Later, in October 2005, another earth quake struck the mountainous Kashmir district in Pakistan. There were devastating earthquakes in China in May 2008, Italy in April 2009; Haiti in January 2010; a magnitude 6.9 quake hit western China's Qinghai province in April 2010; Japan's earthquake and tsunami in March 2011; the Iranian earthquake in August 2012; the Pakistan flood in September 2012; and the typhoon in the Philippines in December 2012. These indicate the frequency and the impact of natural disasters that need further attention from the global community and to national and international level institutions.

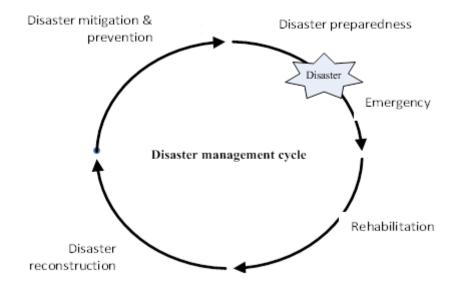
With the increased probability for future natural disasters, many institutions are trying to find innovative solutions to unchallenged issues. Within the literature on disaster, many studies have been reported on its management. However, as mentioned earlier, there is no single universally accepted definition for a disaster. It can be observed within the literature that many authors do not attempt to define the term disaster within their studies. Barkam (1974 cited in Quarantelli, 1985) stated that disaster is perhaps easier to recognise than to define it. Although some have attempted to define it, their definitions are different to each other. This is mainly due to the difference in the context and their disciplines. While describing about the history of disaster studies, Barkun (1974 cited in Quarantelli, 1985) stated that the term disaster has been used as an outmoded concept during earlier times and as a residue from the flow of history that captures relatively insignificant phenomena, rather that terrors and pervasive perils that have emerged in the modern world. It can be noted that the emphasis has been changing from physical event to social situational aspect. This trend was also noted in the early seventies (Quarantelli, 1985).

According to the Centre for Research on the Epidemiology of Disasters (2010), a disaster has been defined as a situation or event, which overwhelms local capacity, necessitating a request to a national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering. In maintaining a record for disasters that have occurred in the past, the Centre for Research on the Epidemiology of Disasters gives criteria for what do they mean by disaster. That is, when an event has occurred with the following criteria that could be listed as a disaster under their database. These are: 10 or more people reported killed, 100 people reported affected; declaration of a state of emergency and call for international assistance. The Australian Emergency Management Glossary (Emergency Management Australia, 1998) defines disaster as a serious disruption to community life which threatens or causes death or injury in that community and/or damage to property which is beyond the day-to-day capacity of the prescribed statutory authorities and which requires special mobilisation and organisation of resources other than those normally available to those authorities.

The United Nations (2003) described a disaster as a severe disruption of the functioning of a community or a society causing extensive human, material, economic or environmental losses which goes beyond the ability of the affected community or society to cope using its own resources. Meanwhile, in 2009, UNISDR defined disasters as 'a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources'. Depending on the scale of disasters and the local capacity to cope with disasters, the extent of external assistance will differ. In handling the issues on risks for disasters and managing post disaster situations, there is a need to deal with the management of disasters. The following section defines disaster management and explains the disaster management cycle.

2.2.2 Disaster management

Natural disasters can occur as slow-onset natural disasters such as droughts or as rapidonset disasters. Hence, depending on the kind of disaster its management activities need to be varied. In addition, the population's level of risk to disaster needs to be considered for the management of disasters. The level of risk to disaster is determined by the type of hazard and the calculation of the level of vulnerability which is determined by social, physical and attitudinal variables (Ariyabandu and Wickramasinghe, 2003). The degree of vulnerability of the affected population can be used to document the magnitude of a disaster (Ariyabandu and Wickramasinghe, 2003). Further, in order to reduce the magnitude of disasters, individuals, organisations, government and international parties need to draw a strategy that could address the threats and weaknesses and incorporate the capacities and opportunities. This strategy could play its part during post and pre disaster situations. Although it is difficult to differentiate between different stages in the management of disasters, the disaster management cycle can be shown as per Figure 2.1. In this cycle, each phase has its merits and special considerations. The disaster management cycle includes disaster mitigation and prevention, preparedness, emergency, rehabilitation and reconstruction (Delaney and Shrader, 2000). This model gives a detailed insight. Each phase in the disaster management cycle requires particular types of interventions and programming. The study follows the description of disasters that Ariyabandu and Wickramasinghe (2003) have defined: Disaster management is a collective term encompassing all aspects of planning for and responding to disasters which includes both pre and post disaster activities. The disaster management cycle includes shaping of public policies and plans that either modify the causes of disasters or mitigate their effects on people, property and infrastructure. Further, it should be noted that disaster management should not be seen in isolation instead it should be considered at various phases of management cycle in addressing the issue.





2.2.2.1 Disaster mitigation and prevention

In the natural disaster cycle, the pre-disaster phase includes mitigation and prevention, and preparedness. During the mitigation stage, activities are related to eliminating or reducing

the probability of occurrence or reduction of the effects from unavoidable disasters (Delaney and Shrader, 2000). The mitigation process includes building codes; vulnerability analysis; zoning and land use management; building safety codes; preventive health care and public education. The success of mitigation measures depends on the integration of appropriate measures in national and regional development planning. Its effectiveness will also depend on the availability of information on hazards, emergency risks and the counter measures to be taken.

2.2.2.2 Disaster preparedness

During the disaster preparedness phase, measures are undertaken to control the impact of the event by ensuring a structured response and establishing mechanisms for effecting a quick and orderly reaction to disasters (International Labour Organisation, 2003). These are not aimed at preventing the occurrence of a disaster. This stage includes development of awareness among people on general aspects of disasters and how they need to behave in future by educating them about the disaster signs, methods of successful evacuation and first aid measures. In addition, formation and training of local committees, building of communication systems, meteorological observation systems, facilitation of basic utility systems such as a water supply system and sanitation are some of the activities that can be undertaken during this phase.

2.2.2.3 Emergency phase

The emergency response aims to provide immediate assistance to maintain life, improve health and support the morale of the affected population. The emergency phase involves immediate post recovery which can last for days, weeks or months depending on the nature of the disaster and local conditions (Jones, 2006). During the emergency phase, relief agencies or groups focus on preventing additional loss of life through actions such as search and rescue, emergency food and water, temporary shelters, and temporary transport. The focus of this phase is on meeting the basic needs of people until more permanent and sustainable solutions can be provided. Humanitarian organisations are often heavily present during emergency phase.

2.2.2.4 Rehabilitation and reconstruction phase

The rehabilitation and reconstruction phase includes both short and long term activities and continues until all systems return to normal or to an improved status. The rehabilitation phase includes medium term interventions such as construction of transitional housing, provision of basic food to the affected population, provision of social services, road clearing, income generation, and water system rehabilitation (Delaney and Shrader, 2000). As the emergency is brought under control the affected community is capable of undertaking a growing number of activities aimed at restoring their lives and the infrastructure that supports them. There is no distinct point at which immediate relief changes into rehabilitation and then into long-term reconstruction development. The reconstruction period includes long-term and often substantial investment in rebuilding the physical and social infrastructure of affected regions. The construction industry makes a major contribution in this phase and this phase is also referred to as the post disaster reconstruction phase. There are many opportunities during the reconstruction phase to enhance prevention and increase preparedness, thus reducing vulnerability. Compared to other phases, the amount of actual work carried out on reconstructing the affected place is considerable, in fact, most construction is carried out in this phase. In addition, huge investments are made during this phase. The success of redeveloping the communities fundamentally depends on utilising the opportunities that this phase could bring to the affected communities. Thus, it is important to carefully plan and carry out the reconstruction activities to a successful reconstruction effort. Accordingly, this research considers the post disaster reconstruction phase for further investigation.

2.2.3 Post disaster reconstruction

2.2.3.1 Understanding the post disaster reconstruction

Post Disaster Reconstruction (PDR) is a process that is the interaction of complex social, technological and economic factors and actions (Baradan, 2007). Jones (2006) refers to recovery as 'reconstruction-plus'. That is reconstruction is a prospect to construct things better than before. Disaster has been recognised for the ideal opportunities that it provides to introduce timely, practical and the latest solutions. The position of reconstruction

activities within the whole disaster reconstruction phase can be depicted as shown in Figure 2.2 (Baradan, 2007). Since this study views the research problem from the built environment's point of view and also centres within the post disaster context, the study researches three phases of the disaster reconstruction cycle: Pre-construction (including Assessment and Planning); Reconstruction and Post construction (including Evaluation and Database).

It was noticed that during the post disaster stage, many stakeholders show their dissatisfaction and sometimes frustrations on the progress of post disaster reconstruction. Broadbent and Broadbent (2007) found that no stakeholders feel satisfied with the progress in addressing the needs of the Asian Tsunami, the Pakistan Earthquake or Hurricane Katrina. Jones (2006) states that post disaster recovery is jeopardised by institutional constraints, gaps in communication, lack of access to professional skills and knowledge in order to support local effort and failures in management and planning. It is recognised that the capacity for reconstruction is conditioned by many dimensions of resilience, covering various intensities of social, economic, environmental and technological aspects (Broadbent and Broadbent, 2007).

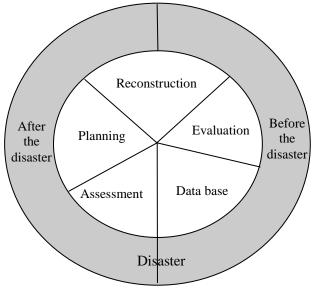


Figure 2.2 Post disaster reconstruction process (adapted from Baradan, 2007)

2.2.3.2 Different approaches in post disaster reconstruction

Jones (2006) identified that permanent reconstruction is often inefficiently managed, uncoordinated and slow to get off the ground. This leads to further suffering for communities for a longer period of time. Some remain in temporary shelters and wait without any hope of their new homes. In certain cases, the constructed property does not satisfy the local requirements and is left abandoned or not utilised. This was mainly due to inappropriate design or lack of consultation with the community. In order to overcome this problem some organisations adapt different strategies for construction of houses. Barenstein (2006) found that after the Gujarat earthquake, five different housing reconstruction approaches were employed in Gujarat. They are: owner-driven approach; subsidiary housing approach; participatory housing approach; contractor-driven approach in situ; and contractor-driven approach.

The owner driven approach facilitates communities to take on building work themselves, with external financial, material and technical assistance. This approach allows the owners to retain full control over the housing reconstruction process within given building codes (Barenstein, 2006). Within the subsidiary housing approach, agencies do not engage directly in housing reconstruction, but instead play a facilitator role, providing additional material and technical help within the framework of government assistance. Under the participatory housing approach, agencies assume a leading role in housing reconstruction, while involving home-owners in the planning, design and reconstruction of the house. While the contractor-driven approach in situ, involves tasking a professional building contractor to design and build the houses, the contractor-driven approach ex nihilo, uses professional building contractors. The difference between the in situ and ex nihilo approaches is that, in the ex nihilo approach, the entire village is rebuilt on a new site. These approaches show that depending on the capabilities of the community and the available resources and support for the reconstruction process, they can be adapted to different approaches to facilitate a successful delivery. This cannot only enhance construction performance but also develop community capacity.

This shows that disasters can turn into opportunities and learning experiences. However, Moe (2006) identifies that unclear goals and failure to include relevant information for each phase of the project life cycle: design, procurement, implementation, operation and maintenance, contributes to failure in reconstruction. Broadbent and Broadbent (2007) stated that all the organisations which operate at a local level need to work within political and religious practices, behaviours, conditions, and institutional frameworks. Further, in order to carry out disaster management activities, the process requires finance or equivalent. This will assist in mobilising unskilled labour, semi-skilled labour, skilled labour, management, materials, consumables, plant, equipment, vehicles and machinery. Broadbent and Broadbent (2007) recognised that although all stages in the disaster management cycle require these resources, reconstruction requires a significant portion. This ultimately decides the action to be carried out. For example, after Japan's 2012 tsunami, scientists, architects and city planners debated about the cost to invest in coastal fortifications such as sea walls and forests (Cyranoski, 2012).

2.2.3.3 Importance of post disaster reconstruction

Broadbent (2003) states that post disaster reconstruction could provide a platform to generate local employment. Although many organisations get involved in the post disaster phase, most often they focus on the emergency phase and the reconstruction remains neglected (Jayaraj, 2006). Johnson and colleagues (2006) argue that '*reconstruction projects are sandwiched between the short-term necessity to act promptly and the long-term requirements of sustainable community development*'. Further, the importance of incorporating communities within post disaster reconstruction has been widely highlighted within literature (Johnson *et al.*, 2006; Aldunce and Leo'n, 2007). Therefore, it is necessary for organisations working on disasters to utilise opportunities and develop community capability during post disaster reconstruction.

After Hurricane Katrina, the reconstruction in fact provided an opportunity for many local hotels to renovate or reconstruct. Further, it was recognised that the reconstruction brought many hotel rooms out of inventory (Guillot, 2007). Some locals invested in alternative businesses in different locations to overcome any losses from future disasters. This boosts tourism and improves local employment and finally leads to improved local economy. In this instance, the post disaster reconstruction phase has not only provided opportunities for the construction sector but also for communities during and after post reconstruction.

In order to make the reconstruction process a sustainable one, the local community needs to be included within the process. Broadbent and Broadbent (2007) recognised the link between the UK sustainable development guiding principles and post disaster reconstruction. The UK sustainable development guiding principles which aspire for sustainable development based on living within environmental limits and a just society. It focuses through sound science, sustainable economy and good governance. Under these consolidated principles, it has four aims. They are, respecting the limits of the planet's environment; meeting the diverse needs of all people; building a strong, stable and sustainable economy which provides prosperity and opportunities for all; promoting participative systems of governance. This shows the importance of considering the needs of all people and also promoting participative approaches in order to make the post disaster reconstruction sustainable. However, in order to enhance the community's position they have to be given the opportunity for their voice to be heard and also power in the decisions that affect them.

In addition, the Millennium Development Goals and the European Union Sustainable Development Strategy also support effective incorporation of social, environmental and economic objectives to deliver sustainable development, especially for the poorest members of society. It can be noted that these guidelines and strategies also facilitate for effective disaster management, especially for poor and vulnerable people. Inclusion of communities within post disaster reconstruction could provide a platform for major behavioural changes within the society. Education could play a major role in raising awareness and also in developing new skills and knowledge to build better behaviour. This could prepare the individuals to take up their roles as active members of the communities (Broadbent and Broadbent, 2007). This could not only contribute to post disaster reconstruction but also to help them to develop their resilience. Hence, post disaster reconstruction should make efforts to include the communities, not only to provide opportunities to make their decisions and but also to develop their capacities and take up the responsibilities. Among many natural disasters that occurred in the past, the 2004 tsunami was significant in terms of the damage and loss of lives, and the disaster reconstruction efforts. Hence, analysing such a significant event would assist the countries to prepare for future disasters.

Within the built environment, Broadbent and Broadbent (2007) view disaster as a major consumer at the end of the supply chain of the construction sector. The extent and the speed of its consumption show the significance of disasters on the built environment. While the predictions for future disasters are capturing the headlines, the built environment needs to seriously consider effects that disasters can leave behind. For post-tsunami recovery, the total of committed or spent funds was nearly US\$11 billion. Within this fund, around US\$2 billion was spent on short term humanitarian relief, while the remaining US\$9 billion was allocated for longer term rehabilitation processes (Tsunami Recovery Network, 2005). This shows that about 80% of the funds were allocated for the post disaster reconstruction stage where the construction sector plays a major role. The built environment could treat each future disaster as an individual project and try to develop management principles (Alexander, 2002) to be applied within the post disaster reconstruction as a new direction for the construction professions and related sectors.

2.2.3.4 Considering Sri Lanka as a case for the study

Sri Lanka was one of the countries that was hardest hit by the 2004 tsunami. The tidal waves that were created by a series of earthquakes that occurred in the sea near Sumatra, Indonesia on the 26th of December, 2004, haunted many people. These tidal waves struck the Eastern, Southern and Northern coasts of Sri Lanka and also parts of Western coasts sweeping people away, causing flooding and destruction of infrastructure. The government of Sri Lanka has recognised the importance of having appropriate measures for rebuilding permanent infrastructure in order to carry out effective tsunami recovery (Government of Sri Lanka and joint partners, 2005).

The tsunami damaged or destroyed more than 100,000 houses, which amounted to 13% of the total housing stock in coastal administrative divisions. Sri Lanka faced many challenges during its reconstruction phase. Although guaranteed external assistance seemed to be more than adequate for reconstruction costs, the subsequent problems with regard to relief payments, providing credit facilities, distribution of funds, coordination of reconstruction activities, and mismanagement of funds hindered the reconstruction progress (Jayasuriya *et al.*, 2005). Further, poor coordination among domestic and external agencies has created serious problems in providing humanitarian assistance to people and

in balancing sensitive issues in the political arena. The study on post tsunami recovery process in Sri Lanka (Ratnasooriya *et al.*, 2007) highlighted that housing reconstruction efforts have not succeeded in achieving the targets due to lack of consultation among all stakeholders, lack of awareness of those affected of their entitlements, confusion caused by the revision of the buffer zone and the resulting additional demand for housing, escalation of the cost of building materials, limitation on the capacity of the local construction industry, and the lack of sustained commitment of some of the donor agencies.

There was extensive damage to the national roads caused by the tsunami. It damaged a total length of nearly 700 km, representing nearly 5% of the total national road network, since many national roads were located near to the coastline. Even prior to the tsunami, an estimated 60% (Jayasuriya *et al.*, 2005) of the entire road network was in a deteriorated condition due to lack of maintenance and damage and neglect during the 20 years of civil war, particularly in the north and east. The total damage of the tsunami to the road sector was estimated to be approximately US\$50 million (Jayasuriya *et al.*, 2005). It was found that the donors were quick in committing funds for road rehabilitation.

Another important infrastructure facility that was severely damaged was railway infrastructure. The tsunami caused disruption to rail services in the north eastern, eastern and southern corridors. However, damage to north eastern and eastern corridors were not severe compared to the southern corridor. The total damage to rail tracks, railway infrastructure and rolling stock was estimated to be US\$ 26 million (Jayasuriya *et al.*, 2005). During the post tsunami reconstruction process, the restoration of rail services in the southern corridor was considered to be a speedy achievement. In addition to the prevailing water shortage in certain areas, the tsunami affected the water supply and sanitation systems of those areas. Although many efforts had been taken to restore this service and provide additional supplies, it was observed that due to the relocation of communities, some existing networks needed to be expanded and parts of them have become redundant (Ratnasooriya *et al.*, 2007). Under the water sector, the government highlighted the challenges with regard to sustainable maintenance of water/gully bowers and packaged water treatment plants, securing local counterparts funding, commencement of sanitation studies and development of sewerage for new settlements, further

improvement of hygiene practice and strengthening significantly the sanitation sector (Government of Sri Lanka and joint partners, 2005).

The report by the Government of Sri Lanka and joint partners (2005) states that the national construction industry does not have the required number of contractors, equipment, skilled workforce, modern management practice and access to necessary finance in order to maintain the required speed of the entire tsunami reconstruction work. Hence, the government proposed to engage and team up with international contractors and to provide training to local contractors in order to solve the above problem and to develop the affected community. Further, under the cash for work schemes by Non-Governmental Organisations (NGO), the community based organisations and small contractors were encouraged to get trained in labour based contracts to reduce the pressure on main contractors and to improve the quality of infrastructure.

The reconstruction process can play a major part in not only developing the affected area, but also for future occurrence of disasters. The poor level of existing social and physical infrastructure facilities can turn hazards into disasters or the inappropriate development can itself be the cause of disasters. Hidellage (2008) emphasised that although many houses and infrastructure facilities were constructed, the effectiveness of their use does not provide adequate return to them (Abeysekera, 2006). This indicates the importance of considering the needs of local communities and including their local knowledge into the reconstruction process.

The social conditions in Sri Lanka are much better than other South Asian countries (Department of Census and Statistics, 2005) in the accomplishment of human development goals. Life expectancy in Sri Lanka is 72 years of age (Department of Statistics and Census, 2005). Further, the granting of free education facilities to the entire population has made a rapid upliftment in literacy levels, and given an opportunity for both the rich and the poor alike to pursue higher education. This makes the literacy rate in Sri Lanka 91.5%. According to the Department of Census and Statistics (2009) the male literacy rate is 92.8% and the female literacy rate is 90.3%. Hence, adequate measures should be taken to utilise the current social conditions in order to deliver a better environment for the community especially issuing their own resources. The inclusion of women can provide opportunities to develop required skills and income earning

opportunities for their enhancement. The following section looks into the challenges that women face during post disaster reconstruction.

2.3 Women's status in post disaster reconstruction

2.3.1 Women's difficulties and needs

2.3.1.1 Existing vulnerabilities

The report by World Bank (2011) recognised that women are not effectively engaged and represented in post disaster recovery and reconstruction initiatives. Many studies viewed existing inequalities as the root cause of women's disaster vulnerability (Gokhale, 2008; Ariyabandu and Wickramasinghe, 2003). '*Vulnerability is the characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard*' (UNISDR, 2009). In other words, it can be described as the inability to resist a hazard or to respond when a disaster has occurred (UNISDR, 2009). For example, people who live on plains are more vulnerable to disasters like floods than people who live on higher land. Vulnerability can arise from various physical, social, economic, environmental, and attitudinal factors. Gokhale (2008) explained that women are vulnerable due to fewer resources with their rights and control; no permanent place in decision making systems; traditional, routine and gratuitous gender biased oppression; and, lower economic, social and political status such as high rate of poverty, cultural constraints on their activities. These have led women to suffer more losses in terms of lives and properties in the face of natural disasters.

The report by the Bhatti, *et al.* (2006) recognised that women are marginalised due to deepened vulnerability and dependency; and denied opportunities to learn, grow, to provide leadership and contribute to recovery efforts. Gokhale (2008) identified the causes for women's vulnerabilities in the study within India as shown in Table 2.1. In addition, it was noted that women's increased vulnerability was primarily due to biological reasons and women are married off at a much younger age or wedded to older men during the post disaster period. Further women are prone to depression and emotional disturbances due to disasters and hence this leads them to psychological vulnerability.

Table 2.1 The fundamental causes influencing the vulnerability of people (Source: Gokhale,
2008)

Vulnerability	Causes
Material/economic vulnerability	Lack of access to resources
Social vulnerability	Disintegration of social patterns
Ecological vulnerability	Degradation of the environment and inability to protect it
Organisational vulnerability	Lack of strong national and local institutional structures
Educational vulnerability	Lack of access to information and knowledge
Attitudinal and motivational vulnerability	Lack of public awareness
Political vulnerability	Limited access to political power and representation
Cultural vulnerability	Certain beliefs and customs
Physical vulnerability	Weak buildings or weak individuals

2.3.1.2 Difficulties associated with reconstruction

It has been widely stated that women have been most affected by the tsunami and on many occasions they have been referred to as vulnerable groups (Ariyabandu and Wickramasinghe, 2003; Abeysekera, 2006; Women's coalition for disaster management, 2005; Gomez, 2006). While investigating the challenges women face during post disaster it can be seen that in different phases of the disaster management cycle, women's needs and challenges are different. However, while some needs may not continue to the next phase, the others continue to remain until a solution is given. Further, these challenges are directly

related to disaster reconstruction apart from other challenges that are not directly related to disaster reconstruction, such as poor access to health and other services, violence against women, other human rights issues, etc. Although the challenges under the second category do not directly fall under reconstruction activities, the link and inter connections between benefits and activities link them together.

2.3.1.2.1 During pre-reconstruction

During the phase of planning and designing of shelters, women find that poor procedures in capturing women's demands and their ways of living lead to construction of inappropriate houses (Women's coalition for disaster management, 2005). Further, the guidelines used by the agencies/institutions were not clear about the definitions of who could receive support. For example, a government initiated agency which worked on disaster reconstruction claimed that it would encourage 'household-driven housing reconstruction' while it did not clearly define the word household, especially where extended families live in the same house (Women's coalition for disaster management, 2005). The women's coalition for disaster management highlighted the importance of providing compulsory criteria for including women in decision making bodies in order to avoid dismal representation. Since certain organisations such as the Village Rehabilitation Committees and Divisional and District Grievance Committees play a very important role in the reconstruction, such as responsibility for making the beneficiary lists, administration and disbursal of grants, and resolution of disputes, it is important to maintain representation from all in order to avoid any discrimination. Further, the Women's coalition for disaster management (2005) emphasised that tsunami recovery, rehabilitation and the construction process has to be based on the promotion and protection of rights rather than on a 'victim focus' which is limited to a welfare and dependency approach.

2.3.1.2.2 During reconstruction

Further, time constraints in utilising the loans given for the reconstruction process added additional burdens to people who were in affected families. The eligibility for special loans was based on the capacity to pay back the loan rather than on the vulnerability of people whose accommodation was destroyed by the tsunami. The increased consumption of alcohol by men led to misuse of funds allocated for reconstruction purposes (Women's coalition for disaster management, 2005). This shows the need to consider the equal distribution of funds to both men and women and to maintain a monitoring mission in order to provide effective distribution of funds for the purpose intended.

According to the study by the National committee on women (2006), it was found that female headed households face discrimination in terms of their civil status, family and community support, property ownership, and access to resources. Patriarchal systems that exist within the community suppress women's legal rights such as property rights and land titles. Since land titles are allocated to the head of the household who is generally registered as being male, this caused concerns over the entitlements of women within the reconstruction phase. Although the Sri Lankan law does not state that the male is the head of the household, the patriarchal systems tend to locate women in a secondary position within the family based household (National committee on women, 2006). However, government payments and interventions in the post tsunami context target the family based household as the unit that receives payments. Further, the head of household is eligible to receive these benefits. This leads to women in a more marginalised position.

Women's participation in reconstruction of dwellings is not always anticipated. Many women from certain parts of the affected communities mainly carry out their income earning activities in their houses. Their lack of alternative housing, and also with other cultural factors, forces them to live in marginalised positions. Lack of experience/knowledge on construction of houses and their dependency on others to complete the project led them to more vulnerable positions. Further, misuse of the constructed houses for women by others made them more vulnerable. In addition, it was found that the lack of knowledge on the usage of new technology within their houses did not offer any benefits to them (Hidellage, 2008).

2.3.1.3 Other difficulties

2.3.1.3.1 Financial issues

According to Enarson (2000), there are four general impacts that disasters have on the work of women. Firstly, women's economic insecurity increases. Since their productive

assets are destroyed they often become sole earners, their household entitlements may decline, their small-businesses are hard-hit and they lose their work. In addition, due to economic downturns after natural disasters women lose their jobs more quickly and in greater numbers than men (Enarson, 2000).

The effects that disaster leaves on women's mobility lead to women recovering more slowly than men from major economic losses, as they are less mobile than male workers, are likely to return to paid work later and often fail to receive equitable financial recovery assistance from the government or external donors (Enarson, 2000). In certain communities, since women often take on more waged or other forms of income generating work and engage in a number of new forms of disaster work, they have also expanded their responsibilities.

In addition, their small businesses tend to be hard-hit and their household entitlements decline. In the report by International Labour Organisation (2003) it was found that, since land and employment arrangements are often negotiated through men, women may lose access to both without men's representation (International Labour Organisation, 2003). These reflect that women are deprived after disasters and bespeak the need for enhancing women's positions after disasters.

2.3.1.3.2 Property rights

In the report by International Labour Organisation (2003) it was found that, after natural disasters, women hold fewer land titles and their small farming plots may be forced off the land. According to the World Bank (2011), there are four main categories of elements related to PDR which pose challenges for women. They are housing, land titling and property rights; health and post disaster violence; community services and infrastructure restoration; and poverty reduction, livelihood restoration and economic development.

In the case of the tsunami in 2004, due to death of male heads of households, there has been an increase in the number of female headed households. In female headed households, women take on the role of primary income earners and primary care-givers of the young and elderly. However, female headed households face discrimination in terms of their civil status, family and community support, property ownership and access to resources. For example, because land titles and ownership are allocated through the head of household who is generally registered as male, there is a concern that women's names have not been included on titles for new homes built for tsunami-affected households. This marginalises women by excluding them from direct access to property (ADB 2005 cited in Goonesekere, 2006). Further, the same study concluded that the destruction of wider family and community life in the post tsunami context may leave female headed households with less support and more vulnerable to social discrimination (Goonesekere, 2006).

In addition, it is important to take note of the number of households that define themselves as female headed, as it is a significant construct in relation to government programmes, policy and legislation. During the aftermath of the tsunami disaster, while Sri Lankan law does not explicitly state that the male is the head of household, the patriarchal framework tends to locate women in secondary position within the family-based household. Government payments and interventions in the post tsunami context target the family based household as the unit that receives payments and relations, but it is the head of household that is eligible to receive benefits. A woman is usually recognised as a head of household in situations where her spouse is deceased or is unable to provide for the family (Goonesekere, 2006). In developing countries, after natural disasters, women lacking in land titles or farming small plots may be forced off their land (Enarson, 2000). Moreover, since land and employment arrangements are often negotiated through men, women may lose access to both without a man to represent them. This bespeaks the need to enhance woman's position within the post disaster context.

2.3.1.3.3 Women's family responsibilities

Many studies emphasised that women's responsibility for their family increases after disasters (Gokhale, 2008; Ariyabandu and Wickramasinghe, 2003). Gokhale (2008) noted that women's roles of ensuring food security for them and their family and, their dependency on natural resources are severely affected by natural disasters such as drought or flooding. Women's workload increases significantly following a disaster and their working conditions in the household and paid workplace deteriorate e.g. through lack of child care and increased work and family conflicts (Enarson, 2000). The increase in workload stems from damaged infrastructure, housing and workplaces; the need to compensate for declining family income and social services and the responsibility to care

for orphaned children, the elderly and the disabled. This in turn limits women's mobility and time for income generating work.

2.3.1.3.4 Skills and capacity development

A report by the Bhatti, *et al.*(2006) pointed out that impact and recovery of both genders is a reflection of the balance between capacities and vulnerabilities. This proportion, between capacities and vulnerabilities, differs substantially within the existing relations of a society, and it further said that in south Asian countries the gender imbalances and discrepancies in recovery are more inclined towards women. Another difficulty that women face during post disaster situations is the loss of their livelihood. The report (Bhatti, *et al.*, 2006) states that gender blind recovery interventions deny the recovery of their livelihood options and, skill and capacity development opportunities largely bypass women.

2.3.1.3.5 Cultural barriers

According to a study on past disaster experiences, a pre-existing pervasive culture of acceptance or denial concerning violence against women, including no existing criminal legislation on domestic violence, presents compounded problems for organisations attempting to support women in the wake of the tsunami. The denial or trivialising of violence against women by authorities only adds to the problem (Pheng *et al.*, 2006). In certain developing countries, the prominent findings of male dominance and its negative implications are what underscores the importance of the longer-term vision for structural change to address gender inequality (Pheng *et al.*, 2006).

2.3.1.3.6 Issues from development strategies

Though decisions regarding resource allocation, enforcement of land and building regulations, and investment on economic and social development, are made with an intention to satisfy both genders, many studies have highlighted the existing inequality in distribution chains and implementation phases during post disaster activities. Most importantly, women's contributions to post disaster resilience have long been under estimated. Further, similar to using a generic term 'he' especially in written documents,

linguistically, females are subsumed under males. Pyles (2009) recognises that a core and often neglected element of disaster recovery has been the rebuilding and community development phase. Morrow and Peacock (1997) recognised that low income and marginalised communities are likely to suffer from a downward spiral of deterioration after a disaster. Further, Sundet and Mermelstein (1996) found that high poverty rates in communities were associated with the failure to survive. This can be seen on many occasions within the research on disaster. Therefore, in order to enhance women's positions and improve post disaster reconstruction this section of the chapter identifies and examines the problems that women face in post tsunami reconstruction.

2.3.1.3.7 Other issues

In addition to this, it is stated that gender based violence increases after disaster happens (Polity, 2005) and since women mostly depend on men they are subject to more vulnerability. It has been widely accepted that women and girls have been mostly affected by the tsunami and the study conducted by the National committee on women also supported this statement from their survey (Goonesekere, 2006).

Apart from women's needs and difficulties in PDR, it was very prominent in many disasters that the loss of women's lives in a disaster is much higher than men. In Indonesia, women are disproportionally affected by disasters and they are more likely to die or experience major changes in their role, often with little support and few resources (Oxfam, 2012). During the 2004 tsunami, the death toll of women was more than thrice of that for men in Sri Lanka, India, Indonesia, Thailand (Bhatti, *et al.*, 2006). Although women's physical inability to escape, their dressing which acted as obstacles in escaping, social and cultural barriers that kept them closer to homes and restricted their movement, have been cited as some of the reasons for their demise. Gokhale (2008) mentioned reasons such as women do not have technical knowledge about disaster occurrence and their participation in planning, designing, implementing and monitoring emergency programs and rehabilitation projects is on a low key profile. Participation of affected communities on rebuilding the disaster affected communities is recognised as an essential part in PDR (Practical action, 2006). These bespeak PDR's responsibility to look into these issues and rebuild the infrastructure for better escape next time hence reducing the

fatality and reducing their other vulnerabilities. Accordingly the following section looks into the roles that women play in PDR.

2.3.2 Women's role in post disaster reconstruction

The importance of including communities was recognised widely within the literature on post disaster reconstruction (Practical action, 2006). Although both men and women are identified as contributors, due to practical problems and realities within the communities, the need for recognising the capacity of women and inclusion of them within the post disaster reconstruction has been highlighted within the literature (Ariyabandu and Wickramasinghe, 2003; Delaney and Shrader, 2000). According to Oxfam (2012), just 1% of the 500 heads of districts is women and a similar pattern is observed in institutions for disaster management and preparedness. Disasters are profoundly discriminatory, even those that are natural rather than man-made (MacDonald, 2005). MacDonald further states that the factors which were present before a disaster such as poor social conditions contribute to the differences in the effects of disaster on different groups. Especially people who are living in poverty are much more vulnerable to the effects of natural disasters. In addition, the level of education of population, health care and skills; the customs and beliefs within the community; limitations to the access to land, credit and information; disparities in the remuneration for their activities make certain groups of people much more vulnerable than others during post disaster situations.

2.3.2.1 Roles associated with reconstruction

Although natural disasters severely affect women, they often provide them with a unique opportunity to challenge and change their gendered status in society (International Labour Organisation, 2003). Women have proven that they are indispensable in responding to disasters. Following hurricane Mitch in 1998, women in Guatemala and Honduras were seen building houses, digging wells and ditches, hauling water and building shelters (Delaney and Shrader, 2000). Often against men's wishes, women have been willing and able to take an active role in what are traditionally considered male tasks. This can have the effect of changing society's conceptions of women's capabilities. Women are effective at mobilising the community to respond to disasters since they form groups and networks

of social actors who work to meet the most pressing needs of the community (Delaney and Shrader, 2000).

Following the earthquake in Maharashtra, India, in 1993, reconstruction was initially managed by men who failed to plan for water storage, grain storage, cooking and keeping of cattle. During reconstruction, men preferred to demolish old stone houses and rebuild in costly reinforced concrete. However, a development organisation facilitated local women to construct low cost and safer structures using traditional bricks or stone (Pelling, 2003).

Gokhale (2008) noted in her study that many non-governmental organisations encouraged local women to participate in relief and recovery operations after earthquake occurrence in Maharashtra and Gujrat states of India. They have formed various groups to build the skills and capacities required to train the members for PDR. This organisation has been working for women and poor communities in rural India for 15 years and has shown that women have the capability to handle disasters. Women were involved in repairing houses after disasters. They trained more than 1000 women who were taught the basic construction techniques used for adapting and strengthening traditional village houses and how this type of construction would protect residents from future tremors. It has facilitated women to inform, motivate, and supervise local homeowners in PDR. Women were involved in planning, designing their house and interacting with authorities on behalf of their communities.

Gokhale (2008) found that the above NGO has helped to build the capacities of rural women's groups to access and manage development resources and to participate in decision-making processes affecting their families and communities. They have piloted a collaborative effort with the government to enhance women's economic participation in an existing antipoverty program. They have piloted methods such as district wide information fairs and community to community exchanges and dialogues for women designed to help them to learn to work with banks and government agencies. Women's participation in reconstruction activities in India were noted by many scholars. After the Bhuj earthquake, women were involved in PDR activities. Women's groups underwent training to take on their role to motivate householders, build technical capacity, demonstrate collective arrangements, provide feedback, and monitor reconstruction. This has helped women to develop their confidence and skills over time.

2.3.2.2 General roles

Domeisen (1997) views disasters as a magnifying glass for society as it "magnifies" the strong and the weak points in society. In a disaster, women's workloads increase due to damaged infrastructure, housing and workplaces; the need to compensate for declining family income and social services; and the responsibility of caring for orphaned children, the elderly and the disabled. This in turn restricts women's mobility and time for incomegenerating work. In certain instances, especially social and political transitions, declining political participation and resurgent patriarchal attitudes jeopardise opportunities for women (International Labour Organisation, 2003). These disaster-related adversities compound several existing challenges for women.

In countries such as Sri Lanka, Nepal, and India, a pre-existing pervasive culture of acceptance or denial concerning violence against women, including no existing criminal legislation on domestic violence (Ree et al., 2005; Bourke-Martignoni, 2002), presents compounded problems for organisations attempting to support women in the wake of the disaster. The denial or trivialising of violence against women by authorities only adds to the problem. In responding to disaster, interventions need to be developed around the existing skills and knowledge of women, who are the time-honoured custodians of community knowledge, social networks and community development (Ree et al. 2005). While in certain instances, cultural barriers may prevent women from taking an active role in reconstruction, on the whole, women contribute to such activities as relief distribution, clearing up after disasters, preparation of land, wage labour in reconstruction, etc. (Ariyabandu and Wickramasinghe, 2003). In this context, there is a need to look into the ways of enhancing women's positions within post disaster reconstruction. In addressing this problem, the concept of empowerment can be used for women's betterment. Hence, the following section firstly describes the concept of empowerment and then examines the concept for women's empowerment.

2.4 Concept of empowerment

2.4.1 Emergence of the concept

Although the meaning similar to empowerment was phrased in other ways by different authors the origin of empowerment as a form of theory in transforming people's social status was traced back to the Brazilian humanitarian and educator, Paulo Freire (1973 cited in Hur, 2006) when he proposed a plan for liberating the oppressed people through education in 1970s. Although Paulo did not use the term empowerment, his emphasis on education as a means of inspiring individual and group challenges to social inequality provided an important background for social activists who were concerned about empowering marginalised people (Parpart, et al., 2003). The concept is conceived as the idea of power since it is closely related to changing power by gaining, expending, diminishing, and losing (Page and Czuba, 1999). While explaining about the origin of the concept, Shackleton (1995) says that there is no single cause or origin of the empowerment movement, rather, it emerges from the increasing specialisation of some work, the changing shape of organisations and a shift towards placing greater value on the human being at work. While describing empowerment, Nesan and Holt (1999) state that empowerment is more a philosophy than a set of tools or management principles to be readily applied to business organisations. Though the term empowerment has been used frequently in management literature, it is been defined in several ways by organisations and scholars. Accordingly, empowerment is a diverse concept which is open to a number of different interpretations. During the last decade, the term has become a widely used word in the social sciences across many disciplines such as community psychology, management, political theory, social work, education, women's studies, and sociology (Lincoln et al. 2002).

Empowerment has been defined in several ways by many authors for different contexts. Even though the meaning of the terms delegation and empowerment may seem similar, they are different to each other. Shackleton (1995) states that in delegation a leader or manager decides to pass on a task or a specific part of his or her job to another individual for a specific reason. However, empowerment is a philosophy of management which widens the responsibility associated with the current task or role without necessarily changing the task or role itself. Handy (1993) simply explains empowerment as encouraging people to make decisions and initiate actions with less control and direction from their manager. In a study by Loretta and Polsky (1991), for management, empowerment is the 'giving up' of some control and the sharing of additional knowledge of company goals and achievements. In addition, for an employee, it is the acceptance of risk by taking more responsibility. Avrick and colleagues (1992) state empowerment as giving authority commensurate with their responsibilities to initiate positive change in their organisation. This demands total commitment, involvement, support and trust from upper management. While explaining about empowerment, Rubinstein (1993) states that every individual is responsible for acceptance or rejection of the quality of prior work; self-inspection and control of current work; and acceptance or rejection of finished work. In the above studies, the authors have explained the term from a similar perspective within the management of organisations.

Ripley and Ripley (1992) explain empowerment from four dimensions: as a concept; as a philosophy; as a set of organisational behavioural practices and as an organisational programme. They further state that;

- Empowerment as a concept is the vesting of decision making or approval authority to employees where, traditionally, such authority was a prerogative.
- Empowerment as a philosophy and as a set of behavioural practices means allowing self-managing teams and individuals to be in charge of their own career destinies, while meeting and exceeding company and personal goals through shared company vision.
- Empowerment as an organisational programme involves providing the framework and permission to the total workforce in order to unleash, develop and utilise their skills and knowledge to their fullest potential, for the good of the organisation, as well as for themselves.

In the above definition of empowerment, Ripley and Ripley (1992) identify the possible means of including empowerment into the organisation. In other words it provides a guide to practitioners and scholars to investigate the roles and implications of the concept within management.

In a study within the construction industry, Nesan and Holt (1999) collectively define empowerment as the process of giving employees the authority to take decisions, relating to their work processes and functions, and within the limits provided by management, but requiring them to assume full responsibility and risk for their actions. Further they state that, empowerment is not an act or incident that can visibly or physically happen, but it is employees' perception or realisation that they believe in, and control what happens to their work processes; and that they are capable of controlling those processes efficiently. Even though Eylon and Bamberger (2000) view empowerment from two different perspectives: a cognition (psychological approach) or social act (sociological approach), in their gender related study, they accept that empowerment cannot be neatly conceptualised as either a cognition or social act.

2.4.2 Ingredients of empowerment

Empowerment is multidimensional, and occurs within sociological, psychological, economic, political and other dimensions. Earlier studies on empowerment state that empowerment can occur at individual level or collective level (Hur, 2006; Boehm and Staples, 2004). Empowerment can be illustrated as a social process since it occurs in relation to others and as an outcome that can be enhanced and evaluated against expected accomplishments (Parpart, *et al.*, 2003). According to Hur (2006), the process of empowerment can be synthesised into five progressive stages as illustrated in Figure 2.3 an existing social disturbance, conscientising, mobilising, maximising, and creating a new order.

According to Hur (2006) and Nilsen (2007) the components of 'Individual Empowerment' could be listed as follows:

- Meaningfulness: This is related to how the employees find the work relevant to their own values and ideas. It is also about internal commitment.
- Competence: It is a belief that one possesses the skills and abilities necessary to perform a job or task well (Gist, 1987 cited in Hur, 2006).
- Self-determination: Is about autonomy in personal working tasks. It concerns having the ability and authority to try one's own solutions.

• Impact: Impact is the perception of the degree to which an individual can influence strategic, administrative or operating outcomes at work.

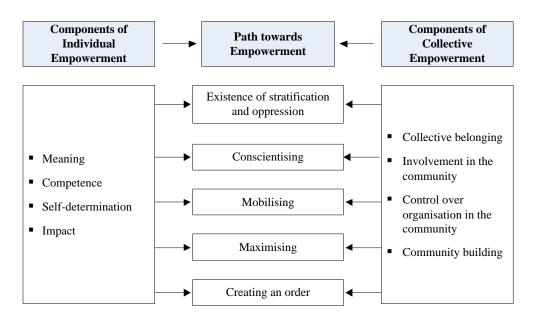


Figure 2.3 Path towards empowerment (Source: Hur, 2006)

Furthermore, Fetterson, (2002) and Hur (2006) describe the components of 'Collective Empowerment' as:

- Collective belonging: Creating a sense of community among community members that will increase its ability to work together, problem solve, and make group decisions for social change.
- Involvement in the community: taking part in community activities or events that may lead to effecting change in /affecting the power structure in communities.
- Control over organisation in the community: component of gaining forces to influence representative groups, plus efficacy of those organisations like group support and advocacy.
- Community building: creating a sense of community among residents that will increase its ability to solve the problem, and make group decisions for social change.

As shown in Figure 2.3, empowerment has two aspects: personal empowerment and collective empowerment. Each aspect has its own components. A set of four components including meaning, competence, self-determination and impact were found in personal empowerment. A set of four components, including collective belonging, involvement in the community, control over organisation in the community and community building, are explored in collective empowerment. The goal of individual empowerment is to achieve a state of liberation strong enough to impact one's power in life, community and society. The goal of collective empowerment is to establish community building, so that members of a given community can feel a sense of freedom, belonging, and power that can lead to constructive social change. Although this research study focuses on the process of empowerment it considers empowerment as both a process and an outcome.

2.4.3 Women's empowerment as a construct

2.4.3.1 Sifting through terminology

The concept of women's empowerment is a fuzzy concept as its value, content, and boundaries of application vary depending on contexts or conditions in which it is applied. Further, it is not a theory which is fixed and applied as a standard. Historical textual analysis and interviews with researchers and officials in development organisations disclose its flexibility and capacity to carry multiple meanings. In the efforts to utilise the concept for a broader social change agenda, policy makers and other officials juggle these different meanings in order to keep that agenda alive. However, the concept needs to be defined properly in order to achieve its primary objectives without manipulations. Hence, in order to gain an understanding on the ways the concept has been viewed by many countries the following sections review the concept within developed and developing countries.

2.4.3.1.1 In developed countries

According to Wang and Burris (1994) empowerment is about increasing power, especially for marginalised people and groups who are farthest down the ladder in the power-over hierarchy, and who have least access to knowledge, decisions, networks, and resources.

According to a study in the USA, empowerment is viewed as expanding assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives. Within this study, empowerment of a local community was achieved through community participation where it emphasised the need to consider community perceptions about indicators and indicators' context specificity as it may delay the impacts (Moser and Moser, 2003).

A study on empowering Russian adults at individual and household level showed that empowerment is viewed as taking actions that selectively empower those with little power to redress power inequality (Lokshin and Ravallion, 2003). This project was aimed to address inequality of personal power and inequality of economic welfare. This study concluded that perceptions of power and welfare are significant but seemly weak in association between them in level and over time. It used the Cantil ladder (9 steps for power and welfare) to rank respondents' power by themselves.

According to the report on poverty elimination and empowerment of women in the UK, empowerment was defined as individuals acquiring the power to think and act freely, exercise choice, and to fulfil their potential as full and equal members of society. The study emphasised the need to have equality of opportunity and equity of outcomes for women's empowerment. The study identified the factors that influence empowerment of women: acquiring knowledge and understanding of gender relations and the ways in which these relations may be changed; developing a sense of self-worth, a belief in one's ability to secure desired changes and the right to control one's life; gaining the ability to generate choices and exercise bargaining power; developing the ability to organise and influence the direction of social change to create a more justice in social and economic order. In this context empowerment of women was aimed to address lack of commitment to improve opportunities for women, lack of income, limited access to services and opportunities for human development, lack of voice in political life and decision making and social subordination and exclusion (Department for International Development, 2000). The report highlighted aspects that need to be considered for the support for gender equality and women's empowerment: economic and social policy; women's economic empowerment; education; women in public life; trade and globalisation; reproductive and sexual health; rights of the child; violence against women; basic services and infrastructure.

In another study within the UK, women's empowerment was viewed as a process by which women redefine and extend what is possible for them to be and do in situations where they have been restricted, compared to men, from being and doing (Mosedale, 2005). It identified the problems that can be addressed through empowerment such as women's gendered identities that disempowered them in public roles, need for change that expands options not only for themselves but for also for women in general, both now and in the future.

2.4.3.1.2 In developing countries

In a study within rural India, Roy and Tisdell (2002) refer to women's empowerment as a process by which women can gain power to diminish the forces of institutional deterrents considerably to their development. Further, they state that the right to land is an important factor for women's empowerment as it is a more permanent source of income and it indicates that the person has a long-term interest in preserving the fertility of the land and therefore will be interested in investing in land. Furthermore, when income is higher this will increase the person's capacity to spend on consumption of food, housing, education, health and other necessities. It was found that when women work on someone else's land as paid labour or on her family land as an unpaid labour they do not have an opportunity to invest and cannot have a significant voice in the family's expenditure plan.

In Nepal, government and non-governmental organisations funded projects are running to develop communities which include educational development, child welfare, women empowerment and health services. A study on empowering women through community development approach views empowerment as a multidimensional and interlinked process of change in power relations to expand individual choices and capacities for self-reliance (Mayoux, 2003; Acharya *et al.*, 2005). In order to address female submission, silence, sacrifice, inferiority and obedience, problems in female illiteracy, less mobility of women in employment in Nepal, the project considers the concept of empowerment of women through facilitating self-help group activities which are truly self-reliant, literacy programmes, group savings and credit programmes.

According to a study on rural women in Bangladesh, Parveen and Leonhäuser (2004) describe empowerment as an essential precondition for the elimination of poverty and

upholding of human rights, in particular at the individual level it helps building a base for social change. This study found 6 indicators to measure cumulative empowerment index such as contribution to household income, access to resources, ownership of assets, participation in household decision-making, perception on gender awareness, coping capacity to household shocks. The study addresses women's problems such as a limited role in household decision making, limited access and control over household resources, low level of individual resources, restricted mobility, inadequate skills and knowledge leading to vulnerability, heavy domestic workload, etc.

A study on microfinance-based intervention on women's empowerment in South Africa (Kim *et al.*, 2007), stated that violence against women is an explicit manifestation of gender inequality and increasingly being recognised as an important risk factor for a range of poor health and economic development outcomes. Violence perpetrated by a spouse or intimate partner is the most common form of gender-based violence among intimate partner violence. This causes direct injury or loss of life and it increases vulnerability to a range of health problems. The study found that reduction in violence resulted from different things such as enabling women to challenge the acceptability of such violence, to expect and receive better treatment from partners, leave violent relationships, give material and moral support to those experiencing abuse, mobilise new and existing community groups, and raise public awareness about the need to address both genderbased violence and about infections.

In order to overcome rural women's difficulties with regard to their lack of access to human, capital, and information resources, and women's very limited role outside the confines of their homestead, improvement of women's participation was proposed as a solution in Kashmir within Pakistan (Weinberger, 2001). The study states that participation means enabling poor people to take part in a process that strengthens their own abilities and possibilities which is often regarded as a human right, allowing for equity and empowerment. In this study, participation is viewed as a function of bargaining power. Further, incomplete information, cultural, ethnic and economic restrictions often influence the decision-making process of women and hence it has a bearing on women's empowerment. In addition, social networks play a major role is women's empowerment. It further states that in order to improve the participation of women, two categories of participation approaches can be used: group centred participation where the costs and benefits of participation are connected to the uncertainty that surrounds the behaviour of fellow individuals, and where the decision to participate is based on an individual analysis of cost and benefit.

In Sri Lanka, the concept of empowerment is becoming an important concept to address women's difficulties especially to those who are more vulnerable in disaster situations. Many non-governmental organisations are working on women's empowerment in order to address women's safety and health related issues and, to enhance their status with regard to their assets, income and employment. In addition, difficulties of women who work in factories also need to be explored further since violence against them in Sri Lankan society does indeed appear to be a major problem. Factory women who participated in a piece of research by Hancock (2006) rated violence against women as a major way in which to measure women's empowerment, as a reflection of the problem itself at the societal level, and provides new and constructive ways in which to conceptualise and measure women's empowerment. Although one government ministry has interest in women's empowerment, they do not have any legislation specifically about women's empowerment. However, compared to earlier days, enhancement of women's position within the society has been recognised and actions have been taken to reduce the gender based violence which act as a major barrier to women's empowerment.

Women's empowerment in developing countries has its interconnected key issues, such as the role of culture, tradition, education, religion and economics. Although while explaining the concept of empowerment within developing countries, the authors of studies carried out in developing countries have referred to the writers from developed countries and the contextual factors such as culture, beliefs, regulatory frameworks differentiate the way in which women are empowered within developing countries. Further, female submission and their restricted mobility in certain places of developing countries emphasise the need to address women's problems especially in rural communities, whereas in developed countries the concept on women's enhancement looks into empowering women in terms of their economic and social independence. In addition, women's perceptions on empowerment in developing countries also act as a hindrance to women's empowerment. Women's empowerment in developed countries views empowerment as a means of creating equality of opportunity and equity of outcomes for women. Economic participation is not only the actual numbers of women participating in the labour force, but also their remuneration on an equal basis. In this context, this study views women's empowerment both as an outcome and as a process by which women can gain power to diminish any negative internal or external forces to their development and improve their status in terms of economical, political or social conditions.

2.4.3.2 Process of women's empowerment

The concept of women's empowerment begins from the understanding that women's empowerment is about the process by which those who have been denied the ability to make strategic life choices can acquire such an ability (Kabeer, 1999). According to Magar (2003) women's empowerment is an outcome of a process whereby individual attitudes and capabilities, combined with collaborative actions, and reciprocally influenced by resources results in a transformation to the desired achievements. Kabeer (1999) describes women's empowerment as a process by which women acquire the ability to make strategic life choices in terms of three interrelated dimensions that include resources (preconditions), agency (process) and achievements (outcomes). Magar, in her study on empowerment approaches to gender based violence, constructed a framework using the findings from earlier studies (Kabeer, 1999; Stein, 1997).

This framework, as shown in Figure 2.4, highlights individuals' attitudes and capabilities, which allow participation in various types of collaborative behaviour which leads to empowerment. The empowerment process comprises of two levels: the level of individual capacities observed in individual attitudes and capabilities and the level of group capacities (Magar, 2003). Individual attitudes (self-esteem and self-efficacy) along with specific types of skills, knowledge, and political awareness, are key ingredients to achieving empowerment at these two levels. Self-efficacy or agency is defined as the experience of oneself as a cause agent, not in terms of skills but rather in terms of one's judgment of what one can do with whatever skills one has (Bandura, 1995).

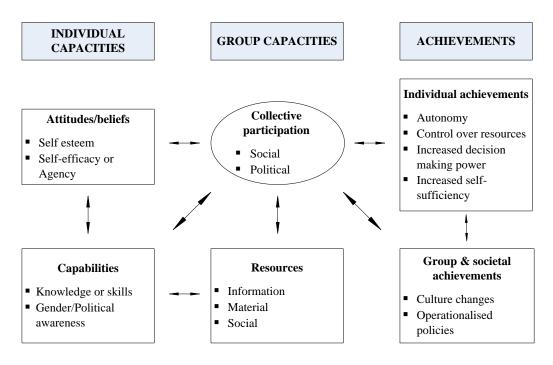


Figure 2.4 Women's empowerment conceptual framework (Source: Magar, 2003)

According to the report from the Division for the Advancement of Women from the Department of Economic and Social Affairs, the Beijing Declaration 75 and Platform for Action 76 encouraged men to participate fully in all actions towards gender equality and urged the establishment of the principle of shared power and responsibility between women and men at home, in the community, in the workplace and in the wider national and international communities (United Nations, 2006). It emphasises the need to bring about change in attitudes, relationships and access to resources and decision making, which are critical for the promotion of gender equality and the full enjoyment of all human rights by women. Hence, in order to provide opportunities for women and enhance their capacities, there is a need to examine the concept of empowerment for women within the post disaster reconstruction.

2.5 Women's empowerment and post disaster reconstruction

2.5.1 Concept of empowerment for women in post disaster reconstruction

According to Pillai (1995), 'Empowerment is an active multidimensional process which enables women to realise their full identity and powers in all spheres of life'. As per UNFPA's report on guidelines to women's empowerment, it has five components: women's sense of self-worth; their right to have and to determine choices; their right to have access to opportunities and resources; their right to have the power to control their own lives, both within and outside the home; and their ability to influence the direction of social change to create a more just social and economic order, nationally and internationally.

By considering the earlier definitions on empowerment this study shapes for definition for women's empowerment in post disaster reconstruction as

'A process of giving women the authority to take strategic decisions, relating to their personal and work processes and functions and building capacities leading to greater participation and greater decision-making power and control to result in a transformation to desired achievements from post disaster reconstruction'

(Nesan and Holt, 1999; Karl, 1995; Kabeer, 1999 and Magar, 2003)

2.5.2 Influences of women's empowerment

The conditions of choice must be recognised in order to transform people by which those who have been denied the ability to make strategic life choices can acquire such ability (Kabeer, 1999). Kabeer (1999) identifies the conditions as, taking into consideration the internalisation of norms; the consequences of choice must be overall positive; and the choices pursued must have a transformative significance, changing the social structure in sustainable ways. Hayward (1998) argues that power is faceless with social boundaries rather than identifiable agents, constraining and enabling action. According to the studies of Foucault (1979) and Giddens (1979), there are three categories of constraints that prevent the pursuit of interests. They are internal, institutional and social. These categories

should not be considered as separate and autonomous aspects of power relations. Instead these can be considered as mutually dependent processes constraining action.

Internal constraints prevent the pursuit of interests by limiting the identification of what those interests are, and the actor's sense of self-entitlement to them. In an earlier study by Foucault (1979) he argues that processes of socialisation in which punishments and rewards are brought out for certain behaviour which encourage the adherence to social norms. Jakimow and Kilby (2006) term this 'normalisation' of the individual within the social structure which leads to the internalisation of norms, shaping the aspirations and perceived possibilities of the actor. Further the observation by peers prevents action that deviates from these norms, regardless of their utility in the pursuit of individual interests. Institutional mechanisms can support the relative autonomy and dependence. Actors can disobey social norms when institutions provide the support that may otherwise be removed through social sanctions. Although institutional mechanisms are a product of the social system they often reinforce social norms instead of acting as an instrument to overcome them.

As mentioned earlier, internal and institutional constraints are a product of a social structure and so it can be argued that either reducing or removing social constraints and legitimating ideology are most important in facilitating long term changes in the ability to pursue interests (Jakimow and Kilby, 2006). The initiatives that focus on internal and institutional constraints only ameliorate relative disempowerment unless accompanied by social transformation which is about the ability to challenge or maintain social norms.

In an earlier study by Parveen and Leonhäuser (2004), a cumulative empowerment index was developed using six key indicators of empowerment covering three dimensions in order to measure the empowerment of rural women. These dimensions include socioeconomic dimension, familial dimension and psychological dimension. The socioeconomic dimension consists of economic contribution to household welfare, access to socio-economic resources and ownership of assets. The familial dimension includes women's participation in household decisions covering six major dimensions: selfdetermination, bargaining power, control over resources, self-esteem, autonomy, status, and power relations within households. The psychological dimension includes perception on gender awareness with regard to basic rights of women and coping capacity to different household shocks.

Parveen and Leonhäuser (2004) considered six indicators which include: contribution to household, access to resources, ownership of assets, participation in household decision making, perception on gender awareness and coping capacity to household shocks. The contribution to household income refers to the wife's contribution in terms of percent involvement in subsistence productive activities that are not rewarded in cash or kind to household income. Access to resources refers to the right, scope, power or permission to use and/or get benefits from household and social resources. Ownership of assets refers to the ability of a woman to control her own current productive and non-productive assets and enjoy benefits accruing from them. The participation in household decision making refers to the extent of women's ability to participate in formulating and executing decisions regarding domestic, financial, child-welfare, reproductive health, farming and socio-political matters in coordination with other family members. The perception on gender awareness refers to a woman's ability to express her opinion with regard to existing gender inequality and discrimination against women in the society. In their study, Parveen and Leonhäuser selected fifteen crucial gender issues which include under-value, education, economic opportunity, inheritance property rights, reproductive choice, early marriage, dowry, divorce rights, son preference, attitude towards female child, birth registration, feeding priority, wage differentiation, political awareness and violence against women. Finally, the coping capacity to household shocks refers to a woman's ability to face sudden risks, crises and periodic stresses in the household. Although several studies identify different factors influencing women's empowerment, the consideration of factors which influence women's empowerment will differ from one context to another.

2.5.3 Women's empowerment strategies

This section of the chapter focuses on the national and international policies and frameworks on the treatment of gender inequality, which have been adopted by, or enforced within, Sri Lanka. The main research focuses on exploring and investigating the current practices of empowerment of women within post disaster reconstruction in Sri Lanka in order to formulate a strategy that integrates empowerment of women during post disaster reconstruction. Hence, this section aims to explore the existing national and international frameworks for women's empowerment in Sri Lanka.

Similar to the importance of fairness in laws within the international area, gender fairness has gained its importance within many fields. The fairness of an international law, as of any other legal system, will be judged, first by the degree to which the rules satisfy the participants' expectations of justifiable distribution of costs and benefits, and secondly by the extent to which the rules are made and applied in accordance with what the participants perceive as the right process (Frank, 2002). There are two reasons behind international law being fair. Frank (2002) identifies two aspects of fairness, the substantive (distributive justice) and the procedural (right process), while one has a primarily procedural and the other has a primarily moral perspective. In order to have an effective system, its decisions must be arrived at discursively in accordance with what is accepted by the parties as right process. The law promotes distributive justice not merely to secure greater compliance, but primarily because most people think it is right to act justly. Discussions on fairness tend to be productive when the allocation of rights and duties occurs in circumstances which make allocation both necessary and possible.

The push towards equal opportunities policies gathered momentum in both the UK and the USA in the 1970s and 1980s, to the point where employers and educational institutions are ashamed not to declare themselves publically (Humphires, 1996). There are many international frameworks under developmental aspects. However, the popular international framework to address inequalities against women is the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). CEDAW has often been referred to as an international bill of rights for women and it was the first detailed statement on women's rights at the international level. This was adopted by the UN General Assembly in 1979. However, it came into force on 3rd of September 1981. The convention identifies what constitutes 'discrimination against women' and establishes an agenda for countries to stop any such discrimination. The convention defines 'discrimination against women' as,

'Any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human

rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field' (United Nations General Assembly, 1979)

Under this convention, the accepting member countries need to commit themselves to undertake a series of measures to end discrimination against women. One of the concerns about CEDAW is it does not have any specific clauses on violence. However, the Declaration on the Elimination of Violence Against Women (DEVAW) (United Nations General Assembly, 1993) filled this gap. In addition, the power of the CEDAW committee has substantial jurisprudence that informs domestic courts and member states. CEDAW can require the governments to abolish any laws and practices that discriminate against women and establish adequate legal protection for women. Sri Lanka has ratified both CEDAW and DEVAW along with the Convention on Torture, the Covenant on Civil and Political Rights and the Covenant on Economic Social and Cultural Rights. Further, under the Ministry of Child Development and Women's Empowerment there are two women's statutory institutions which focus solely on women's affairs and development. They are the Women's Bureau of Sri Lanka and the National Committee on Women.

The State of Sri Lanka passed a Domestic Violence Act in August 2005. This act aims to provide immediate relief to victims of violence and has been resorted to by many women to obtain protection orders against their abusers. Under this act, the definition for domestic violence does not include any economic abuse. The Women's Charter of Sri Lanka was adopted by the government on the 3rd of March 1993. This is the main policy statement of the country regarding the rights of women. The Charter aims at eradicating sex based discrimination and achieving gender equality. The Charter establishes standards to be observed under seven broad areas: Political and civil rights; Rights within the family; Rights to education and training; Rights to economic activity and benefits; Rights to healthcare and nutrition; Rights to protection from social discrimination and Rights to protection from gender based violence. Although the Charter imposes obligations on the state to tackle violence against women procedurally it is not a legally binding document and cannot be reinforced in a court (People's report, 2007).

In addition to the above, the Population and Reproductive Health Policy formulated in 1998 contains several provisions related to violence against women such as review and change in laws and practices that are prejudicial to the reproductive health of women and deny their rights, and to strengthen laws and enforce procedures to eliminate violence and sexual exploitation against women. Further, under the collaboration of the International Labour Organisation with the Employer's Federation of Ceylon a gender equity policy document was produced and applied to private sector companies. This includes gender sensitive recruitment, promotion and sexual harassment in the work place. A code of Sexual Harassment has also been developed.

The government of Sri Lanka formed the Task Force for Rebuilding the Nation (TAFREN), later replaced by the Reconstruction and Development agency (RADA) to coordinate the reconstruction process. Later, the RADA Livelihood Division formulated Divisional Livelihood Development Planning. Although RADA aims to increase community participation, it does not specifically mention women's issues. After the tsunami, the state passed three laws relating to the reconstruction stage. They are: Tsunami (Special provisions) Act; The Registration of Deaths Act and Disaster Management Act. A Tsunami Housing Policy was formulated by RADA in April, 2006, to establish a framework for the distribution of state land and cash allocations to the tsunami affected people. This policy facilitates the process of distribution to vulnerable groups, single women and multi-child households. In addition, the current plans developed by the National Centre for Disaster Management do not have any reference to gender issues within disaster situations.

2.6 The research focus

As mentioned under section 2.2.1, occurrences of natural disasters have increased in the recent past and this has been widely noted within literature. In addition, as mentioned earlier literature has recognised the need to utilise the opportunities that reconstruction brings into these disaster affected communities. The reconstruction phase includes long-term and substantial investments in reconstructing the physical and social infrastructure. Although each phase of a disaster cycle should not be seen in isolation (Delaney and Shrader, 2000) the construction industry should increase its focus in the right phases to build long term disaster resilient communities.

Post disaster reconstruction can provide windows of opportunity for physical, social, political and environmental development not only to reconstruct the impacted areas, but

also to improve the socio-economic and physical conditions of the impacted population in the long term (International Labour Organisation, 2003). However, in practice, too often disaster responses have not contributed to long-term development but they actually subvert or undermine it (Bradshaw, 2001; Anderson and Woodrow, 1998). This results in lengthy post disaster reconstruction activities and the development opportunities are lost. Previous research found that despite the improvements in the emergency response to natural disasters, permanent reconstruction is often inefficiently managed, uncoordinated and slow to get off the ground (Jones, 2006). This indicates a need to focus on post disaster reconstruction to improve disaster resistance in the long term.

The local community is an important segment of stakeholders for disaster management as they are the first responders when a disaster happens. Most often during small scale disasters the local community is left to deal with disaster management without any assistance from external parties. In addition, top-down disaster risk reduction programmes often fail to address specific vulnerabilities, needs and demands of at-risk communities (Haghebaert, 2007). These vulnerabilities and needs can only be identified through a process of direct consultation and dialogue with the communities concerned, because those communities understand local realities and contexts better than outsiders (Haghebaert, 2007). Generally, vulnerable communities possess skills, knowledge, resources and capacities and these are often overlooked and underutilised (Aldunce and Leon, 2007) and, in some cases, even undermined by external actors. This indicates the need to consider the capabilities of the local community in post disaster reconstruction activities.

The lack of involvement of both men and women in disaster management has exposed them to more potential dangers (Childs, 2006). It was found in a study by Ariyabandu and Wickramasinghe (2003) that disasters affect women and men differently due to the different roles and responsibilities undertaken by them due to the differences in their capacities, needs and vulnerabilities. In most of the instances, although disaster management efforts are designed to benefit both men and women, in practice a larger share of benefits and resources goes to men while women continue to remain marginalised. In many instances after the occurrence of disasters, women's economic dependence on men increases (Kottegoda, 2001). This ultimately reduces their security (International Labour Organisation, 2003). During or after a disaster as job opportunities

dry up, men have the option of migrating to find work (Ariyabandu and Wickramasinghe, 2003). However, women are less able to migrate due to their domestic responsibilities, which leave them in a more vulnerable position (Centre for Policy studies, 2001; Enarson, 2001; Ariyabandu and Wickramasinghe, 2003; United Nations, 2006). These studies recognise the need to include women's contribution to post disaster reconstruction.

In addition to poverty, environmental degradation and the different needs of men and women, the marginalised role of women within many organisations and their absence from the decision-making structures, contributes to women's vulnerability in post disaster situations (Department of Economic and Social Affairs, 1999). One of the main, sustainable, means to overcome the marginal condition of disaster victims is through an adjustment process, allowing them to fulfil their basic human development needs (Jeyantha and Gunesekara, 2006). The concept of empowerment is a management philosophy which can help to overcome these problems.

According to Jayaraj (2006), in reconstruction, the most vulnerable and marginalised sections of society like, women, children, and the poorest sections of society are the primary stakeholders and partners in the empowering process. As per the United Nations Development Programme (United Nations, 2005), 'Eliminating gender inequalities in employment' is one of the strategies within the millennium development goal 'Promote gender equality and promote women' which seeks to improve women's economic opportunities. According to the International Strategy for Disaster Reduction (United Nations, 2005) women are often left out of formal planning and decision making and marginalised from community authority. As such, their needs and concerns are often overlooked, and their profound contributions frequently go unrecognised.

A recent report on the Millennium Project (United Nations, 2005) states that ensuring female property and inheritance rights would help to empower women both economically and socially and would rectify a fundamental injustice. The study by UN-HABITAT (2007) found that when women are empowered, they have the capacity and the inner will to improve their situation and gain control over their own lives. This reflects the strong need to empower women who are from the affected community within post disaster reconstruction to develop long term disaster resilient communities. This can be considered as a stepping stone to not only eliminating gender inequalities in employment but also to

reducing poverty which are two of the important goals of Millennium Development (United Nations, 2007a). Even though literature related to women and disaster management strongly recognises the need to empower women in post disaster reconstruction, it barely identifies a system for empowering women during disaster reconstruction.

Empowerment can be illustrated as a social process since it occurs in relation to others and as an outcome that can be enhanced and evaluated against expected accomplishments (Parpart, *et al.*, 2003). However, many studies on empowerment have focused on the outcomes rather than on the process (Hur, 2006) and within the studies that have focused on the process of empowerment, their conclusions were more relevant to the outcome rather than to the actual on-going process (Darlington and Michele, 2003). Hence, this study tries to explore how the concept of empowerment can be extended to women during post disaster reconstruction.

2.7 Summary and link

Increase in the occurrence of natural disasters has drawn the attention of many governments and institutions to develop strategies that include disaster affected communities in post disaster reconstruction. Women are one of vulnerable group of people and their inclusion at various levels of reconstruction has been emphasised heavily within the literature. In this context, the undertaken research attempts to investigate on how women could be empowered using post disaster reconstruction. The study reviewed and synthesised the literature on the major knowledge domains: disaster management, women, and empowerment and also the integration between such knowledge domains.

The chapter has synthesised the literature on disaster management and importance of post disaster reconstruction for the research, and on the concept of empowerment for women. Furthermore, the chapter presented the importance of the research and identified the knowledge gap and the focus of the study. The next chapter will discuss the research methodology adopted for the research.

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Introduction

Chapter 2 presented a detailed synthesis of the relevant literature on the research. This chapter illustrates the research methodological design of the study detailing the process adhered to from inception of the research to writing up of the thesis. Accordingly, this chapter is structured as follows:

- Firstly, the process of forming the aim, objectives and research questions of the study is described in this chapter.
- Secondly, it discusses the process involved in selecting the research methodology covering research philosophy, research approach and research techniques. The research techniques include both data collection and data analysis of the study.
- Thirdly, the credibility of the research which include validity and reliability of the research design is discussed.
- Finally, a summary of the research methodological design is presented.

3.2 Establishing the research problem

In formulating research, the researcher needs to identify what he/she needs to research, why, and then how it could be carried out. Many researchers develop a brief report consisting of answers to the above questions which is called a research proposal. In research development, some researchers initially tend to focus on the concept of research questions while others focus on research problems. The second approach helps the researcher to focus more on the problem behind the research rather than on research questions. Coley and Cyranoski (2007) view proposal writing as an entire process from assessing the nature of the problem, developing solutions or programs to solve or contribute to solving the problem, and translating those into proposal format. Here, their approach starts with forming a research problem. Similarly, Brink and Wood (1998) also recommend the construction of research problem as an earlier task compared to formulating the research questions in research proposal development process.

Brewer and Hunter (2006) view the research problem as questions that indicate gaps in the scope or the certainty of our knowledge. In explaining further, they state that research problems can reflect challenging phenomena; any observed events that are contradicting to currently accepted ideas; or any challenging theories or ideas that are confronted by new hypotheses. Formulation of research problem will help to develop an effective piece of research. According to Punch (2006) research problem formulation involves 'moving to and from different levels of abstraction and generality'. It is also viewed as sharpening of concepts and narrowing of scope. Accordingly, this research has initially established its central purpose of the research by formulating a research problem. Following the establishment of the research problem the aim, objectives and research questions were defined. The following sub sections illustrate the process adopted in establishing the research problem.

3.2.1 Initial stimulus for the research

As an initial step to establishing a research problem, the researcher needs to determine the field of study which underpins the overall discipline of research within which the particular research would be carried out. Selecting an area which is of interest and where the researcher has some experience or some academic knowledge places the researcher in an advantaged position (Saunders, et al., 2012). As a person who had been in a country when a catastrophic natural disaster occurred (Indian Ocean Tsunami in 2004); had seen and heard the trouble that people faced in post disaster reconstruction; and, as a professional who was working in the construction industry, the researcher has developed a desire and got an insight to look into issues within disaster management. In addition, my involvement in a research project that looked into developing women leaders in the UK construction industry developed an interest towards women's issues. Further, the project funded this PhD to research on women's issues within the context of construction and this have paved the way to look into issues that women face within post disaster situations. Furthermore, the researcher's passion towards community development from her early school days provided the drive to select disaster management and women as the main areas for this doctoral study.

Soon after selecting the areas, the researcher needs to find a research idea unless an initial research idea has been given. It is important to select an idea which is of the researcher's interest. Following the identification of a research idea, the research topic can be formed. Saunders and his colleagues (2012) classify the techniques that can be used to select a topic under two categories: those that are predominantly rational thinking and those that involve more creative thinking. However, these two are not mutually exclusive techniques and selection of techniques is entirely up to the researcher. This research used rational thinking techniques by reviewing literature, examining the researcher's strength and interests, having discussion and also, creative thinking techniques by keeping ideas in notebooks, relevance trees (where the researcher starts with a broader concept and generates more specific topics in branches), exploring personal preferences in order to get the most use of approaches to formulate the ideas and which the researcher enjoys using (Raimond, 1993; Saunders, *et al.*, 2012).

After an initial review of extant literature on women and disaster management, the researcher was involved in formulating a research topic by using the above techniques since selecting a topic is one of the main milestones in the research process and is stated as the starting point of any research project (Ghauri and Grønhaug, 2010; Smith and Dainty, 1991). Apart from the interest of the researcher on the topic, there are many factors that influence the selection of a research topic, such as: accessibility to data; achievability within the time; financial support; values and scope of the research; the researcher's capabilities; and symmetry of potential outcomes (Gill and Johnson, 2010). The following section details the literature review which acted as the stimulus to establish the research problem and research topic, which led to determine the aim, objectives and research questions for the research.

3.2.2 Literature review

Ridley (2008) explains the literature review as a process involved in creating the connections between the source and the text that the researcher brings into the research and, positioning the researcher and the research among these sources. This involves extensive reference to related research studies and theory in the field. Although initially it helps to formulate the research problem it continues to facilitate the researcher to identify

the theories, related studies, research methodology that could be adopted for the research and, to assist in analysing and interpreting the collected data (Ridley, 2008).

The purpose of a literature review is to demonstrate how the research is connected to other related areas and to make the reader understand how the research fits into a broader area by showing its importance in the current knowledge domain of the particular area (Oliver, 2012). In addition, it helps the researcher to provide the background and justification for the undertaken research. Ridley (2008) calls it the driving force and jumping off point for the research investigation. Oliver (2012) lists the purposes of literature review under the following categories:

- To present historical background to the research
- To present the overview of contemporary context of research
- To discuss relevant theories and concepts which underpins the undertaken study
- To introduce terminology and definite how it is being used for the particular research
- To explain the relevant research studies and show how the undertaken study extends or challenges those, or to address the gap in research
- To provide supporting evidence for the research problem and showing its importance

The literature review is a continuous activity which involves searching for literature, reading the materials and writing the review which are interconnected and a cyclical process. Ridley illustrates it using the diagram shown in Figure 3.1. The literature searching, reading and writing feed into each other continuously. In addition, activities like developing research questions and qualifying the research problem are influenced by the literature searching and reading and this also provides motivations for writing the thesis (Ridley, 2008). In the practice of carrying out research, it can be noted that the research process is not always a logical, linear process that the researcher would like to have. Hence, the researchers have to be prepared to move sideways, backwards and diagonally in their thinking and planning (Oliver, 2012).

After deciding on the area of study the researcher conducts a preliminary literature review to identify the research gap in the related knowledge domain. As explained in section 3.2.1, the researcher's interest on disaster management was developed with the

experience of witnessing the damage that the 2004 Indian Ocean Tsunami had brought in Sri Lanka and having seen the struggles that communities were left to face during post disaster situations. However, following the discussions with other researchers on this field and reading articles on disaster management it was noted that post disaster reconstruction was mainly criticised for not handling it well to reap its benefits. Since the construction industry is a main contributor in post disaster management and the role of the construction industry in PDR. It was found from the literature that although PDR can be used as an opportunity to develop those affected communities (Thurairajah, *et al.*, 2008), in many instances the opportunities were missed. The construction industry is one of the major contributors to the Gross Domestic Product of the country's economy (8.1% of GDP in 2012) (Central bank of Sri Lanka, 2012) and construction activities help to expand the industry sector (10.2% in 2012). This reflects the scale of developments that PDR could provide to the affected community and ultimately to the country.

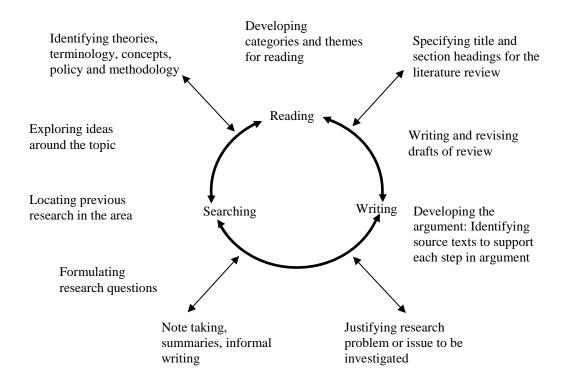


Figure 3.1 The Literature review process (Source: Ridley, 2008)

While exploring issues surrounding post disaster reconstruction it was noted that reconstruction has created problems or has not addressed the existing problem of disaster affected communities. As a professional from the construction industry, and a person with a strong passion towards community development, this gave me the initial inspiration to further look into community's issues in PDR. While carrying out the preliminary literature review, it was found that women are one of the most vulnerable groups who are affected by disasters. Furthermore, there were hardly any studies on how PDR could facilitate the development of women from disaster affected communities. As the researcher had some experience in working on women's issues in the construction industry the scope was narrowed down from disaster affected community to women who were from that community. Wellington et al. (2005) term this approach as the Funnelling approach in the literature review, where the literature of a broader scope gets limited to a more narrow area. In addition, since the gender dimensions play a major part in determining the impact that disasters could bring into people's lives and the effectiveness of PDR strategies, it was recognised as necessary to investigate women's issues in PDR separately. Hence, 'Post Disaster Reconstruction' and 'Women' were selected as major areas.

The preliminary literature review of research journal articles, conference publications, books, other articles, web sites, and institutional reports on post disaster reconstruction, women's issues in construction and in the post disaster context were selected in finding the gap in the knowledge domain and to identify the importance of research. The research initially identified that women face lot of difficulties in PDR, their contribution towards PDR is comparatively less recognised and the extent to which women could reap benefits from PDR for their development is not considered well. This research recognised that focusing on these areas would benefit not only women but also the local construction industry.

Accordingly, a further literature review was conducted to identify women's issues, how women's issues could be addressed and how women could be developed using PDR. During this process, many concepts were identified, yet the concept of empowerment was identified as the most appropriate concept to address the research problem. This concept was promoted by the United Nations in its Millennium Development Goals where Goal 3 focused on promoting gender equality and empowering women. This was, and is, a hot debate topic on women's development. However, there was barely any research on

applying the concept of empowerment for women in PDR (from the built environment angle) except studies on livelihood development. Accordingly, this research found its research gap within intersections between the above three areas, as shown in Figure: 3.2.

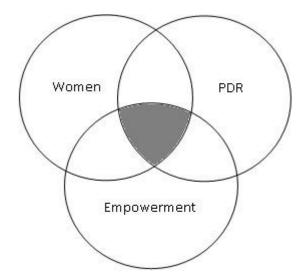


Figure 3.2 Intersections of major research areas

Following the identification of the research gap, a further literature review was conducted on the following issues:

- Women's status in post disaster situations
- The concept of empowerment and the influencing factors on empowerment
- Women's role in PDR
- Practices related to women's empowerment and PDR within the post disaster context.

This led the researcher to develop a conceptual framework for the research and further explore the issue to identify the research problem, aim and objectives of the study.

3.2.3 Research problem

As explained earlier, the research problem is a key element of the research process. The research problem helps the researcher to study aspects of reality that he/she hopes to discover, or attempts to develop an understanding of the reality (Allard-Poesi and

Marechal, 2001). Accordingly, with the view of identifying the research problem, the researcher sets out the research problem for this study as follows.

Disasters are threatening many countries around the world and the intensity and frequency of natural disasters have increased. Among many natural disasters that have occurred in the past, the 2004 tsunami was one of the worse catastrophic disasters in the twentieth century. Many countries were severely affected by the tsunami. Sri Lanka was one of the countries which was brutally hit by the tsunami on 26th of December 2004. Although disasters and devastations are not new to Sri Lanka, the extent of devastation to properties and lives in one single event was breath-taking, not only within the country but around the world. Though Sri Lanka had the experience of dealing with natural disasters such as floods, landslides and occasional cyclones, the tsunami took many by surprise by its scale of devastation. The tsunami took more than 36,000 lives and damaged around US\$ 1 billion worth of infrastructure and capital assets. According to the Government of Sri Lanka and joint partners (2005) 86,000 houses were damaged in the tsunami.

Within disaster management, the need for building disaster resilient communities has been increasingly emphasised (United Nations, 2007b). This is mainly due to the fact that vulnerabilities and needs of communities can only be identified through a process of direct consultation and dialogue with the communities concerned since those are the communities who can understand local realities and contexts better than outsiders (Haghebaert, 2007). Margareta Wahlström, special representative of the Secretary General for disaster risk reduction, highlighted the importance of including communities into disaster reconstruction (United Nations, 2007b). Most importantly, Hyogo Framework for Action 2005-2015 roots its strategies on improving local communities' resilience to natural hazards by communities' inclusion in rebuilding. The South Asia report 2005 on 'Tackling the tides and tremors' emphasised the need for participation of affected communities and flexibility to incorporate local needs into implementation plans in Sri Lanka (Bhatti, *et al.*, 2005). The government's Rebuilding Sri Lanka Post Tsunami Action plan also recognised the reconstruction effort as an opportunity for sustainable development.

In the process of rebuilding disaster affected communities, the built environment plays a major role during post disaster reconstruction. This post disaster reconstruction can provide many opportunities in rebuilding the social and economic status of the community (Thurairajah, et al., 2008). However, the lack of involvement of both men and women in disaster management has exposed them to more potential dangers (Childs, 2006). A core and often neglected aspect of the post disaster reconstruction phase has been the lack of inclusion of women and other vulnerable groups into rebuilding and community development. Many studies have contemplated the need for gender consideration in disaster management and emphasised its importance in building disaster resilient communities (Ariyabandu and Wickramasinghe, 2003; Delaney and Shrader, 2000). Studies in Sri Lanka found that (Ariyabandu and Wickramasinghe, 2003; SHRDC, 2006) disasters affect women and men differently due to the different roles and responsibilities undertaken by them, and the differences in their capacities, needs and vulnerabilities. Although disasters happen equally without gender bias the impact it causes differs between men and women (SHRDC, 2006). In certain situations, even though disaster management efforts are designed to benefit both men and women, in practice a larger share of benefits and resources goes to men while women continue to remain marginalised (Delaney and Shrader, 2000). This bespeaks the need to consider women's status and their needs in PDR.

One of the main sustainable means to overcome the marginal conditions of disaster victims is through an adjustment process, allowing them to fulfil their basic human development needs (Jeyantha and Gunesekara, 2006). Literature on disaster management recognises that when designing protection programmes and rebuilding the affected communities it is essential for planners to broaden the concept of women's status from the narrow conceptualisation as daughter or mother or wife (ITDG, 2001; Enarson and Morrow, 1998). This can enable disaster management to provide physical, social, political, economic and environmental development opportunities for women. However, the earlier studies related to post disaster management noted the poor performance of reconstruction activities and its failure to achieve its targets (Jones, 2006; Pheng *et al.*, 2006; Max Lock Centre, 2006; Ofori, 2002). In order to achieve better results in PDR it is important to gather the information about the realities and to use the capabilities of the local community. This can be achieved through empowering people and especially by including the right procedures to capture knowledge (Kumaraswamy, *et al.* 2004) from the affected communities. Here the empowerment can be illustrated as a social process since it occurs

in relation to others and also as an outcome that can be enhanced and evaluated against expected accomplishments (Parpart, *et al.*, 2003). This would not only improve the reconstruction but also reduce the vulnerabilities of the affected community.

However, the restricted mobility of women, their domestic responsibilities after the occurrence of disaster, the marginalised role of women in PDR and absence from decision-making structures, leads to more vulnerable positions in post disaster situations. This emphasises the need to empower women from the disaster affected community. Even though literature related to women and disaster management strongly recognises the need to enhance women's status in post disaster situations, it barely identifies ways of empowering women especially during the post disaster reconstruction phase. Hence, this study tries to explore how the concept of empowerment can be extended to women during post disaster reconstruction to address their problems and needs. Accordingly, the study has identified its research problem: *How Post Disaster Reconstruction can be used to empower women in post disaster situations*.

In achieving this research problem, the study formulates its research aim, objectives and research questions in the sections below, before carrying out further research.

3.2.4 Aim

In order to accomplish the research problem, the research needs to formulate its research aim. The research aim is a general statement on the intent and direction of the research (Gray, 2009). It is a broad statement of desired outcomes. This research aims:

To explore and investigate the concept of empowerment for women within post disaster reconstruction in order to formulate strategies that integrates community women's empowerment during disaster reconstruction activities.

In addressing the above aim the research further divided the aim into objectives and research questions as detailed in the Section 3.2.5.

3.2.5 Objectives and research questions

Following the formulation of the aim, the research objectives could be set, which are more precise and clear statements of intended outcomes. This research has five objectives as

shown in Table 3.1. However, in order to make the researcher identify the tasks involved in the research much more precisely, research questions were constructed for each research objective. Articulating research questions is another important part of the research process to define the study, set boundaries and give direction (O'Leary, 2004).

No	Research objectives	Research questions
01	Understand the concept of empowerment for women	What is empowerment?What is the process of empowerment for women?
02	Determine the importance of women's empowerment during PDR	 What are the difficulties that women face in the post disaster context? How could women's empowerment benefit women?
03	Establish the key factors which influence women's empowerment	 What are the factors which enable or hinder women's empowerment in PDR? How do the factors have an influence on empowering women?
04	Explore and investigate the current practices of women's empowerment within PDR	What are the current practices of women's empowerment within PDR?What are the issues in those current practices?
05	Formulate strategies to integrate women's empowerment during PDR	 What are suitable instances for women's empowerment in the PDR? What are the strategies to address women's issues and empower them during PDR?

Table 3.1 Objectives and research questions of the study

Research questions can be seen as artefacts that can help the researcher to direct and focus his/her thinking in the creation of new knowledge (Remenyi *et al.*, 1998). Collis and Hussey (2003) depict the general process of developing research questions in a graphical form as in Figure 3.3. Having identified the research aim, objectives and research questions, the researcher needs to design the research methodology. In order to produce research results which are valid and reliable, it is important to design the research on a foundation which is acceptable and could be taken to the knowledge domain. Accordingly the following section describes the research methodology adopted for the study.

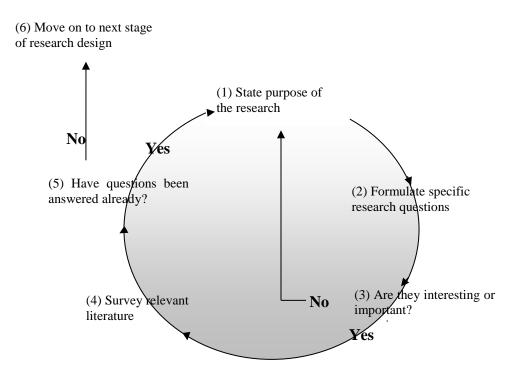


Figure 3.3 Process of developing research questions (Source: Collis and Hussey, 2003)

3.3 Research methodology

Research is described as a scientific and systematic search for relevant information for a research problem (Oxford dictionary, 2009; O'Leary, 2004). In order to gather information which is valid and reliable the researcher needs to adopt an acceptable methodology. Collis and Hussey (2003) refer to research methodology as the overall approach to be used in the research process, from the theoretical underpinning to the collection and analysis of data. There are many factors that determine an appropriate methodology such as the research area and research questions. In order to explain the overall approach of the research this study adapts the nested approach by Kagioglou, *et al.* (1998) as this model (Figure 3.4) maintains a better direction and cohesion of elements within research methodology. This study also includes the detailed aspects of research methodology given by Saunders and colleagues (2012) under the 'Research onion'. According to the nested approach there are three main components in research methodology. These interrelated components are: research philosophy, research approach and research techniques (Kagioglou *et al.*, 1998). Research philosophy guides and

energises the inner research approaches and research approaches guide and energise the research techniques in the nested approach.

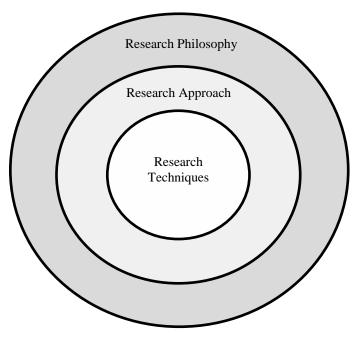


Figure 3.4 Nested model (Source: Kagioglou, et al., 1998)

As mentioned above, the researcher needs to adopt an appropriate methodology to conduct research which minimises associated risks and uncertainties. The following sections identify the choice of research methodology for this study and justify its selection among other options, under three main sections: research philosophy, research strategy and, research techniques. Research philosophy refers to the assumptions that a researcher makes about the way to view the world while research techniques are the methods adopted for data collection and analysis of the study.

3.3.1 Research philosophy

It is important for a researcher to understand philosophical issues because the knowledge on philosophy can help the researcher to recognise the designs which would work well and which won't. This can avoid the researcher from falling into the wrong path and also can indicate the limitations of a particular approach. It can help to clarify research designs from data collection to analysis. This also could help the researcher to identify and create designs which are out of his/her experience and, may suggest how to adapt research designs according to the constraints of different subjects (Easterby-Smith, *et al.*, 2008).

Research philosophy relates to the development of knowledge and the nature of that knowledge (Saunders, et al., 2012). It contains important assumptions about the way in which the researcher views the world. Particularly, assumptions concerning the researcher's view on the relationship between knowledge and the process by which it is developed play an important part for the design of research strategy and research methods. Saunders and his colleagues (2012) view research philosophy as a multidimensional set of continua. There are three main philosophical positions that underlie the designs of management research: Epistemology, Ontology and Axiology (Saunders, et al., 2012). Clark and Creswell (2008) state that Egon Guba and Yvonna Lincoln originally created a system to compare different paradigms in social science research through a trilogy of concepts from the philosophy of knowledge. They were comparing the positivism paradigm and the competing paradigm, called the 'naturalistic inquiry' which was later known as constructivism. Their system mainly consisted of ontology, epistemology and methodology. Here, methodology specifies how the researcher may go about practically in investigating the phenomenon. However, as per Creswell (1998) axiology also appeared in some summaries. Epistemology is about a general set of assumptions about the best ways of inquiring about reality. Ontology is about philosophical assumptions about the nature of reality. Axiology is about the role of researcher's value in research. Table: 3. 2 contains a summary of the above positions.

Table 3.2 Research philosophy as a multidimensional set of continua (Source: Saunders, etal., 2012)

Dimension	Continua		
What is the nature of reality?	External	\Leftrightarrow	Socially constructed
	Objective	\Leftrightarrow	Subjective
What is considered	Observable phenomena	\Leftrightarrow	Subjective meanings
acceptable knowledge?	Law like generalisations	\Leftrightarrow	Details of specifics
What is the role of values	Value free	\Leftrightarrow	Value bound

3.3.1.1 Epistemology

Epistemology is about what constitutes acceptable knowledge in a particular field of study (Saunders, *et al.*, 2012). On the continuum of epistemology, the most extreme positions are called 'Positivism' and 'Interpretivism'. However, Easterby-Smith and colleagues (2008) denote these two positions as 'Positivism' and 'Social Constructionism' (Figure 3.5). Within the literature, authors have used different terms to explain both extremes in the epistemology continuum. Generally, natural scientists adopt a 'Positivism' philosophical stance. Positivists attempt to collect data about observable reality and search for regularities and causal relationships to develop law like generalisations (Gill and Johnson, 2010).





The main idea behind the positivism stance is that the social world exists externally and its properties should be measured through objective methods than being inferred subjectively (Easterby-Smith, *et al.*, 2008). They refer to the French philosopher, Augste Comte (1853) as the first person to summarise this perspective. In summarising some of the characteristics of positivism, Easterby-Smith and colleagues state that the observer is independent from what is being observed and, the choice of what to study and how to study is determined by objective criteria rather than by human beliefs and interests. Their research is conducted in a value freeway as far as possible. Under positivism, researchers are most likely to use highly structured methodologies to facilitate replication (Gill and Johnson, 2010).

In contrast, under social constructivism, the reality is not objective and it is determined by people rather than by external factors. This philosophical position was developed as a reaction to positivism in the social sciences. This was supported by many authors who conveyed the idea of making sense of the reality through sharing experience with others. Habermas (1970) refers to this type of research as interpretive methods. Similarly, Saunders, *et al.*, (2012) refer to it as 'Interpretivism'. Under this view, the researchers try

to understand and explain why people have different experiences rather than try to search for external causes and fundamental laws to explain behaviours. The strand of Interpretivism comes from two intellectual traditions (Saunders, *et al.*, 2012). They are, phenomenology which refers to the way in which the researcher as a human makes sense of the world and, symbolic interactionism which is the continuous process of interpreting the social world. Easterby-Smith and colleagues have summarised the features of positivism and social constructionism in a tabular form by compositing various authors' views on both paradigms (Table 3.3). Table 3.3 gives a clear understanding on both paradigms from different aspects.

	Positivism	Social constructionism
The observer	must be independent	is part of what is being observed
Human interests	should be irrelevant	are the main drivers of science
Explanations	must demonstrate causality	aim to increase general understanding of the situation
Research progresses through	hypotheses and deductions	gathering rich data from which ideas are induced
Concepts	need to be defined so that they can be measured	should incorporate stakeholders perspectives
Units of analysis	should be reduced to simplest terms	may include the complexity of 'whole' situations
Generalisation through	statistical probability	theoretical abstraction
Sampling requires	large numbers selected randomly	small numbers of cases chosen for specific reasons

Table 3.3 Contrasting implications of positivism and social constructionism (Source:Easterby-Smith, et al., 2008)

The undertaken research is about empowerment of women in post disaster reconstruction where the study attempts to understand women's status in post disaster situations and how they could be empowered using PDR. In this context, the reality exists in the community's views on the above aspects and also it is represented in some other indicators which exist externally to the social actors of the study. For example, in order to find out what factors that have an influence on women's empowerment, there is a need to investigate what factors that women perceive, and also what are the other factors that exist externally to them, such as their income, property rights, etc. Thus, this study takes its philosophical position within in-between points in the continuum but more towards social constructionism as depicted in Figure 3.6.

POSITIVISM

PHENOMENOLOGY

	Approach to social sciences					
Reality as a concrete structure	Reality as a concrete process	Reality as a contextual field of information	Reality as a realm of symbolic discourse	Reality as a social construction	Reality as a projection of human imagination	

Figure 3.6 Continuum of core ontological assumptions

Source: Adopted from Morgan and Smircich, (1980 cited in Collis and Hussey, p.51)

In order to understand the reality with a better view, the researcher has acted to a certain extent as part of what has been studied although she has declared herself as a researcher and maintained a distance from her influence on respondents' views. The researcher has declared her intention to study the problems within the communities. Since the researcher is also from that country, her natural instinct in understanding the cultural aspects of the community helped the respondents to open up their views in a friendly manner rather than being more introverted. The researcher's personal interest in the subject was a major driver in the study. The research adopted interviews as a major method of data collection to gather rich data on the phenomenon, rather than questionnaires, which is a most common method in survey strategy. The study also incorporated views from experts on relevant fields and professionals who are/were working on post disaster reconstruction and women's development. This shows that the study integrated views from communities, experts and other professionals who are the major stakeholders in PDR. These aspects

clearly demonstrate that the philosophical stance of the study falls more towards social constructionism.

3.3.1.2 Ontology

The other philosophical stance, ontology, is concerned with the nature of the reality. This relates to the assumptions that researchers have about the way the world operates. Clark and Creswell (2008) call this 'metaphysics' which consists of issues related to the nature of reality. They further state that ontological assumption hold a diversity of viewpoints of social realities but they need to be placed within political, cultural, historical and economic value systems to understand the differences. Ontology consists of two main aspects: 'Objectivism' and 'Subjectivism'. Objectivism represents the position where social entities exist externally to social actors concerned with their existence (Crotty, 1998). Subjectivism embraces social phenomena from the perceptions and consequent actions of social actors concerned with their existence. While Easterby Smith and colleagues (2008) refer to the extremes between realism and relativism. Traditional realists believe in a position where the world is concrete and external, and where science can only progress through observation which has direct correspondence to the phenomena.

There are a number of alternative paradigms along the continuum. This shows that there are a whole range of paradigms than just two of them. Morgan and Smircich (1980 cited in Collis and Hussey, 2003) identified a continuum of these assumptions with six identifiable stages as shown in Figure 3.6. This study attempts to understand the reality through community's and experts' perceptions and also by considering the other indicators which are represented by objective data. For example, the third objective of the study, which is about identifying key factors which enable or hinder women's empowerment during post disaster reconstruction, needs to investigated by considering women's perceptions on the influencing factors of women's empowerment and other factors such as women's income, resources, legal rights, etc. which are represented by objective data. This study falls within in-between points in the continuum for nature of realities (ontological position) as shown in Figure 3.7. As Barron (2006) mentioned, it is the ontological concerns with questions relating to the kinds of things that exist within society. In this study it is related to the idea of being, and existence of a patriarchal system within the disaster affected communities, and the negative implications these have on affected women.

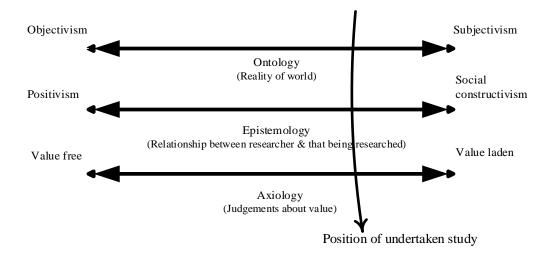


Figure 3.7 Philosophical positioning of the research

3.3.1.3 Axiology

The third philosophical stance, axiology, is concerned with the judgements about values of the researcher. That is, whether the researcher's own values play a part in the stages of the research process (Saunders, Lewis and Thornhill, 2012). In order to achieve a credible piece of research, the results incorporate the role of a researcher's values in all stages of the research process, and this is of great significance. Heron (1996) claims that researchers reveal axiological skill by being able to articulate their values as a basis for making judgements about what research they are conducting and how they go about doing it. The value of judgements may differ in the study's conclusions from other researchers' studies.

The research undertaken under the positivism philosophy is considered to be in a valuefree way as the researcher is independent of the data and maintains an objective stance (Saunders, *et al.*, 2012). In other words, the researcher is detached from what they are researching and they regard the phenomena as an object. Meanwhile, the research that falls under the Interpretivism philosophy takes a value bound stance since the researcher is part of what is being researched and they cannot be separated. Their values help to determine what are recognised as facts and also determine the interpretation of the data. This would be a very subjective piece of research. Apart from these, the 'Pragmatism' philosophy is where the research methodology is chosen to best achieve an answer to the research question, and means the values play a bigger role in interpreting the results. Here the researcher adopts an in-between stance in order to get the best possible answers. Saunders and colleagues (2012) state that under this philosophy, either or both observable phenomena and subjective meanings can deliver acceptable knowledge depending on the research question.

For example, the selection of a particular data collection technique instead of another suggests that the researcher values the selected one rather than the other. In this study, the researcher's selection of data collection techniques shows that the researcher values the use of interviews in the data collection process as it helps to capture rich information about the reality. This study leans more towards the value laden approach because the researcher needs to gather information by personal interaction and through the interpretation of the data collected.

3.3.2 Research approach

The research approach is the approach taken towards the data collection and analysis. Saunders, *et al.*, (2012) refer to this as research approach while Yin (2009) calls it a strategy. Saunders *et al.* defined research strategy as 'a plan of how a researcher will go about answering her or his research questions'. It is based on the ontological assumptions, epistemological undertakings and axiological purposes. This is the inner middle section of the Nested model (see Figure 3.4). A research strategy can be treated as an approach that provides the overall direction of the research including the process by which the research is conducted (Remenyi *et al.*, 1998). The choice of research approach is guided by the research questions and objectives, the extent of existing knowledge, the amount of time and other resources available and the philosophical underpinnings.

The research approach can be used for exploratory, explanatory and descriptive types of research (Yin, 2009). Although there are several research strategies these should not be considered as mutually exclusive. Among research strategies some of them belong to the deductive approach and others the inductive approach. A deductive research approach requires the development of a conceptual and theoretical structure prior to its testing through empirical observation (Gill and Johnson, 2010). This is most commonly used in theory testing. Meanwhile, the induction approach involves theory building where a theory is developed from the observation of empirical reality (Gill and Johnson, 2010).

As a guide to identify the research strategy, Yin (2009) proposes three main conditions: the type of research question; the control an investigator has over actual behavioural events and the focus on contemporary as opposed to historical phenomena. In addition to the above three questions, the philosophical position of the study needs to be considered while deciding the research strategy (Sexton, 2007). The following sections illustrate the selection of a research approach for the study.

3.3.2.1 Selection of a research approach

Denzin and Lincoln (2005) see research approach as a methodological link between philosophy and subsequent choice of methods to collect and analyse data. Yin (2009) adopted a guide for selecting an appropriate research approach for research as shown in Table 3.4. It displays how the three conditions (See section 3.3.2) relate to five major research methods. Although Yin has used the word method it refers to the approach as per Saunders, *et al.* The commonly used research approaches are experiment, survey, case study, action research and ethnography (Saunders, *et al.*, 2012; Easterby-Smith, *et al.*, 2008). Yin (2009) argues against various research methods being arrayed hierarchically. For example, case studies which were mainly used for exploratory purposes can be used for explanatory and descriptive purposes (Yin, 2009).

In Table 3.1, the first condition (column one) covers the type of research questions. The basic categorisation scheme for type of questions is: who; what; where; how and why questions (Hedrick, *et al.*, 1993). Secondly, depending on whether the researcher needs a control over the study the research strategy will be determined. Thirdly, the researcher needs to identify whether he/she is going to study a current or a past phenomenon. Depending on this the research strategy could be selected. Among the research strategies, this study cannot be carried out using a 'historical' strategy as the study is related to contemporary phenomenon and requires people's current perspectives on women's empowerment. It cannot also be conducted as an experiment, as the researcher doesn't have control over behavioural events in post disaster situations. In addition, having a controlled environment might restrict people's views. Hence, the researcher needs to conduct the study in a comfortable and friendly environment in order for them to share their experiences.

Archival analysis is another approach which could be used for the study. However, since the study needs to gather information on people's perceptions on empowerment this cannot be conducted using only archival material, thus leaving this approach also out of useful strategies for the research. After looking at the possibility of other approaches, survey and case study are the only two approaches that seemed to be of possibility for the research investigation. The undertaken study attempts to research a current problem where there is no researcher control over actual behavioural events and it consists of 'what' and 'how' types of research questions. In addition, the philosophical position of the study lies between positivism and social constructionism where it considers both the objective and subjective nature of realities. According to the guidelines given in Table 3.4 the survey research approaches, ethnography and action research approaches are two different approaches used in qualitative research. However, due to practical limitations on time, resources available to adopt those research procedures, and ethical considerations, those were not considered appropriate for this research study.

Strategy	Form of research questions	Requires control of behavioural events?	Focuses on contemporary events?
Experiment	How, why	Yes	Yes
Survey	Who, what, where, how many/much	No	Yes
Archival analysis	Who, what, where, how many/much	No	Yes/No
History	How, why	No	No
Case study	How, why	No	Yes

 Table 3.4 Relevant situations for different research strategies

(Source: COSMOS Corporation cited in Yin, 2009)

Furthermore, the 'case study' as a strategy would not be possible due to unavailability of information on actual projects on empowering women within post disaster reconstruction

(from the construction industry's angle) in the area of the study. This would not assist in gathering detailed information on the research problem. Furthermore, due to civil war displacements in Sri Lanka, there was limited access to information and so the possibility of considering case studies as a strategy was rejected. Hence, capturing information from women who were involved in PDR at their household or community level and have heard or seen other women getting involved in reconstruction, was the best choice to get better data. In overcoming the problems of bias in answering (from capturing only women's views for the study) the study considered different stakeholders for a project on empowering women. This could only be achieved through the survey strategy within the context of the study.

Saunders, *et al.* (2012) state that the key to choice of a research strategy is that the researcher is able to achieve a reasonable level of coherence throughout the research design which will facilitate in answering the research question and objectives. Hence, it creates a link to research philosophy, research approach and purpose, and other pragmatic concerns such as extent of knowledge, available time, other resources, access to potential participants and to sources of data. Accordingly, the survey research strategy was selected as the most appropriate approach for the study.

3.3.2.2 Survey as a strategy for the study

De Vaus (2002, p.3) states that the 'survey is not just a particular technique of collecting information: questionnaires are widely used but other techniques such as structured and in-depth interviews, observation, content analysis and so forth, can also be used in survey research'. Similarly, Bryman and Bell (2011) refer to survey research as a cross-sectional design in relation to which data are collected predominantly by questionnaires or by structured interviews on more than one case at a single point in time. De Vaus (2002) further states the distinguishing features of surveys as being the form of data and the method of analysis. The form of data means information that is collected concerning the same variables or characteristics from at least two cases, and which usually finishes with a data grid, while survey analysis is about describing the characteristics of a set of cases or finding causes of phenomena. If the interview is well conducted in a comfortable environment and the respondent is well prepared, this will reduce the coercing nature of the survey sometimes experienced by respondents.

Aldridge and Levine (2001) explain the survey strategy as a way to set about gathering and analysing data. Further, in a survey, the same information is collected about all the cases in a sample (Aldridge and Levine, 2001). The concept of the respondent is that the respondent is both the object and informant and will play an important role in the study. Yin (2009) states that the survey strategy can be beneficial when the research goal is to describe the incidence or prevalence of a phenomenon or when it is to be predictive about certain outcomes. Since this study attempts to explore and describe the prevalence of the conditions that affect women in post disaster situations and to seek ways to empower women, the survey strategy will be appropriate for this study. In this instance, it is believed that gathering information from the affected community, that is from both men and women and other stakeholders who can play a role in empowering women such as policy makers, funding bodies, construction professionals, etc. will assist the researcher to gather more relevant expectations and outcomes of the empowerment process.

Similarly, Saunders, Lewis and Thornhill (2012) view the survey strategy as an approach which could be used for exploratory and descriptive approaches as they are most often used to answer 'what', 'who', 'where', 'how much', and' how many' questions. Although questionnaires are the most often used method under this strategy, structured interviews is also another method. However, they clearly state that semi-structured or unstructured (indepth) interviews are different from structured interviews. Under structured interviews, there is a defined schedule of questions from which the interviewer should not deviate. Structured interviews allow the researcher to choose open and closed ended questions including complicated questions.

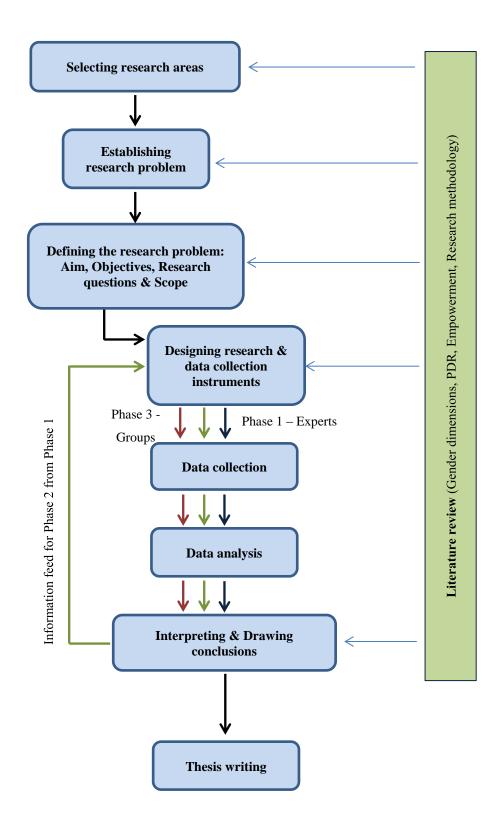
Reviewing of literature on survey interviewing shows that the predominant nature of questionnaires in the survey strategy sometimes supresses the development of qualitative survey interviews which would help the researcher to gather richer information. Many studies related to health and social sciences have used survey interviews in their qualitative studies. Kvale (2007) recognised structured interviews within qualitative research methodology. The structured interviews facilitate more engagement of respondents and it is suitable for focus group studies where it allows comparing or contrasting responses (Lindlof and Taylor, 2002). Bryman and Bell (2011) identified a trend of qualitative research which facilitates researchers to allow women's voices to be heard, to reduce exploitation by give and take in the fieldwork, realise emancipatory goals

of feminism and which does not treat women as objects to be controlled by the technical procedures.

Under this research, since the researcher is unable to find cases on empowering women in post disaster reconstruction, considering the survey strategy would be more appropriate as it would help to gather information on a larger scale considering different segments of people from the country. In a study within the medical profession, Dicicco-Bloom and Crabtree (2006) state that in contrasts with highly structured survey interviews and questionnaires, less structured interview strategies make the interviewer more of a participant in meaning making than a conduit from which information is retrieved. Since the survey strategy offers the option to conduct interviews among disaster affected people and professionals who have worked in relevant areas, it would facilitate the researcher to gather more rich and useful information for its results. In addition, since the study takes a stance which is more towards the interpretive philosophy, conducting structured interviews as the main mode of data collection in addition to questionnaires and group structured interview. Section 3.3.2.3 details more information on this adopted method.

3.3.2.3 Design of survey approach

The undertaken research had three phases of data collection. The first phase gathered experts' opinions on women's current status, the state of the concept of empowerment, factors affecting or enabling empowerment, etc. through interviews and document reviews. Meanwhile, the second phase gathered data from the affected community on the difficulties that women face; the importance of women's empowerment; its enablers and hindrances; the existing measures for women's empowerment; and problems in post disaster reconstruction, through interviews and questionnaires. The third phase included group interviews with community groups using a structured interview. The process involved in the research is depicted in Figure 3.8.



- Phase 1 Experts' interviews
- Phase 2 Individual community members' interviews & questionnaires
- Phase 3 Community group interviews

Figure 3.8 Research process of study

3.3.2.3.1 First phase of data collection

During the first phase of data collection, semi-structured interviews were conducted among experts who were involved in disaster reconstruction, women's social and economic empowerment and policy development within post disaster settings in Sri Lanka. During this phase of data collection, data was collected through semi-structured interviews and document reviews. The interviews were chosen as a method of data collection for this phase due to their appropriateness and flexibility. Kvale (2007) states that interviews are more suitable method of data collection for capturing experiences and meanings of subjects in the real world. While explaining about interviews, Flick (2009) states that, 'the research interview is an interview where knowledge is constructed in the inter-action between the interviewer and the interviewee'. Furthermore, interviews allow participants to convey their own situation in their own words from their own perspective to the researcher.

The first phase interview guideline was formulated from the relevant literature. In this phase, semi-structured interviews were used as they can allow for collection of both structured information and also participants' views and opinions. Further, semi-structured interviews can facilitate the researcher to ask for spontaneous questions as the first phase seeks to collect a rich and wide area of field information, and can provide a comfortable environment for the interviewee. The analysis of the interviewees' responses was processed through a procedure outlined by Hall and Hall (1996). This process involved three activities: data reduction, data display, and conclusion drawing. The interviews were firstly recorded and later transcribed. Finally they were analysed using content analysis.

3.3.2.3.2 Second phase of data collection

The second phase of data collection involved structured interviews with both men and women from disaster affected communities around the country. In order to capture the overall perspective, the study attempted to gather opinions from women and men who were affected by natural disasters. The second phase data collection instrument had two parts. Firstly, open ended survey interview questions and secondly a questionnaire with closed ended questions. However, interviewees were given an option to choose to omit to answer the second part of the instrument if they did not wish to do it. In order to triangulate the data collected from the first phase, questionnaires were formulated. Analysis of data from the first phase was used as guidance for the second phase interview guidelines in addition to literature findings.

This phase of data collection had its target population within Sri Lanka. People who were/are a member of a community (women or men) that was affected by natural disasters and were involved in the post disaster reconstruction of their community, were welcome to take part in this interview. The following self-illustrating diagram (Figure 3.9) was given for more information on whether they could participate in this interview. Those who fall under any of the categories that are indicated by the shaded areas were invited for interview. In covering the ethical issues people were requested to complete a consent form. The whole pack of interview guidelines is attached in Appendix A. Although major questions were the same for men and women, some of the initial questions on background information were modified to suit men and women. There were separate interview guidelines for men.

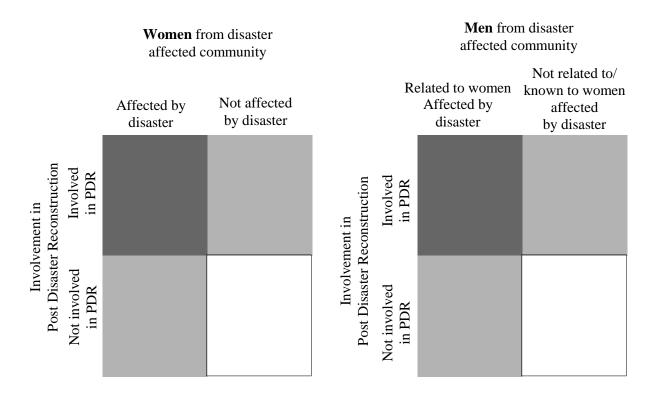


Figure 3.9 Diagram illustrating the target population for second data collection

3.3.2.3.3 Third phase of data collection

Finally, the third phase included group interviews with disaster affected women to validate the results from the second phase. This not only validated the results but also gave an opportunity to women who were reluctant to take part in individual interviews in the second phase by being part of these groups. The same interview guideline that was used for the second phase was used in this phase. More details on group interviews is described in section 3.3.3.1.

3.3.3 Research techniques

Research techniques, sometimes referred to as research methods, are the tools of research. The researcher needs to find methods that would suit the kind of data that she/he is searching for. Most importantly it has to fit the research questions. In this section the research methods for data collection and analysis are explained with the justification for its selection.

3.3.3.1 Data collection techniques

As mentioned in section 3.3.2.3 the data collection comprised of three phases. Semi structured interviews with experts; structured survey interviews and questionnaire with disaster affected community members; and group structured interviews were the data collection techniques that were used in this study.

3.3.3.1.1 Interviewing

Interviewing gives an opportunity to the researcher to enter into someone else's world. The effort of empathetic understanding through interviews facilities the researcher to capture the interviewee's views and later helps to relate to other aspects of their social reality. In the understanding that people who were affected by disasters and were involved in post disaster reconstruction have a great deal to tell about what they have gone through and what they have felt during this process would provide a greater understanding on this subject, led the researcher to interview people who were affected by disasters. The interview guidelines and questionnaires were translated into local languages and were

refined through several stages. In addition, in order to understand the insight into what is lacking on the ground, the research investigated on how professionals who are in the relevant sectors view this research problem against how communities view this problem. Gray (2009) states that when the objective of research is largely exploratory involving investigating attitudes and feelings, then interviews may be the best methods. Accordingly, the research undertaken investigates people's feelings and attitudes on women's status and how they think women could be empowered. Thus, considering interviews is a best way to explore the subject for the research.

Qualitative methods, such as interviews, are believed to provide a 'deeper' understanding of social phenomena than would be obtained from purely quantitative methods, such as questionnaires (Silverman, 2006). Interviews are, therefore, most appropriate where little is already known about the study phenomenon or where detailed insights are required from individual participants. They are also particularly appropriate for exploring sensitive topics, where participants may not want to talk about such issues in a group environment.

Gill et *al.* (2008) state that the purpose of the research interview is to search for the perspectives, experiences, beliefs and/or motivations of individuals on particular aspects. According to Gill and colleagues, there are three fundamental types of research interviews: structured, semi structured and unstructured. According to them, structured interviews are, essentially, verbally administered questionnaires, in which a list of predetermined questions are asked, with little or no variation and with no scope for follow-up questions to responses that warrant further elaboration (Gill *et al.*, 2008) while unstructured interviews do not reflect any preconceived theories or ideas and are performed with little or no organisation (May, 1991).

Semi-structured interviews consist of several key questions that help to define the areas to be explored, but also allow the interviewer or interviewee to diverge in order to pursue an idea or response in more detail. However, there are many more different types like focused interviews, group interviews, non-directive interviews, information conversational interviews, etc. (Gray, 2009). Although an interview is a common method in qualitative research, structured interviews are used within survey research as well. Singleton and Straits (2001) view various interview methods as various modes of data collection that fall along a continuum from the most to the least interactive.

3.3.3.1.1.1 Semi structured interviews

Semi-structured interviews are non-standardised and often conducted in qualitative research. The flexibility of this approach, particularly compared to structured interviews, also allows for the discovery or elaboration of information that is important to participants but may not have previously been thought of as relevant by the research team. Bryman and Bell (2011) describe the semi structured interviews as an interview guide that consists of a list of questions on a fairly specific topic that needs to be covered by the researcher. In this method of data collection, the interviewer does not need to allow the questions to be in the exact way outlined in the schedule and questions not included in the guideline also be asked in the her the interview process is flexible. Bryman and Bell (2011) state that semi-structured interviews help to gain a genuine understanding of the world views as less structured approach of interviewing is more preferable for people than structured approach. This would help the researcher to see the world as the interviewee sees it. Gray (2009) states that use of semi-structured interviews allow the researcher to probe for more detailed responses where the respondent is asked to clarify their responses.

The interview guideline was formulated using preliminary findings from the literature review (refer to Appendix B). In this data collection stage, initially a telephone call was made to make an initial request for their interest to take part in the interview. Following that a formal letter was sent through email giving details about the study, with the interview guideline. Those who were able to allocate time and provide their interview were contacted individually by the researcher and interviews were conducted in an environment where the experts felt comfortable. The interviews were recorded with the consent of the interviewees.

Since this phase of data collection attempted to explore the research problem, conducting semi-structured interviews was the most appropriate method of data collection. This allows the researcher to explore new areas that come along in the interview that were not initially planned through the interview guideline. In addition, further clarifications on the responses can be gathered. This phase of data collection was conducted to gather data on what experts felt about the research problem and also to gather data that would help the researcher to formulate the interview guideline for the next phase of data collection.

A document review was also undertaken as an additional source of evidence to collect information about the legal practices related to women's empowerment. Information about government's acts, policies, other legislations, national level committees, etc. were considered. Document review is another data collection technique that helps to augment evidence collected from other methods of data collection (Remenyi *et al.*, 1998). In this research, in addition to the interviews with experts, documents were further reviewed to gain understanding on the practices of women's empowerment.

3.3.3.1.1.2 Structured interviews

The second phase of data collection was mainly done through structured interviews with community members from the disaster affected communities (refer to Appendices C to H). Although structured interviews are mostly seen as a method for quantitative research it is also used for qualitative research. Standardisation of interviews is subject to debate and there are developments happening on the method especially within qualitative research. Standardisation is about the logic of scientific measurement applied in social phenomena. It attempts to hold the behaviour of the researcher constant and thus reduce variable error (Schaeffer and Maynardm, 2001). In addition, it helps to reduce bias by reducing the chances for interviewer expectations and opinions to intrude on the process by which respondents' answers are generated, interpreted or recorded.

The discussion on the concept of standardisation in survey interviews has always been under debate. Unlike questionnaires, standard interviews have their practical limitations in adhering to the strict rule of standardisation which has been practised mostly by positivists. However, the emergence of social constructionists who were trying to consider social measurements using standard interviews has created issues concerning standardisation. This has led social researchers into a critical state where their findings were rejected. Schaeffer and Maynard (2001) have presented two aspects in handling this issue from the recent debates on survey interviews. Since there is a tension between the procedures for social measurement and the practice of talk and interaction, the researchers have to alternate between following the rules of standardisation and using the tacit knowledge available to competent social actors. The role of tacit and common-sense knowledge and, analytic alternation are two aspects which are considered in addressing the above concern. Schaeffer and Maynard (2001) state that increasing tacit knowledge is embedded in the conduct of survey interviews. In addition interviewers and respondents alternate between following the rules of standardisation and using daily interactional competence in order to have better data collection for the research. Although the undertaken study adheres to the rules of standardisation it also agrees on the concept of tacit knowledge and analytic alternation.

Schaeffer and Maynard (2001) say that there no standardised rules on standardisation and the practices of it have developed at various sites and which has its own traditions. Suchman and Brigg (1990 cited in Schaeffer, and Maynardm, 2001) argued that standardisation itself is substantial threat to the validity of research findings. Fowler and Mangione (1990) have presented four principles of standardising interviewing. They are: read questions as written; probe inadequate answers nondirective; record answers without discretion; and, be interpersonally non-judgemental regarding the substance of answers. Michael Brenner (1981 cited in Schaeffer and Maynard, 2001) allows the interviewer to show an interest in respondents' answers by volunteering a clarification when necessary to gather adequate data. According to them it could be achieved by nondirective probing, repetition of the question or instruction and nondirective clarification. If the respondents ask for clarification the interviewer has to provide clarification by predetermined clarifications. In addition to these, there are many practices that scholars have in survey interviews such as verification, tuning, zeroing in, etc. this shows that although standard survey interviews require standardisation in practice, the interviewer may find it difficult to balance the rules of standardisation and the task of getting adequate information from the respondents which is meaningful for the research. Maynard and Schaeffer, 2000) have devised an approach called 'critical remediation' to survey interviews in qualitative methodological orientation using earlier studies.

The structured interview guidelines (together with questionnaires) were translated from English to local languages. The translated instruments were refined through several stages in order to provide an instrument which is more appropriate for the local communities. Hence, translators with local knowledge on language usage and local conditions were involved in this process together with the researcher. Thereafter, pilot interviews were conducted with community leaders and members to further refine the instruments. This study was conducted on tsunami affected people in Sri Lanka. However, it is not possible to collect data from the entire population due to time, cost and practical limitations. Hence, the study considered a sample which represents the population for the study. Therefore, people who were affected by the tsunami from three main devastated provinces were considered for the study. Following that, divisional secretariats from the northern and eastern provinces were contacted to identify the hardest hit areas and to identify areas where reconstruction has taken place. Later, through village level authorities, people who fell into the criteria as cited under section 3 were requested to participate in the survey. An initial idea about the study was given to the authority figures to pass the message to the people. However, before the interviews each participant was checked again on their position as per Figure 3.9, then women and men who were willing to participate were taken through the interviews. Accordingly, the second phase adopted a multi stage cluster sampling technique (geographical) followed by purpose and volunteer sampling. The study adopted a non-probability sample. The interviews were conducted until the researcher felt that the responses were duplications. A sample of 58 disaster affected women and men were considered from all three provinces. Since the earlier studies done on the northern and eastern provinces were far less than the southern province, the sample size included more people from northern and eastern provinces.

3.3.3.1.1.3 Group interviews

Group interviews help the researcher to gain understanding over a wide range of people. The group interviews typically involve between 4 and 12 participants. The participants are chosen using non-probability sampling often with a purpose. It helps to gather rich information. In group interviews, the researcher has the responsibility to give each participant a chance to state their point of view and record the data. Although group interviews are non-structured interviews, Zikmund (2000) states that group interviews can be a structured or non-structured form.

Saunders and colleagues (2012) view group interviews as more productive discussion and the interviewee responds to the questions and also evaluates the answers of others when giving his/her answers. This can suppress some respondent's answers. However, the research could state the purpose of research as exploratory and encourage all the participants to answer with their view. This can minimise this negative effect. Group interviews are cited as methods to encourage a wide range of responses to interview questions unlike individual interviews. Thus, the group interviews are selected as a follow up interview for the second phase of data collection. Under this phase of data collection, interviewees were invited to participate in group interviews. Four groups were considered under this phase. The researcher explained the purpose and area of research before starting the interview. Using the guidelines previously used for the second phase interviewees, each participant was given an opportunity to answer. Those who wanted time to think were also given that chance by taking turns between each individual. The interviewer has to encourage discussion and keep relatively quiet so that interviewees are encouraged to share their views. This is to avoid any bias occurring from sampling.

3.3.3.1.2 Questionnaires

Questionnaires are described in many ways. They can contain closed ended questions or / and open ended questions. De Vaus (2002) refers to the questionnaire as a method of data collection where respondents are asked to respond to the same set of questions in a predetermined order. It can be a self-completing questionnaire or where the interviewer completes the questionnaire. In this study, it was chosen to take the latter method for data collection. Questionnaires are the most common method used under the survey strategy. However, this research forms part of the second phase of data collection and was conducted to triangulate the research findings from the first phase of data collection. This comprised of close ended and open end questions. It was mainly conducted to understand the importance of having women's empowerment in PDR; the rank of importance of different factors that were identified through the first phase and literature review; awareness towards any policies/acts/committees relevant to women's issues or disaster reconstruction; and difficulties that women face that were particularly relevant to reconstruction activities. Since it was used to triangulate the data, the importance given for the size of sample to the whole nation that was affected by disaster was done through representative sampling due to time constraints. However, the sample had 32 participants who were both men and women and from all three provinces that were considered for the study.

3.3.3.2 Data analysis techniques

Data analysis consists of examining, categorising, tabulating, testing or otherwise recombining both quantitative and qualitative evidence to address the initial propositions of a study (Yin, 2009). It is important to have a data analysing strategy as it will guide the researcher in selecting the appropriate data analysing tools, to make sure that the evidence is well handled and to generate sound and convincing analytical conclusions while discarding the alternative interpretations (Yin, 2009). In this research process, data analysis will take place in different stages in order to provide the background information in the later phase of data collection.

3.3.3.2.1 Content analysis

Content analysis is an approach to analyse documents and texts that seeks to quantify content in terms of pre-determined categories and in a systematic and replicable manner (Saunders, Lewis and Thornhill, 2012). Content analysis is the most common approach to qualitative analysis. This involves making the inferences about data by systematically and objectively identifying special characteristics within them (Gray, 2009). Before the data is analysed, the criteria of selection has to be established in order to address objectivity in the research process where specific rules are created before analysis.

According to Miles and Huberman, (1994) qualitative analysis involves three activities: data reduction, data display, and conclusion drawing. Data reduction is the process of selecting, focusing, and simplifying the interview transcripts by extracting the most relevant data from all of the responses. This process identifies a number of issues to be addressed under the main questions of the research. The undertaken research conducted interviews in local languages with communities. This facilitated a greater response rate from the communities. Following that, the recorded interviews were transcribed and translated from local languages to English. Later, the transcripts were uploaded into NVivo (version 9) and the process of codes which were identified from the literature was used as guidance. However, new categorises which were emerging from the data were also considered for further investigation. The researcher repeated this process till all the data were considered and coded.

While data display produces a data matrix. This can be done through tabulating the interview data; the respondents listed as columns and the questions as rows, etc. Finally, display of data and drawing of conclusions are done. Easterby-Smith and colleagues (2008) state that content analysis could be done by analysing the use of words and the recurrent patterns of certain words or phrases.

3.3.3.2.2 Cognitive mapping

Easterby-Smith *et al.* (2008, p.327) refer to cognitive mapping as a '*method of spatially displaying data in order to detect patterns and by doing so better understand their relationship and significance*'. This can be used to structure the complex and complicated issues and ideas in order to reveal hidden knowledge. The concepts and themes developed were grouped in hierarchical order and relationships among the concepts were based on either categorical concepts or similarity concepts; cognitive maps are thus used for a variety of purposes and contexts in this way.

There are many computer software packages that are used for qualitative analysis. In this research, Nvivo (version 9) software was used to analyse the data collected from the first and second phases. However, the empirical evidence collected through the third phase of data collection was analysed through content analysis without any computer software. NVivo (version 9) software helps to manage, organise and analyse qualitative data. It has many features that helps the process of qualitative analysis. Nevertheless, it should be noted that the software will not perform an analysis on its own. It was very useful for the undertaken research as the researcher had to analyse empirical data gathered through interviews from 58 participants. Hence, usage of this software for the research was advantageous. In addition, NVivo facilitates the researcher to present cognitive mapping using its features. Its capacity to increase the quality of the presentation was another reason that the researcher used the software as a tool to support the data analysis.

The interviews were recorded using electronic voice recorders during data collection and were later transcribed and imported to NVivo 9. Following that, a node structure was created using the understanding that was gained from literature and previous phases of empirical evidence collection. The term 'node' in NVivo is used to represent a code, theme, concept or an idea about the data that is used in the analysis. These nodes were

created in a hierarchical manner to reflect the relationships between the main and the sub themes. Although this step is called deductive coding, in order to avoid missing out any new themes emerging from the research, the research used both deductive coding and inductive coding. This would allow new nodes to emerge from the transcripts themselves. In this step a task of coding is carried out where the interview transcripts were scrutinised to identify the main concepts and themes that are related to the research objectives. This coding exercise closely followed the steps outlined by Smith and Osborn (2008). Thereafter, data analysis was performed using modelling. Models in NVivo are a way of visually exploring or presenting the data in the project. The models can be used to graphically represent the data structure and the relationships between the themes and concepts. This step facilitated the researcher to use cognitive mapping without using any additional software such as Decision Explorer, since unlike earlier versions, the current version of NVivo allows the researcher to create cognitive maps.

3.3.3.2.3 Descriptive statistical analysis

Survey data can be analysed using two statistical procedures: descriptive statistics and inferential statistics. Descriptive statistics are those that summarise patterns in the response of participants in a sample. There are three ways in which descriptive statistics are conducted and presented: tabular (eg: frequency table); graphical (eg: bar charts) and statistical (eg: summary measures of information contained in the set). Meanwhile, inferential statistics help to generalise the results from the sample to a wider population. The function of inferential statistics is to provide an idea about whether the patterns described in the sample are likely to apply in the population from which the sample is applied. Selection of which statistical analysis to be performed is determined by methods of analysis and level of measurement of the variable (nominal; ordinal and interval) and the complexity of the research questions (univariate; bivariate and multivariate). De Vaus (2002) provided guidance on selection of method of statistical analysis. In this study, the data collected through questionnaires were analysed using descriptive statistical techniques. Researchers use descriptive statistical methods to summarise data and get a description of the responses to questions. These methods include frequency tables, crosstabulations (stub and banner tables) and finding mean differences between groups or correlations between questions, etc. However, since the questionnaire of the research was carried out to confirm whether or not communities from disaster affected areas agree on the factors that experts cited in their interviews, descriptive statistical analysis were used to confirm views, through the use of tables.

3.3.4 Thesis writing up

After completing the analysis of empirical data obtained through semi structured interviews, structured interviews, questionnaires and group interviews, as illustrated above, the findings from the research strategy, together with the knowledge and understanding obtained from the literature review, were then used to draw the final conclusions. The final stage of the research methodology is writing up the thesis. The final research output of the study is reported as a thesis. Although the final writing up of the thesis is at the end the process, producing the results and writing the findings from literature and empirical evidence were carried out from the beginning of the research. Many publications on this topic were written during the PhD candidature (refer to Appendix A for publications).

In any research, unless the research findings are credible, the whole process involved in producing the findings are of no use. Hence, the next section explains various tactics applied to maximise the quality of the research design.

3.3.5 Establishing the research credibility

Reliability and validity in qualitative research are important criteria for stabling and assessing the quality of the research. Yin (2009) proposed four criteria for judging the quality of research designs; construct validity, internal validity, external validity and reliability. Construct validity is about identifying the correct operational measures for the concept being studied (Yin, 2009). Internal validity is the concern on all causal and explanatory studies of the relationship between different events (Remenyi *et al.*, 1998). External validity is also referred to as generalisability which is concerned with the application of the research results to people or situations beyond those examined in the study (Collis and Hussey, 2003). Reliability refers to the issue of whether the evidence and the measures used are consistent and stable.

Easterby-Smith, *et al.* (2008), contends that the meaning of terms used in quality criteria is different from one philosophical stance to another. Table 3.5 shows the perspectives on validity, reliability and generalisability from different philosophical stances. Similarly, Remenyi *et al.* (1998) also specifies that criteria used to assess the quality of positivist studies should not be directly transposed when judging non-positivist studies. Generally, qualitative research imposes challenges to overall credibility of the research. Nevertheless, the researcher has to ensure that the research is credible and acceptable among its audience. Thus, in order to create this, the following section details the tactics used for the undertaken research in ensuring its credibility.

Viewpoint	Positivist	Constructionist
Validity	Do the measures correspond closely to reality?	Does the study clearly gain access to the experiences of those in the research settings?
Reliability	Will the measures yield the same results on other occasions?	Is there transparency about how sense was made from the raw data?
Generalisability	To what extent does the study confirm or contradict existing finding in the same field?	Do the concepts and constructs derived from this study have any relevance to other settings?

(adopted from Easterby-Smith, et al., 2008)

3.3.5.1 Construct validity

Construct validity is about demonstrating that the selected measures for use in the research actually address the concepts and issues being investigated (Remenyi *et al.*, 1998). Construct validity for the research was achieved by adopting a triangulation of research techniques and data sources. As explained earlier (refer to section 3.3.3.1) the data was collected from experts who work in relevant fields and/or have experience in studying about these areas, such as individual community members from disaster affected communities and groups of communities from different parts of the country. In addition, the study used a chain of evidence by means of different data collection techniques such as semi-structured interviews, structured interviews, group interviews and questionnaires.

These are considered both qualitative and quantitative in nature. In addition, the study considered both men and women instead of considering only women. This gives multiple perspectives for the study. Furthermore, the literature review covered studies which were carried out within the country and published data from the knowledge domain from the initial stage. This facilitated to conduct theory triangulation.

3.3.5.2 Reliability

Reliability is about achieving the same findings and conclusions when research is repeated. In order to achieve this, the study detailed its transparency in the procedures it adapted from data collection to data analysis. The documents that were used for data collection were properly documented as survey instruments (refer to Appendices C to H). Since the study involved people from disaster affected communities who do not speak English, the researcher has translated the instruments into the local languages and used them to conduct the interviews. The study used non probabilistic sampling for the study and transparency of the details is given above.

Having reliability in research would help the next researcher to carry out similar research. In addition, a database for the participants and the details about them were maintained to address the issue of reliability. From a social constructionist point of view this shows that reliability is through transparency. Details about the procedures adapted from the beginning to the end of the study could help the next researcher.

3.3.5.3 Generalisability / external validity

Saunders, *et al.* (2012) see generalisability as the ability of the research to extend findings to others cases /participants in the study population. In other words, to what extent the results can be generalised. In quantitative survey strategies, statistical generalisability is possible. However, for qualitative research strategies, where it involves collection of richer data with in-depth analysis, it poses additional trouble for the researcher to have a statistical representation. The undertaken research adopted a multi stage, non-probabilistic sampling. The researcher took decisions on a rational basis (which would facilitate the fairer representation of the sample) like adopting the probabilistic statistical sampling technique 'cluster sampling technique' at the beginning by considering the top three

provinces that were hard hit by the tsunami. Later on the researcher contacted the provincial authorities to highlight the places which were hardest hit by the tsunami and where the PDR has taken place. From the research that was conducted within their organisation, the officials gave information on contact details to further proceed with the data collection.

The divisional secretariat was then contacted to further identify the communities who would suit the criteria for respondents. Following that, in certain communities where the divisional secretariat did not have close links with the community; community leaders or community society members were contacted to call for women and also men to participate in the interviews. At this point it was the decision of the leader or the member of their society to do a purposive (and / or convenience sampling). This could not be avoided due to the lack of the researcher's influence in the local community or the area as an independent researcher doing a study. Due to current political instability and problems, the researcher was not able to have control over this. However, the researcher made sure the participant did fall into the criteria that she had set for the required participants. This eliminated people who did not fall into this, and also helped to overcome any issues that may have affected a fairer representation of sampling to a certain extent. Although this technique was applied in the northern and eastern provinces, due to time and cost constraints, access to communities, researcher's lack of fluency in the local language that is mainly spoken in the southern province, etc. limited the research strength on representation in the southern province.

Nevertheless, it should be noted that the study considered many studies that were carried out in the southern province within the literature. Through this the results were triangulated. In addition, the experts who were interviewed had an extensive experience within the southern province. Considering all the limitations, the research has adopted a fair representation of people from the country. In addition, the interviews were conducted until the researcher felt that the responses were replicated (replication logic). The study considered 58 individual community members for the study.

3.3.6 Summary and link

This chapter illustrated the research methodology that was adopted for the research using a model called the nested hierarchical model. The details of the research methodology are explained using the three major components of the nested model: research philosophy, approach and techniques. The research takes a stance within positivism and social constructionism in the philosophical continuum. Further, the research adopted a survey research approach with mixed methods due to its exploratory nature. The research data collection was conducted in three phases. During the first phase, semi-structured interviews were conducted among experts in Sri Lanka while the second phase focused on collecting the perspectives from disaster affected communities using structured interviews and questionnaires. The third phase gathered information from groups of the affected communities' members. Data was then analysed using content analysis, cognitive mapping and descriptive statistical techniques

Finally, the credibility of the research is explained through validity, reliability and integrity of the research design. Validity was achieved by considering multiple perspectives and literature review covering studies which were carried out within the country and published data from the knowledge domain from the initial stage. This facilitated to conduct theory triangulation. The undertaken research adopted a multi stage, non-probabilistic sampling. The research participants were selected from the three main provinces that were affected by tsunami: Northern, eastern and southern provinces of the country to allow for fair representation of people for generalisation. Having outlined the research methodology, the next chapter discusses the conceptual framework of the study and the developmental process of the conceptual framework.

CHAPTER 4 CONCEPTUAL FRAMEWORK

4.1 Introduction

The previous chapter presented a detailed illustration of the research methodology for the undertaken research. This chapter focuses on describing the process adopted in the development of the conceptual framework and presenting the developed conceptual framework for the study. The conceptual framework of a study presents the system of concepts, assumptions, expectations, and theories that support and inform the research. Accordingly, the chapter is presented in the following structure.

- Firstly, the chapter explains the conceptual framework and its importance for the study.
- Secondly, the key areas and issues identified from the literature review are discussed.
- Thirdly, the process adopted in the development of the conceptual framework is illustrated. In addition, the conceptual framework developed for the study is presented.
- Finally, a summary of the chapter is presented.

4.2 Importance of the conceptual framework

The conceptual framework explains the main aspects studied within the research either graphically or in a narrative form (Miles and Huberman, 1994). This includes key factors, constructs or variables, and the presumed relationships between them. Furthermore, they conceive this conceptual framework as a series of intellectual 'bins' containing key events and behaviours. Reichel and Ramey (1987) describe a conceptual framework as a set of broad ideas and principles taken from the relevant fields of enquiry and used to structure a subsequent presentation. Although qualitative research conducted during earlier days relied on keeping pre-structured designs to a minimum, with time, researchers have started to accept more pre-structured qualitative research designs. Thus, it resulted in two extremes of tight, pre-structured qualitative designs, and a loose, emergent one. However, Wolcott (1982 cited in Miles and Huberman, 1994, p.17) states that it is '*impossible to embark upon research without some idea of what one is looking for and foolish not to take that quest explicit*'.

Similarly, McGaghie *et al.* (2001) stated that a conceptual framework helps to set the stage. They further mentioned that it identifies research variables and clarifies relationships among the variables. This research falls in between the two extremes as there are known things conceptually about the phenomenon but it is not enough to state it as a theory. The researcher is aware of the settings that need to be searched, and the actors who need to be contacted. As Patterson (2002) stated, qualitative design is emergent, although researchers may set off with some provisional ideas about research design there may be changes during the research process.

A conceptual framework helps the researcher to link to the research problem and facilitates in planning the research ahead. It acts as a primary model that helps to gain an understanding of what is out there that the researcher plans to study and of what is happening with these aspects and why. Miles and Huberman, (1994) said that the extent of the pre-structured nature of the research design will depend on time available; how much is already known about the phenomena; the instruments' availability and, the analysis that will be made. While considering the factors above, the undertaken study has developed its conceptual framework for the research to be investigated.

4.3 Key issues for conceptual development

The key areas for the research have been identified through a comprehensive literature review which is presented in chapter 2. Following that, the key issues within those areas were identified and investigated further to see the links between them. The identification of the issues can be summarised into following research questions: What is a woman's state in the post disaster period? In other words, what are their vulnerabilities; how could their vulnerabilities be addressed, and how their capacities could be developed during PDR. The second question could be further simplified into two questions. They are, what could PDR offer to women? How could PDR be used to empower women? Since the study is investigating from the built environment's point of view, the issues and measures are related to the construction sector. Accordingly, the study identified its issues as follows in the proceeding paragraphs.

The unprecedented tsunami affected many buildings and infrastructure, such as houses, roads, bridges, railway tracks, fishing ports, landing centres, small scale industrial units, hotels

located near to the seaside, irrigation systems, etc. In addition to the physical damage, the increase in gender based violence and gender insensitive procedures during post disaster reconstruction led women to a more vulnerable state (section 2.3.1). Further, women's dependency on other sections of the community for support in reconstruction, and management of their finance, and the patriarchal systems that exist within the society, also led them into more marginalised positions in PDR. In certain cases, for example, women's needs and demands weren't included in the planning of houses. The existing customs and cultural systems with regard to legal rights of land and properties together with administrative processes put women into economically disadvantaged positions. In addition to the above, there was a need to provide sustainable income generation to support living expenses.

Acar and Ege (2001) found that during the post disaster period, there is a 'double suffering' on women created by natural as well as social, economic and cultural forces which shape the way they experience natural disasters. Further, they found that women in patriarchal societies, developing economies and traditional cultural contexts are precisely in this position. Acar and Ege (2001) recognised that gender-based prejudices, patriarchal values and behaviour patterns are likely to take new vigour and scope during a post disaster context when the conditions of mass anxiety, helplessness and insecurity are felt in the face of life threatening disasters. In addition, they found that this reinforces the communities to follow the same old familiar patterns of behaviour and tends to reject the differences.

Enarson and Fordham (2001) state that exclusion of women's full participation in forming disaster resilient communities will hardly lead to its success. Further, they emphasised that the reconstruction of safer communities cannot be done with elites or technical specialists, but through regular consultation with women across deep divides of class and culture and of women and men working together towards a common future. Exclusion of women will create 'gender-blind' post disaster reconstruction. This will simply build women's subordination which will leave the communities even more vulnerable to future disasters. Further, due to the lack of experience and exposure in handling the post disaster reconstruction process, women tend to fall into more susceptible positions. Thus, identification of their needs would contribute to the reconstruction process and that can uplift their current economic and social positions.

Reconstruction is a rebuilding measure that involves building the confidence, self-respect, self-esteem, self-dependency, mutual support and trust and the rebuilding of communities. In order to have a successful completion of disaster reconstruction it is important to include the participation of social actors of the community (section 2.2). During PDR, in addition to men, women are also engines of recovery who possess qualities vital for disaster response and who can help to keep the fabric of society intact. Since crisis presents an opportunity to breakdown gender barriers (Thurairajah, *et al.*, 2008) and prompts men and women to step out of their traditional places, unequal pre-disaster gender roles can be changed. During recovery programmes in developing countries with critical support and planning (Department of Economic and Social Affairs, 1999). In many instances, after gaining economic independence through income generating projects, women have been largely instrumental in promoting youth projects. Thus, their mobilisation capacity can be increased through their economic independence.

Reconstruction is a long-term process and it focuses more on human and material resource development, coordinated effort towards independence and sustainability. In order to achieve the above objectives, the concept of empowerment can be used as a tool. In reconstruction the most vulnerable and marginalised sections like women, children, the poorest section of society, etc. are the primary stakeholders who need to be considered as partners in the empowering process (Jayaraj, 2006). In disaster circumstances, empowerment would enable women to increase their human and economic developmental goals. Through women's participation in planning, design, implementation, monitoring and evaluation, the processes of recovery and reconstruction can go beyond the provision of basic needs. Their participation may engender a level of community cohesiveness and security, with greater potential for realising development goals.

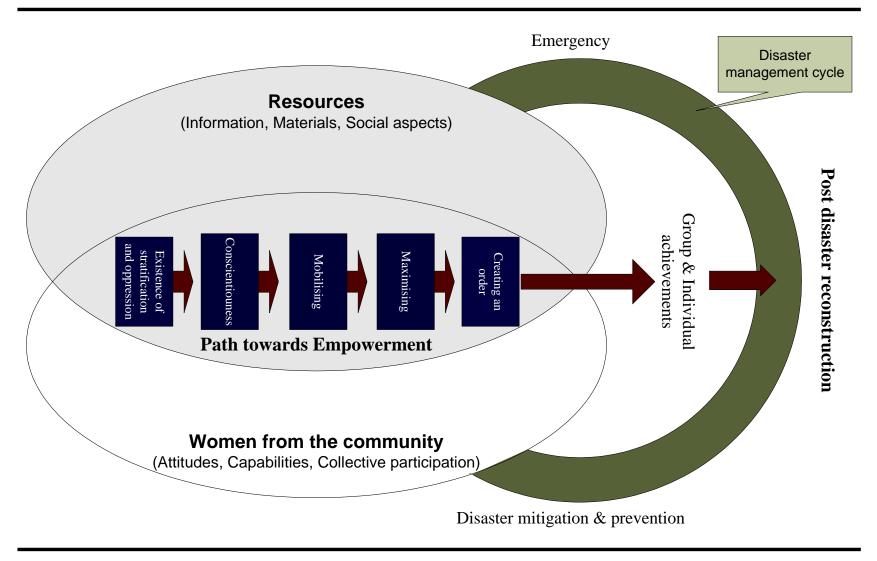
According to a report by UN-HABITAT (2007), when women are empowered they have the capacity and the inner will to improve their situation and gain control over their own lives. Further, it can facilitate for an equal share in economic and political decision-making, and control of economic resources. In the process of empowerment, women need to be facilitated for self-reliance. Since PDR can offer opportunities to build disaster resilient communities it is wise to search for the hidden resilience displayed by communities affected by disasters through themselves. Although studies have identified the difficulties that women face it was

rare to find any studies that have attempted to bridge the gap that is existing between women's empowerment and how that could be incorporated into PDR to enhance the disaster resilience while improving women's positions within the community. This will require conscious strengthening of local knowledge and wisdom while finding solutions to problems. Accordingly, this study focuses on empowerment of women during post disaster reconstruction. Figure 4.1 shows the key research issues and the research focus within the disaster management context.

4.4 Development of conceptual development

Compared to earlier time the contemporary research on social phenomena are complex and linked to multiple bodies of knowledge that belong to different disciplines (Jabareen, 2009). Jabareen views the conceptual framework as a product of a qualitative process of theorisation. He further noted the lack of systematic methods for building conceptual frameworks specially in multi-disciplinary literature despite the availability of literature on logical guidelines for qualitatively deriving theories from text and data (Miles and Huberman, 1994; Myers, 2009).

Jabareen (2009, p.31) defined a conceptual framework as 'a network, or a plane, of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena'. He further said 'the concepts that constitute a conceptual framework support one another, articulate their respective phenomena, and establish a framework-specific philosophy'. The undertaken research developed its framework through three main steps. Firstly a comprehensive literature review was conducted on disaster management and women's issues related to the built environment. In addition, concepts related to addressing the issues that women face and their vulnerabilities were explored and the concept of empowerment was further considered for investigation. Following the identification of a knowledge gap in domains, an initial diagram on key concepts and their positions was developed, as shown in Figure: 4.1. This diagram was primarily developed to provide a basic idea on the concepts involved in the study and its relative positions.



The Figure: 4.2 shows the process involved in developing the conceptual framework for the undertaken research. Detailed information on the key areas and key issues that were identified for the research is given in the following paragraphs.

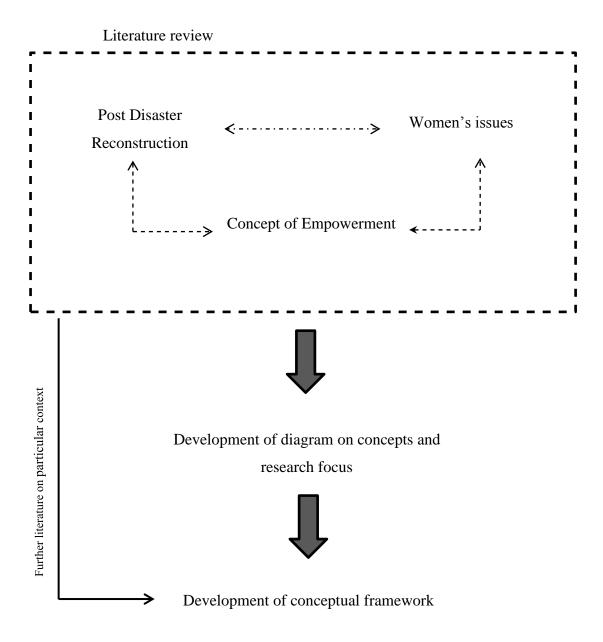


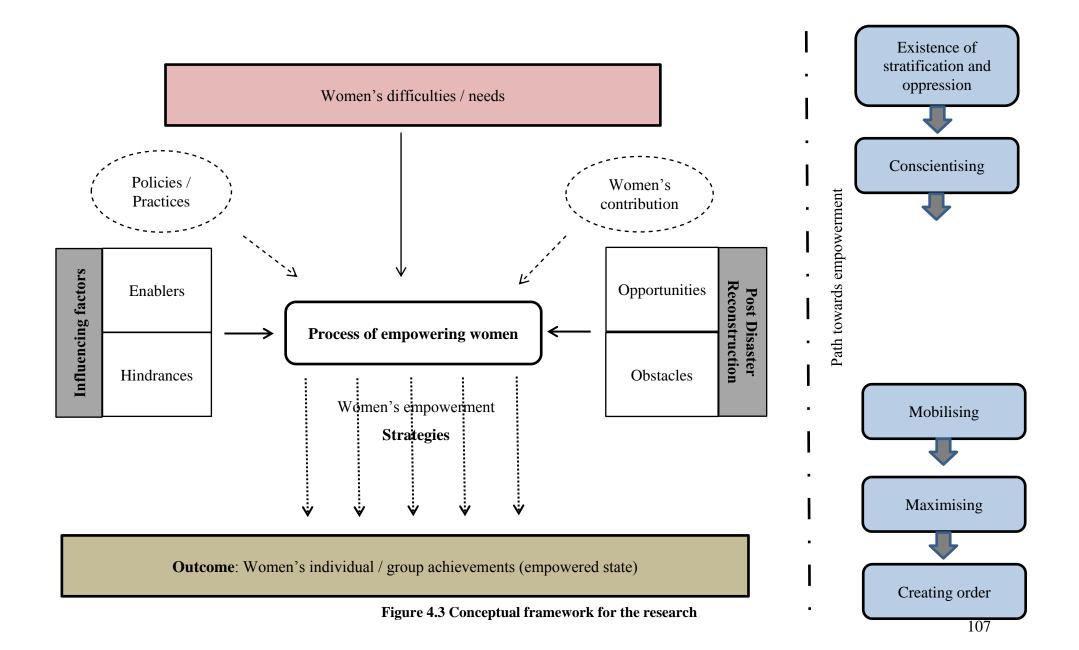
Figure 4.2 Process of conceptual framework development

Furthermore, a detailed literature review was conducted on the above key concepts within the studies that were carried out in developing countries, especially in Sri Lanka, which is the context of study for this research. Following that, the above diagram (Figure: 4.1) was further developed in a detailed conceptual framework as shown in Figure 4.3. As mentioned by

Maxwell (2005) it is primarily a conception or model of what is out there that we plan to study, and of what is going on with these things and why a tentative theory of the phenomena that we are investigating.

As explained in section 4.3, key areas and issues were identified initially. Following that, the conceptual framework was developed. As it can be seen, the left side of the framework represents the components that need to be considered for women in PDR. Women's difficulties need to be identified initially. Since it was highlighted in the literature about missing women's voices, this study mainly focuses on capturing their views individually on what they feel about their state and what they want for their empowerment. In addition to that, experts from the relevant fields and communities in groups were considered for the study.

The influences of women's empowerment and, the opportunities and obstacles that PDR could bring to the community, also need to be identified. Since it is important to know the existing structure and framework in practice and to identify the problems, the policies and practice related to women's empowerment have to be investigated. Providing a solution which cannot be implemented or will not be accepted by women on their empowerment process would be a tremendous failure in strategy formulation. Hence, the roles that women could play in PDR and the roles that they prefer to do to empower themselves should also be noted from women who were affected by disasters. Consequently by considering the above factors, strategies for women's empowerment could be formulated to provide solutions for women's empowered state. The right hand side of the diagram shows the path towards empowerment. Since this research involves, at strategy formulation level, the activities involved in the first two steps, these are considered for the study while mobilising, maximising and creating order need to be considered for further research during the implementation of strategies.



4.5 Summary and link

This chapter presented the development of the conceptual framework for the study. The model was based on the literature review and the initial knowledge and understanding of the researcher on the areas. The framework was initially developed as Figure 4.1 and later after the first phase of data collection, the model was further refined and developed with more details that could be applied to a project. The right side of the conceptual model consists of the path towards empowerment. Meanwhile, the left side of the model illustrates the different components involved in empowerment process such as the influencing factors, women's contribution, practices and the effects from post disaster construction. Initially, the difficulties and needs of women need to be identified for the considered communities. Later, after considering the above components for women's empowerment strategies can be formulated to achieve the outcomes which can be at individual level or collective level. Under this research, the first two steps of the path towards empowerment are achieved. The later steps can only be carried out in an actual project. The next chapter presents the data analysis of the empirical evidence collected during the three phases from experts and disaster affected communities.

CHAPTER 5 DATA ANALYSIS

5.1 Introduction

Chapter 4 presented the development of the conceptual framework of the research. This chapter illustrates the analysis of data collected from expert interviews and, interviews and questionnaires with disaster affected community members. Accordingly, the chapter is presented in three sections.

- Firstly, section 5.2 focuses on analysis of data collected from interviews with experts from relevant disciplines in Sri Lanka. In this section, initially, the background information about the experts who were interviewed under this phase is presented. Later, analysis of data on women's positions in PDR, the factors that influence women's empowerment, policies and practices adopted on women's empowerment in PDR and, effects of PDR in development of women are presented. Documents related to policies and frameworks were reviewed in gathering further understanding of these practices.
- Secondly, section 5.3 focuses on interviews and questionnaires that were conducted among community members. Initially, it gives the background information about the people who were interviewed for the study. Following that, the analysis of those interviews is presented. Accordingly, women's status in PDR, the importance of women's empowerment, the influencing factors for women's empowerment in PDR and policies and practices on women's empowerment are illustrated in this section. Key findings from the interviews are also presented in this section. In addition, this section analyses the questionnaires conducted among individual community members during the second phase of data collection.
- Thirdly, section 5.4 focuses on interviews conducted among disaster affected community groups. Background information about the groups involved in the study is presented initially. Following that, the analysis of structured interviews is presented. This part of data collection was conducted in validating the results obtained from the second phase of data analysis.
- Finally, the analysis of empirical evidence is summarised.

5.2 Experts' opinions

5.2.1 Background information on participants

Phase 1 of data collection involved interviews with experts from Sri Lanka who were working in either disaster management; or women's issues and development; or construction. 15 experts covering the three fields were interviewed for the study. Background information on each participant is given in Table 5.1.

Table 5.1 Background information on experts

					Expertise		
No	Experts	Gender	Occupation	Background	Disaster management	Women's development	Construction
01	Expert A	Male	Planner in an INGO	He was involved in organising the construction of over 165 houses (90 houses in Ampara; 60 houses along south west of the country) just after tsunami. The INGO generally focuses on community development and has the concept of 'gender' as one of the criteria for their work.		-	
02	Expert B	Female	Project coordinator in an INGO	The project that she is involved in focuses on 4 areas: housing; infrastructure; livelihood; water sanitation. The organisation is an international development organisation which deals with PDR and women's development. It has assisted in rebuilding nearly 20,000 destroyed homes, vital community infrastructure and ways of life of the affected people. In addition, it has also helped to capacitate and facilitate the recovery process through technical expertise and policy level inputs.	\checkmark	N	_

					Expertise		
No	Experts	Gender	er Occupation	Background	Disaster management	Women's development	Construction
03	Expert C	Male	Officer in an NGO	He works on projects related to GBV and has worked on reconstruction of houses through self-help schemes. The NGO works on community development especially on IDP's and women's development.	\checkmark	\checkmark	-
04	Expert D	Female	Professor and one of board members in a NGO.	She has extensive knowledge and experience on women's issues and empowerment. She has written extensively on these areas and has done studies after tsunami. She has dealt on these issues at policy level as well. The NGO mainly works on women's development. It handled lot of projects on women's empowerment and has worked during post tsunami reconstruction.	\checkmark	\checkmark	-
05	Expert E	Male	Consultant and Director - NGO	He is a director of well-established NGO that works on community development; disaster management; women's development. He has done publications on livelihood and community engagement.	\checkmark	\checkmark	\checkmark

		Experts Gender	Gender Occupation	Background	Expertise		
No	Experts				Disaster management	Women's development	Construction
06	Expert F	Female	Consultant on GBV; Former Director of Women's national committee	She works for a NGO that works on IDPs and women's issues. She was working for the ministry since 1981. She was a deputy director and then director of ministry. She was an additional secretary and director of national women's committee. She has worked on projects on gender mainstreaming at national level.	\checkmark	\checkmark	-
07	Expert G	Female	CEO of a NGO	A well-established NGO which works on community development; disaster management; micro finance; women's development. They have done projects on women's empowerment in conflict affected areas and some projects after tsunami. They have provided transitional shelters which could be used for longer period of time.	V	\checkmark	_
08	Expert H	Female	Quantity Surveyor	She has worked on post tsunami reconstruction projects and is from a tsunami affected community. She has been working on other construction projects covering houses, community buildings and road projects.	\checkmark	-	\checkmark

		Gender	Gender Occupation	Background	Expertise		
No	Experts				Disaster management	Women's development	Construction
09	Expert I	Female	Director of INGO	The INGO has worked on reconstruction of houses and has given special emphasis on gender. This organisation has conducted seminars, published reports and demonstrated pilot reconstruction projects on community engagement covering gender aspects. She was involved in these projects and publications.		\checkmark	
10	Expert J	Male	CEO - Construction company	He has managed construction projects. It is a contracting company which constructs houses. He has good experience and knowledge of local conditions in tsunami affected areas. He has spoken to people who were affected by tsunami and have gone through PDR.	\checkmark	-	\checkmark
11	Expert K	Female	Director of Women's movement - NGO	The NGO works on community development. This particular division is solely working on women's empowerment which is a separate independent division under its company. She was involved in post tsunami projects on livelihood and have worked closely with people who were affected by tsunami. She has		\checkmark	_

No	Experts	Gender	ender Occupation	Background	Expertise		
					Disaster management	Women's development	Construction
				conducted seminars and actively involved in management of women's empowerment projects.			
12	Expert L	Female	District coordinator of a NGO	She has worked in eastern and northern provinces of the country on women's empowerment. She is attached to the company that Expert K is attached to.		\checkmark	
13	Expert M	Female	Officer for projects - INGO	It is an international development organisation which deals on wider areas of community development and human rights, She has worked on PDR and dealt with female headed households' livelihood development.	\checkmark	\checkmark	-
14	Expert N	Female	District coordinator - INGO	She has worked on livelihood and women's empowerment projects. The NGO is working on reconstruction and livelihood development at village level.	\checkmark	V	-
15	Expert O	Male	Quantity Surveyor	He has extensive experience on cost management of construction projects. He works for a contracting company and has worked on reconstruction projects.		_	√

5.2.2 Analysis of experts' perspectives

5.2.2.1 Women's status in post disaster reconstruction

Disasters affect communities without any gender bias, however, due to local vulnerabilities, women are affected more than men and they are classified as one of the vulnerable groups of people. Accordingly, the first phase of data collection attempts to understand the difficulties that women face during post disaster situations and the roles that they play in PDR through experts' perspectives. The following section describes the status of women in PDR by understanding the struggles that women face in post disaster phase. The difficulties that women face are classified under two sections: construction related difficulties and other general difficulties that women face. In addition, the roles that women play in the reconstruction process are also identified.

5.2.2.1.1 Difficulties related to reconstruction

In order to clearly understand women's difficulties during the reconstruction process, these difficulties are further divided under three phases. They are categorised depending on the phase of reconstruction: pre-reconstruction, during reconstruction and post reconstruction.

5.2.2.1.1.1 Pre-reconstruction

During the pre-reconstruction phase though women were involved in giving suggestions for their house plans there were many cases where their opinions were not heard or they were not given an opportunity to speak about their needs. Expert D said '*during tsunami* women were hardly consulted, it depends on the locality. If people in authority supported, then they have. But women are hardly found in construction'. This was a commonly cited issue within the interviews. Expert A said 'When people were asked about the problems for the beneficiaries, in certain places – since generally men involve in talking firstly they did not find out, but later they found out that the kitchen was very small. Since women use it for social space too it was a big problem for them; their neighbours come for a chat'. Sometimes women carry out their livelihood activities at their homes and it was not

considered in house plans that were designed for tsunami reconstruction projects (Expert I). Since the houses which were given to them are going to be their permanent houses for their life time these issues do matter a lot to them.

Another issue that was pointed out in the interviews was the issue on house designs for local needs. Generally many communities had their customs and traditions on house construction. However, leaving those customs left them with bigger problems such as orientation of the house; location of kitchen, shrine room and well; etc. Although it may be a small change in a construction plan it did matter a lot for people who were in tsunami affected areas. Since women spend lot of their time at home it is important to consider their views. Expert I who was mainly involved in housing reconstruction with community participation felt that women have to be consulted before finalising the plans to give them the satisfaction. She said 'There was a case where the change of the plan was not a big issue it was a change of door orientation. Women have to get involved in the discussion and do the things. If they don't want a window they should be allowed to do alterations. At least for the design of the kitchen women should be given an opportunity. In one incident the height of a table in kitchen need to be changed according to women's need'. In other words, the wrong height of a table could pose health issues for women. In another instance, due to poor chimney design, smoke that came from cooking started to spread inside the house.

As the living styles of these communities are different from urban settings, house design from urban settings posed them with problems. Many communities had issues on their toilet construction. Generally these people would like to have detached toilets or toilets with doors facing outside of house. Sometimes it was noted that women found it difficult to maintain it. Women complained about kitchen construction and some women were cooking outside the house while they had a kitchen inside. Expert I said '*There was a case where they have closed the sink saying that there is a smell coming and we are thinking it is coming from toilet. So then, when contractors said, no, it is not connected to toilet; then they got to know. So later it was found that they didn't know how to use it properly and clean it*'. She further said that some women felt it's claustrophobic and while others felt lighting was not enough for them. Therefore, if a useable open place with two walls would have been given to them they could have used it. Expert H who has worked on reconstruction processes felt that generally men tend to take decisions and when women raise their ideas they are sometimes supressed within the meetings itself. She quoted as follows 'when women say things in meetings one boy will get up and say, now that can't be done and it would be difficult. Then they tend to ignore women's needs in the meetings. But some women who said that no, we'll talk and they did. In construction, there weren't many women in management level compared to men. There were some ladies as engineers and other professionals but not many' (Expert H). This reflects the male dominance and ignorance of women's words in construction.

Although many organisations quoted themselves as institutions that carried out owner driven projects the extent of community's participation in housing reconstruction was very different to each other. Expert I felt that some organisations just talk to the community leader and take decisions and thus leaving out individual household's needs and difficulties. There were many projects where the community was separated and not allowed to contribute or comment on their house construction. Expert I further felt that 'when reconstruction didn't consider community's participation how we can expect them to consider gender issues which are further own the line'.

5.2.2.1.1.2 During reconstruction

Women found many difficulties during the reconstruction phase. Women who were involved in constructing their houses were involved in purchasing and transporting materials for their house construction. However, due to high demand for materials there was scarcity of materials. Thus, women had to travel to different places to purchase those materials. This was physically challenging for them. In addition, due to scarcity, the prices of cement, sand and other materials went up and, women found it difficult to manage variation of cost and management of construction.

Women who would like to work in reconstruction found it difficult to join construction due to its image and macho culture. Working patterns in construction pose additional barriers to women to enter or progress in construction jobs. Even though women are seen at unskilled levels, their presence in skilled levels was less evidenced by community women. Expert H felt 'Lack of women in the field of skilled labour work such as carpenter, mason, plumber, etc. make it harder for women to get promoted to skilled work from unskilled'. An interviewee said 'Domestic work load – it is sometimes a problem for

women when we need to go for work especially in the construction industry'. Another interviewee said there are issues in recruitment of women in construction. Women who work in construction found that they had to face additional problems than men and hence they needed additional facilities to work on those sites.

An interviewee who was from a contracting company said 'Sometimes the contractors mishandled the construction of houses in households where only females were there or no support from others'. Apart from this, Expert H highlighted another issue, 'while women were working there were misbehaviours. People said bad comments when women went and worked with those NGOs. They felt it is against their culture. So women automatically stopped going to work because there were problems. Some people started saying bad things that were happening in some NGOs and it has resulted in public bad opinions as a whole and family didn't support women going and doing work. So it affects women's mind. Some women were working with confidence saying that they will work and let people talk'. This shows that PDR should be sensitive on cultural issues and should work on gaining the confidence from communities than isolating them from the reconstruction process. Though PDR would be able to complete its construction work on time they may not be able to develop the community in term of social economic aspects.

5.2.2.1.1.3 Post reconstruction

After the tsunami, people were asked to relocate to another location if their houses were within buffer zones. The concept of a buffer zone was introduced in 2005 through the Task Force for Rebuilding the Nation (TAFREN) guidelines. According to this guideline there are two types of buffer zones; 100m landwards from the mean high water line (mainly in coastal belt within southern and western provinces) and the other one is 200m landwards from the mean high water line (the coastal belt is mainly within northern and eastern provinces). All tsunami affected occupants who were living in houses which were located within the buffer zone were eligible to get a new house regardless of their ownership of the land. Government gave Rs. 250,000.00 to people whose houses were fully destroyed and which were located outside the buffer zone. Meanwhile, the houses which were partially damaged were given a grant of Rs. 100,000.00. The Government did not permit new construction within the buffer zone. Therefore, due to relocation, people's life style has changed and it has affected their income earning activities. In addition,

largely, the relocated people were in newly developed areas and this has brought issues about access to roads or other infrastructures. This has affected women much more than men.

Another significant issue which was raised by interviewees was women's right to properties. While explaining a related issue, Expert D said 'they were claiming that the houses were built and given to men even land was initially belonged to women. It was not that bad in south. If you had a land and lost it then it is an issue. But if they give a new land in a joint ownership then it is a gain'. When women do not have property rights then they cannot take loans for their income earning activities. This has ultimately made women disempowered. Expert K said 'Usually in Sri Lanka head of household is a man whether that person is capable of doing anything or not the head of household is a man. So women did not have title to land that they had. Even if they want to take a loan, because they couldn't take collateral to take loan they had problems. For reconstruction they need money'. However, this issue was later sorted. Another highlighted issue was though women owned their land before the tsunami, due to hassles in handling the administration process, women gave away their right to receive the property to men. An interviewee quoted an incident where she said that since women have to travel a long distance for the office to receive the support for a house they have sent their husbands. This has resulted in men getting those properties. However, RADA has later developed a policy where it emphasised the need to give a joint ownership for men and women. This gave the right to sell a property as well. However, Expert K said that this was not practised in the field as some people involved in administration confused the interpretation of laws and that has left this attempt in vain.

The poor quality of construction has given additional problems to women. In certain houses there were water collection, blockages in sinks and toilets. This has led to health issues as well. Although the majority of people received permanent housing there were some people who did not receive houses and some of them are still living in transitional shelters. This is causing tremendous problems for women. In certain instances women had issues in expressing their needs to construction or administrative workers either due to their lack of confidence or due to fluency in a language that is used. In addition, communities in northern and eastern provinces have lost their houses due to displacements later on.

5.2.2.1.2 General difficulties

One of the most cited struggles that women face is the cultural barriers and society's views on women. Expert B said that 'women have cultural barriers being in east and in Muslim community. It is basically the attitudes and the perceptions of people. The cultural barriers are major one in east compared to south or other places. If you can break that then you can win it'. Another interviewee who was working in construction and belongs to the disaster affected community said that some women are unable to carry out their work in the organisation due to customs and traditions in their village. While another male interviewee from construction said that 'there are beliefs still existing in the community that construction is a male dominated job and not suitable to women. Hence, women are demotivated at their community and household level'. This reflects that the issue on stereotyping hinders women's participation in construction.

Generally the responsibility towards family and children restrict women's ability to engage in employment or any income earning activities. In explaining this aspect Expert D said that 'the reason is difficult to combine work and family because men don't share family responsibility and no child care facilities'. An interviewee from construction said 'Domestic work load – it is sometimes a problem for women when we need to go for work specially in the construction industry. Sometimes we can't take leave. The whole work at home is done much by women. So when they have to work there and here, this can sometimes create problems for women and make them less productive'. Further, Expert J mentioned that women who lost their husbands in disasters have got more responsibility, hence they struggle more. Expert F who has an extensive knowledge on gender and empowerment said 'Women are working hard as husband's earning is not enough. Women are toiling hard and have less number of hours to sleep. They need to compete with men and other women to go up in organisations. Women have to struggle and work harder to show that we are better than men'.

During the post disaster phase it was noted that many women lost their income and income earning avenues. Generally women from these places engage in livelihood activities. Since they lost their homes and they were relocated they couldn't carry out their income earning activities. This has made them more dependent on others. In addition to the above, experts mentioned that women face gender based violence; unequal

opportunities; restricted mobility; disruptions due to external forces like war or bureaucracy.

5.2.2.1.3 Women's roles in PDR

Generally women contributed to reconstruction during the pre-construction period. Women were involved in providing suggestions on house designs and have engaged with their family in deciding on purchasing materials, interior decorations, alterations to original house plans, etc. Expert K mentioned '... *planning stage they got together and planned it. Women are always getting involved in our Sri Lanka. In our country though father is head of household mother runs the house. Though he shows he is the one who makes the decision it is she who makes the decision*'. Women were also seen at unskilled levels for daily wages. Another most cited contribution was food preparation for construction workers. Some of them have provided food and drink for the workers at their household level while others have made it as an income earning activity.

Women had been involved in manufacturing bricks and blocks in the eastern province of the country. There was high demand for bricks and certain NGOs have given machineries and support for women to produce them. In addition, some women also produced roof tiles. Expert J said 'they were doing brick manufacturing and blocks in eastern province. Wherever they had the raw materials it supported them to do this. GTZ, an NGO gave machineries for them to do it. So it became a self-employment for them. Since there was demand this cottage industry was good'. Another interviewee also supported the idea of women being involved in offsite materials production. He said that this would be a sustainable income generating activity for women. Another role that women played in construction was helping to mix concrete.

Generally, women were involved in owner driven projects with their family. Some of them were engaged in painting the house, tiling the bathroom, mixing concrete and also giving assistance to masons and other construction workers at an unskilled level. Women worked in quarries and also in road construction at unskilled levels. Apart from the above roles, women from tsunami affected communities who have undergone educational training were involved at technical and managerial levels on construction sites.

5.2.2.2 Importance of women's empowerment

All the experts involved in the study emphasised the need for women's empowerment in post disaster situations. Since women are more vulnerable financially, physically and mentally they are put into further vulnerable states. Many women were in shock after the tsunami and were unable to move forward in their life. Organisations gave counselling and were involved in arranging many activities for women to change their mind. Expert H thought that women could be offered job opportunities in this programme which will motivate them and distract from worries. Participants recognised that women faced limited economic opportunities, faced gender based violence and struggled due to slipping of various social safety nets in post disaster situations. This presents extreme hardship to women (Expert E). In explaining further Expert C said 'When disaster happens women are the ones who suffer more. If you want to reduce their sufferings then you need to do some intervention. What do women want and what will make them happy? If you want to do on a sustainable purpose then you need to know what you want to do and for what purpose. You need to find out what is bigger violation for women and do women feel like that'. This emphasises the need to understand their perspectives on the difficulties that women face during post disaster situations and what sort of remedies would help to empower them. Furthermore, Expert C said that 'Socially women and men are same now. Females have skills which men don't have. Women tend to think carefully for which they are contributing. Women have critical intervention – chat between ladies'. This reflects that women's capacity to network, share information between different households and, plan carefully with commitment could be utilised in the opportunities to empower them and uplift their families. Expert O felt that 'opportunities to women will offer sustainable income and it will make them to gain economic power while training and workshop for skill development will build their self-confidence, self-dependency and mutual support within the communities'.

One of the serious allegations that were found in post disaster situations was gender based violence against women. Expert E emphasised the need for conscientisation and capacity building in empowering women. She said that if they are awake then they can be empowered which will help to address GBV. She further mentioned that women at grassroots level are sometimes afraid to talk and actions should be taken from the bottom

rather than the top. This would help them to find coping mechanisms. Similarly, while explaining about GBV, Expert G said that 'mainly people in that place are concerned about basic needs. They do labour work and get really tired at the end of the day. So they drink and lead to violence especially domestic violence. Sometimes the government system on gender based violence is not strong enough. Even women who are economically capable are finding it difficult. So it would be worse for other women'. In addition, Expert K said 'when a rape or bad thing happens what a poor mother would do. So we need to economically empower them. So they can stand on their own. Even when there is injustice they keep quiet. If they are economically empowered then they can act upon them'. Furthermore, Expert H said that 'when woman earns that helps her to get empowered and it makes her to take a decision because she is able to fulfil the family need by earning'. She further said that women's employment can motivate her. These clearly reflect the need to empower women not only to address violence but also to uplift women from other vulnerable conditions.

In most of the places in northern and eastern provinces, women were affected by both tsunami and war. Expert E mentioned that, '*in these contexts many men are unable to provide financial support to the family due to identity problems and becoming increasingly dependent on the female members. You could see high female headed houses in northern province. Such families are economically and psychologically vulnerable even in normalities*'. Sometimes men need to go to faraway places for employment and women are left at another place due to war and economic situations. Hence empowering them would not only help her but also her family. However, Expert H felt that lot of support and guidance should be given to women to take responsibility. Since women are facing a lot of cultural problems and stereo typing, more awareness should be made within the community and demonstrations of role models need to be brought in, to encourage them to become empowered.

5.2.2.3 Women's empowerment and post disaster reconstruction

5.2.2.3.1 Post disaster reconstruction's offer to women's empowerment

In understanding how women's empowerment could be undertaken in PDR it is important to understand whether PDR offers any opportunities or does it present obstacles to women's empowerment. Accordingly, the following section outlines the opportunities and obstacles that PDR brought into these communities (Figure: 5.1).

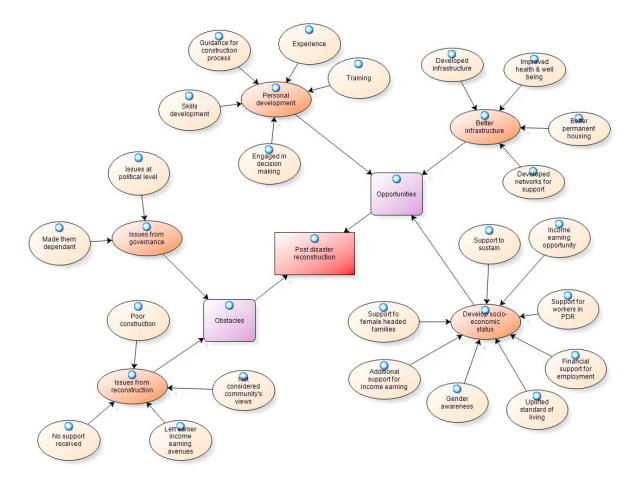


Figure 5.1 Opportunities and obstacles from PDR

5.2.2.3.1.1 Opportunities

Personal development of women was one of the major opportunities that PDR offered them. It was widely accepted that PDR has given experience on reconstruction and other administrative activities to women. Thus, women feel that they would be able to do well the next time. Expert H felt that '*PDR has given women an opportunity to manage in terms of time and money to construct a house. Not all women but some people got it*'. Since many organisations conducted training sessions and workshops for women they were able to develop their skills. Some women were given training on carpentry, masonry, wiring, etc. Some women got training on how to manufacture bricks, blocks and roof tiles. Many others received training on other skills like computing, tailoring, sewing, small business planning, food preparation, etc. PDR has not only developed their skills but also given an avenue to make an earning. Expert H said 'I have heard that in construction also they gave training and gave the option to people to come and work in reconstruction. Then they gave the chance to those to teach the next batch of students in that field'. While Expert I mentioned 'we train people who are willing to get trained from the affected place and also other. There were some mason women who got trained in that. We got them involved in the houses we built. Women were skilled labour'.

Although women were not involved in construction as much as men, their contribution and engagement in decision making has given an experience and knowledge to manage things better than before. Those who were involved in supervising their house construction had gained confidence and courage to supervise another construction project.

PDR has helped women to develop their socio-economic conditions. Women received income earning opportunities during PDR. Some women received employment opportunities within reconstruction. Expert O said that '*International nongovernmental organisations which involved in funding these reconstruction projects had an aim on women's empowerment. They offered more opportunities for women's involvement, they recruited educated woman from affected community'. Another interviewee said '<i>TDH* (*TD Homes*) gave some training on how to child mind and other things. Also they gave some job opportunities. Then they asked those people to come and work in reconstruction. In construction – they asked people to come and supervise and to keep recording, etc.' This shows the opportunities that PDR offered to women. In addition, PDR provided support for women to engage in livelihood activities. Those who received tools and machineries to produce construction materials offsite were given training and support to conduct a business. Additional assistance was given to female headed families since they face more challenges during the post disaster phase.

Many interviewees said that PDR has uplifted the communities' standard of living. Expert H said 'Women have a community and they go and teach others on what they could do and they advise them on how to develop it. Those who were just living feel like they are living in a luxury life now'. PDR has brought gender awareness within communities. Generally people are more aware about gender sensitiveness after PDR. Some construction organisations gave additional support for women to encourage them to get involved in reconstruction projects.

PDR has facilitated better infrastructure development for the community which has ultimately helped women. One of the most cited benefit from PDR was, better permanent housing. Expert G said '*People who lived in places where they had basic facilities to live-in, they were provided with higher quality of living*'. PDR has brought many developments with regard to health facilities, road infrastructure and other community buildings. This has facilitated women's life and development. Some women had to travel long distances for health facilities and so have received nearby facilities after the reconstruction in the eastern province. However, this cannot be generalised to all the places.

Apart from the above opportunities, many community based organisations were developed during PDR. PDR also helped women to engage with other NGOs to improve their networks for their development. This has helped women to take loans or get support for their livelihood activities.

5.2.2.3.1.2 Obstacles

Although generally, post tsunami reconstruction was not recognised as a process that brought obstacles, there were a few issues that were highlighted in the interviews. Some communities had issues with their house construction. Poor construction of houses brought issues to communities. In addition, some families who did not receive any support during PDR felt that they have been further lowered in economic status within their communities. Female headed families who fell into these categories found it very difficult to withstand this situation. Further, since people were not allowed to go and see their houses in large scale project construction, it brought dissatisfaction among communities. Expert I mentioned 'when you are not even allowed to look at your house, how you can think about gender issues'.

Since tsunami affected communities were mostly relocated, their traditional ways of living and earning have changed. Expert G said that 'After fishing women do lot work for value addition in the further productions. They were able to balance family responsibility and that work. PDR gave lot of support for men specially in fishing. So women tend to do something different in that case. There were NGOs which just gave things. So in that we saw them losing their earning ability and they become dependent. People were just expecting things and taking things for granted'. This reflects the need to consider women's empowerment rather than disempowerment. Certain support for women could address their issues in the very short term. However, organisations should make sure that they are not making women dependant and lose their skills in the support process. Furthermore, many women who were involved in cottage industries like making handcrafts; quire production; etc. left their industries due to the support they received and thus bringing down these industries (Expert G).

Another issue that was highlighted by a few interviewees were dominance of politics in the reconstruction process and which has ultimately affected the sustainable construction. Expert A felt that '*Most politicians never think of sustainable development though they talk about it. Within their short time about 5 years they try to do things. So it is difficult to see things in the long term. So for their different agenda they try differently and, this happens around the world*'. In certain places the NGOs were disrupted due to political reasons. Another expert felt that since government gave it to many contractors who were willing to take up the reconstruction, rather than allowing the community to participate in post tsunami reconstruction, the concept of community participation was not handled well. In this context, expecting women's empowerment was a challenge for organisations which were trying to promote it.

5.2.2.3.2 Influencing factors of women's empowerment

In order to understand the input that needs to be given for the process of women's empowerment and to identify the factors that would hamper women's empowerment, the following paragraphs identify the factors that enable or hinder women's empowerment. Figure 5.2 shows a cognitive map of the analysis on influencing factors on women's empowerment.

5.2.2.3.2.1 Enablers to women's empowerment

One of the commonly cited enabling factors into women's empowerment is women's selfconfidence. When women lack confidence and courage they do not express their needs or speak about their problems. Hence, their needs and problems are left out in the planning process. In addition, women's willingness to get involved in empowering them was another factor that was quoted within the interviews. Therefore, by providing encouragement, counselling and mentoring as measures women could be personally empowered. Expert F said 'Construction – there was a welfare scheme. If they were involved in building they are entitled for a fee or something. Therefore, women participated because they will be given money'. This shows that by providing an incentive women could be encouraged to participate in reconstruction activities.

Facilitating women to go through education is an important factor in developing their careers. In addition women should be given training on relevant skills in order for them to get involved in construction or any other employment activities. Expert F said 'Women are capable and very much better to carry out development activities but we may need to give training and guidance'. Providing exposure visits to women to see other women at work in construction or in other employment would develop women's confidence and exposure. Experts cite women's awareness to rights and opportunities, as another factor that needs to be considered in empowering women. Expert D said 'Gender equality has been achieved through education. But that doesn't mean it has empowered them. They don't have awareness about rights and laws. That needs to be improved'.

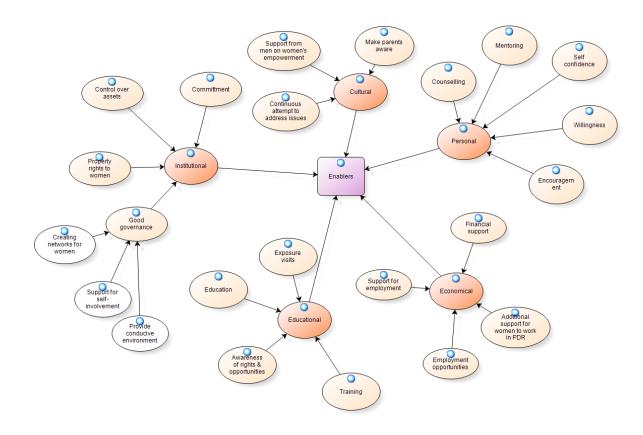


Figure 5.2 Enablers of women's empowerment in PDR

Women's struggles against cultural and societal barriers need to be overcome. Experts say that continuous attempts to address the issues should be made within the communities to understand the hindrances for women's empowerment. Expert H said 'Should have meetings for parents also. Because parents think that daughters should come early or shouldn't go out. They won't understand it. When their child says they won't hear it but when others say then they will understand. So should make parents to understand it'. In addition, Expert D felt that men's support for women empowerment is important and they need to be encouraged to support women.

Women's lack of access to employment opportunities was hindering women's empowerment. Thus, experts said opportunities should be provided for women to get involved in reconstruction. Expert K mentioned '*women's unemployment rate is double the unemployment rate for men in Sri Lanka for last 30 years. During last 30 years more and more women get into the jobs. But they get into labour jobs. With education they were able to get into jobs. But then there weren't job. But you know the more educated you are the less chance of getting a job in this country'. This shows the failures in the educational system to provide education that would support young adults for employment.*

Expert N felt that women should be provided additional support for employment. While Expert D felt women should be provided access to funds for their economic empowerment. She mentioned that 'For economic empowerment they need to have some income and a control over income. So livelihood is a bigger factor for them. So access to funds is an important factor for empowerment. If you have a control over your income then you can get economic empowerment. Then domestic violence will reduce'. A controversial factor for women's empowerment was women's family's difficult financial situation (Expert D). She felt that in low income families there is more labour input from women and mothers take more responsibility of the management of the house and they are much stronger in these families.

During PDR women had to face problems with regard to rights of properties that were not given to them. In certain places women who had rights to properties before the tsunami lost their rights as mentioned earlier (refer to section 5.2.2.1) which has brought the attention of many organisations. This finally facilitated a change in policies that was in

practice. Experts strongly felt that it is important for both men and women to have their rights to properties. This would help them to empower them economically. Interestingly, experts felt that having rights to properties would help women to feel that they have a status and would enable them to contribute to decision making. In addition, women's control over their assets was another enabler that was quoted by the experts.

Creating CBOs and networks for women within communities was considered to be another enabler. Expert B mentioned that '*after CBCs, women have come out. Some of them who lost their husbands have taken up a major role in women headed household*'. CBOs have created a supporting system within the communities by the communities. Thus, it has made a friendly environment for women to speak up about their problems and, receive support and ideas to develop themselves. An interviewee said that it is important to provide a conducive environment for women to work in the construction industry. In addition, women need to be supported for their self-involvement in PDR. Experts mentioned that having good governance in the PDR process is important for women's empowerment.

While explaining about a successful project on women's empowerment Expert C said 'they worked on self-employment development in Vanni. Top man was committed. People were formed in groups and people were given Rs. 4000 or Rs. 5000 for self-employment. It was successful because of commitment from top to bottom. Commitment needs to be there otherwise we can't do anything'. Unless there is commitment from top to bottom in the project on women's empowerment no one can do anything. Hence, creating the culture of understanding the importance of women's empowerment and making people aware about it would facilitate the process of empowerment.

5.2.2.3.2.2 Hindrances to women's empowerment

The most cited hindering factor to women's empowerment is the cultural barrier that women face in their communities. Expert B who works extensively in projects within the eastern province mentioned the effect of cultural aspects on women's empowerment. The attitudes and perceptions of people on women and their activities affect both families and women. It was noted that when the family gets affected by society's views it leads to women changing or halting their activities towards their development. Expert D felt that there is failure in the current educational system which brings in stereotyping into education. She also expressed her concern over the difficulty to get things done from authority especially at the decision making level. She said '*it is such a patriarchal system, it is different. We did study on glass ceiling and we found less than 25% are women in decision making level (private sector is worse). Women are stuck in lower levels. It doesn't matter whether it's men or women, what matters is they need to be gender sensitive. Similarly, Expert F said '<i>Although we are high in women's literacy, health rates, less infant mortality and maternity mortality, in political state we are backwards in gender aspect. In other countries it wasn't the case*'.

Furthermore, gender insensitiveness in systems and regulations have hindered the progress of women's empowerment. However, many organisations are working on this to have a breakthrough in Sri Lanka. Expert F felt '*Construction related policies are gender neutral but not gender sensitive. There is no clause on women or gender. In most of the policies it is the case*'. For example, according to the Land development act if a father dies it goes to the mother, and if she dies it goes to the elder son. While further emphasising this concern she said '*Though we have a ministry on women's empowerment they are not efficient. Though they make things but when it comes to implementation they were not that good*'. Although it is not an obstacle which was brought by PDR, the issue was very much highlighted in the post tsunami reconstruction process and brought in further issues which hindered women's empowerment.

Expert D said that women's lack of awareness on legal rights can hinder their empowerment. She mentioned 'they are not aware about it. This can protect them. They can get a protection order and men can't come near to them. There is penal court which they are not aware. They need to know that it would empower them'. It was noted in many instances during post disaster situations that there was gender based violence. Therefore, by making women aware about their rights, women's physical and mental struggles could be addressed. In addition, women's lack of access to employment hinders their progress. While explaining this, Expert D said 'unemployment rate for women is double than men. There is a big problem here. Women can't access to employment. Largely because boys drop out from secondary school and go for any odd jobs like security and all that. So women stay in the education and get educated but they can't find jobs later'. This reflects

the need to focus on the educational system as a whole to address the gender gap in employment.

5.2.2.3.3 Practices on women's empowerment in PDR

One of the main sustainable means to overcome the marginal conditions of disaster victims is through an adjustment process (Jeyantha and Gunesekara, 2006). Literature on disaster management recognises that, when designing protection programmes and rebuilding the affected communities it is essential for planners to broaden the concept of women's status from the narrow conceptualisation as daughter or mother or wife (ITDG, 2001; Enarson and Morrow, 1998). This can enable post disaster reconstruction to provide physical, social, political and environmental development opportunities for women. Accordingly, the study investigated the practices related to women's empowerment in Sri Lanka. This section has included both interviews from experts and also review of documents on relevant policies and frameworks to further description.

5.2.2.3.3.1 State of policies and frameworks

According to the study, it was found that, in addition to the provisions in human rights constitutions, the Domestic Violence Act is cited as an important legislation for handling gender based issues in Sri Lanka. Further, the amendments that were brought to penal courts in order to reduce gender related issues also contributed towards gender balance. Within the study Expert K said that, *'although Domestic Violence Act which was implemented in 2005 by bringing together the NGOs and political parties, the knowledge on the legal provisions within the act has not been disseminated to the rural women'.* Further, it was found that the knowledge of the acts tends to remain within the capital of the country than to the other parts of the country. However, after identifying this issue, Expert I's organisation took the initiative to translate the important provisions within the act to a simpler and understandable language to the community by issuing those in smaller booklets. Further, it was found from interviews that gender awareness was increased after the tsunami. Warning systems were introduced soon after the tsunami and it was noted that women were too included in awareness programmes. This highlights the positive development towards gender balanced approaches since the tsunami.

The Women's Charter, which was developed in 1993, provides guidance on activities related to gender balanced development. Although it serves as a policy document, it is not a legal document. It was highlighted in the interviewees that although Women's bureau of Sri Lanka and National committee on women were created under the ministry, the expected results have not been reaped from those. Most importantly, the experts emphasised that although a bill on women's development was developed, it has not been passed in the parliament yet. Even though it was agreed by both the ruling and opposite political parties at that time, it has not been passed. Experts emphasised that the attitudes of the people who are involved in the process of approving the bills towards women's development and the bureaucratic nature of the organisation were some of the reasons behind the delay (Expert F and Expert D).

Although the Universal Franchise was introduced in 1933, women's representation within the political arena and at administrative levels such as provisional level, divisional level is very minimal. Expert K said '*Number of women in the provincial sector (in 9 provinces) is less. Although women contested in elections, less than 3% of women were selected. When it comes to local government level which is closest to women's house is less than 1.7%. This shows that women are not there. Decisions have to be taken by them'. Whatever we do outside it is not taken. But in other south Asian countries like India, Pakistan, Nepal they have the quota system. 33.33% in India must be women representations, not nominations. Now there are millions of women. Earlier it was difficult. Now women leaders are coming up*'. One of the participants, who has experience on women's empowerment and also contributes towards policy development, stated that, '*whatever is done outside won't matter unless there is some influence*' (Expert D).

The organisations that were working on post tsunami reconstruction identified certain issues through community consultations. One of the main issues was that women were marginalised while distributing land and properties. This led to modifications in property rights to allow both men and women to jointly own the properties which were given from the state or private sector. This shows the need for community's participation, especially the marginalised people and the need for adjustments of procedures, and most importantly the interest and the dedication on gender sensitive activities within the administrative divisions.

Soon after the tsunami, a sum of money was given to the affected families. However, there were incidents where mostly men spent it on drinking and left their families in desperate situations. Later this was identified and the money was given jointly to men and women. Although legally there is no gender biasness with regard to land rights, due to cultural beliefs and customs, women were mostly given movable assets like cash while men were given land and immovable properties (Expert F). Within Sri Lanka, the Roman Dutch law is gender neutral and which is not biased towards men or women. However, when it comes to the disposal of properties, in certain regions, parents give their movable properties to daughters and immovable properties like paddy fields to sons.

Under Islam law, properties are given to girls. Within the eastern provision, the Mukkuwa law (which is applied to members of Islam in the eastern province) considered the rights and conditions of women and have given more power to women in terms of properties. Due to this provision, women who owned land before the tsunami received their legal entitlements even after the tsunami. However, due to inconvenience in going and collecting their rights from the Kachcheri (where administration of land and property rights take place) many women allowed men to handle this and some have lost their rights due to mishandling. The study highlighted that in the southern part of the country, mishandling of property rights happened due to women's immobility or ignorance (Expert F).

After the tsunami, a cabinet paper was drafted on gender mainstreaming in tsunami activities. This consists of opportunities to equal participation, equal allocation and distribution of resources, provision of joint ownership for land and housing, initiations on actions to prevent gender based violence. Further, it was highlighted that it is important to maintain the practice of these initiatives. Apart from the policies on women's development in disaster management, the introduction of the Breast feeding policy, which gives a year of paid leave and another year of unpaid leave to women, helps them to continue their career.

The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) is one of the major requirements on women's issues. It was emphasised by experts that CEDAW is a very effective regulation. Although women's representation at decision making levels is less than that of men, their participation is very high at

grassroots levels (Expert F). In addition to the national and international policies, many Non- Governmental Organisations (NGOs) working on disaster management in Sri Lanka have their own company policies related to gender. Expert G who is an executive director of a company and working within the field of disaster reconstruction said that their company has three fold gender based policies. They are policies related to gender balance within members of staff, policies related to projects and activities carried out by the company and the statutory requirements such as international frameworks and national regulations. She emphasised that the compliance to these policies add value to the company's reputation. This indicates the worth of introducing gender based policies to both participants and beneficiaries of the built environment in disaster reconstruction.

5.2.2.3.3.2 Experts' perspectives on planning and implementation

Many NGOs and government organisations conduct workshops and seminars to identify women's issues and needs. However, it was found in the interviews that women tend to be silent in general community based meetings. Expert F highlighted an incident where women were sitting in the back row benches in a community based meeting while men were sitting in the front row chairs. In addition, it was noted that women did not express their views within the meeting. However, when the organiser spoke to those women about their silence, women mentioned that they have already conveyed their issues and requirements to the top people who were mostly men, before the meeting. This incident indicates that the barriers against women haven't been broken yet. Further, it was mentioned that women are not given equal opportunities in developmental activities. In addition, the expert herself has experienced situations where men tend to ignore or not accept her ideas when she makes her presentation. She emphasised that even some women also tend to support this old school of thought. She mentioned '*I as a person who has worked in these areas still feel that women are not treated equally although women do office work, house work and many other responsibilities*'.

During the planning phase, policy developers consider the issues from the community through studies by developmental organisations and consultations with those organisations. Many studies are done by NGOs and community based organisations as it affects them more and the results are presented to policy developers. This study found that community based organisations indeed facilitate women and allow them to actively take part in the developmental activities. However, in certain communities it was not successful due to a lack of consideration of cultural values, beliefs and customs. Further, mainly due to stereotypes and the way they were socialised, especially the way the mothers have brought up their children, contribute to these attitudes and gender insensitivity (Expert D).

Expert G, a retired government officer who has worked in a ministry, stated that though lot of money come into the village for development purposes, on many occasions, both women and men did not know of the availability of those funds. The remaining unutilised funds ultimately seep back to the main pool of funds. Hence, it is important to make them aware and empower them to properly utilise and develop the community. It was found from interviews that women need to be empowered if they are to address the main problem of gender based violence. The experts felt that if women are empowered, then they could get together and find a coping mechanism for their local condition especially in certain communities where women are afraid of men or refrain from participating in developmental activities due to cultural beliefs.

Within the implementation stage, women can be beneficiaries, participants in the development activities or managers. In terms of developmental activities on women's empowerment, women are the beneficiaries. It was brought to the attention of NGOs that women take the role of a participant depending on their power towards land or properties or any other assets especially within the rural communities. For example, women who had paddy fields took the responsibilities of their land and participated in development of their properties. In terms of women in managerial positions, the experts viewed that it was not complacent. Within the interviews, it was highlighted that in certain communities women do not speak their mind in front of men and this indicated that women tend to be less forward in certain communities due to their cultural aspects. The experts emphasised the need for further modifications in the regulations to support these societal differences.

When the interviewees were asked about the success of the implementation of these policies, it was found that although many initiatives are taken, these policies do not continue in practice. In addition, Expert G said that some men in authorities misinterpret or find a loop-hole in gender neutral policies and continue to reinforce gender insensitivity. Even though the community is sensitive, the insensitive nature of institutions

and mostly the people who work on it towards these concepts were the reasons behind the failure. However, due to the importance given by the NGOs and other private organisations, the implementation of gender related policies and activities tend to more successful or subject to light now. It was also noted within the interviews that some people who are in politics believe that these feminist concepts will not work in Sri Lanka and try to exclude views of those who work for it. Experts on the field of women's development believe that the success of the implementation of any legislation or policy on women's affairs is comparatively slow in Sri Lanka. However, it was stated within the interviews that international policies get implemented more quickly than national ones. Although the policies on education and health also get implemented quickly as they are common policies, policies on employment and decision making get longer periods of time and mostly it is harder to get the approval to balance the gender inequalities.

Compared to earlier days, many organisations are working on women's empowerment by bringing in gender related polices into their organisations. However, the effectiveness of those polices in its implementation state remains in great doubt especially in the construction sector. Expert I said 'gender into construction is something that is not happening into post or pre disaster situation. When contractors build they do as per their things'. She further said 'very few people considered gender issues. Only some organisations did like that specially those who worked on a smaller scale and who had an experience on working in that area. There was a DRMU to look at PDR which highlighted that people have been by passed – that is everybody else is making the decision and it is out of women's hands. When we build a house we want to have a say how our house is going to be built'. She also mentioned that most of the organisations who were working on PDR didn't have experience in building permanent houses but they had transitional houses. This has led to further negative consequences.

An interviewee said that she heard people saying 'compared to those days women have got enough and what else do they want'. This shows the strong attitudes of people and significance of work that needs to be carried out to address women's issues. Further, people have also said that many girls have entered the universities and many women are employed in organisations especially within financial institutions. In reference to this statement an expert mentioned, 'Women's work is taken for granted. Although how much the work has been done, if the sensitivity is not there among the policy makers then it will not make any difference'.

5.3 Individual community members' perspectives

The tsunami that occurred on 26th of December 2004 in the Indian Ocean devastated Sri Lanka's coastline. Among many provinces that were affected by the tsunami, communities from the eastern province, southern province and northern province were severely affected. The tsunami had shattered the economic security of those households tremendously. The ILO estimated that about 90% of working men and women lost their sources of livelihoods after the tsunami (ILO Sri Lanka, 2005).

The Government of Sri Lanka had adopted two approaches to housing reconstruction: a donor driven process where a contractor builds houses and a home owner driven process. Although the donor driven process was quick in delivering the houses many issues became evident later on. Institutions had started to advocate a community centred approach with mutual support as people were more vulnerable after disaster. Although PDR consists of opportunities to develop women the extent to which women can get empowered depends on many factors. In order to understand whether women feel that they got empowered could only be studied from their perspectives. Hence, this phase focuses on understanding women's and other community members' perspectives on women's empowerment in PDR.

The earlier section analysed the perspectives of experts in disaster reconstruction and women's development, while this section focuses on interviews conducted among disaster affected community members. This section consists of two parts. The first part focuses on the interviews that were conducted among disaster affected people while the second part focuses on the questionnaire that was conducted among people. In first part, firstly, this section presents background information of participants who were interviewed for the study with regard to their gender, age groups, civil status, location, education, etc. The sample of this study consists of 58 community members comprising of both men and women. As highlighted earlier, it is important to consider views from both men and women in a society in order to empower women. Hence, the study included men and women's opinions through interviews. Secondly, it analyses the community's perspectives

on women's difficulties; the opportunities and obstacles that PDR brings into communities; influencing factors on women's empowerment; awareness on related practices in PDR and, the roles that women could perform in PDR that could empower them. In addition, communities were asked to suggest recommendations for women's empowerment.

5.3.1 Interviews with community members

5.3.1.1 Background information on participants

5.3.1.1.1 Geographical location

Participants consist of tsunami affected community members from eastern, northern and southern provinces of the country. Within nine provinces of the country these three are the most tsunami affected provinces. During the earlier phase of the study it was identified that people belonging to one religious group living in different provinces have different patterns of living and which affect their requirements for reconstruction. The intention was to give equal attention to each province and different ethnicities. 45% of participants in the second phase of data collection were from northern province while 46% from the eastern province and 9% from the southern province. Chapter 3, section 3.3.3.1 has illustrated the reasons for this sampling. Figure 5.3 depicts the proportion of people from different provinces in the second phase of data collection in a pie chart.

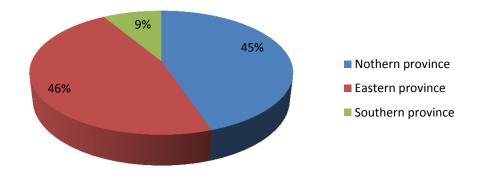


Figure 5.3 Participants' home area

5.3.1.1.2 Demographic details

The sample of this study consists of 58 community members from disaster affected communities around the country. In order to empower women it is important to consider views from both men and women from the community. Hence, the study included opinions from both men and women of the communities. However, since it is important to understand what women feel about empowerment and the difficulties that they face, more women were included in the sample. During the interviews with men, it was also noted that men tend to ask the researcher to inquire from women about women's difficulties as they are not very much aware about it. This too supports the decision on including more women in the sample. The study consists of 78% of females and 22% of males. Figure 5.4 illustrates the proportion of people from different age groups. Most of the participants fall under age groups 26 - 39 and 40 - 59. The sample included all categories of women from married, single, widows and single mothers. This helps to get a view from different categories of women.

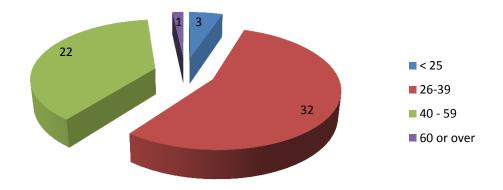


Figure 5.4 Participants' age groups

Further, the study has considered participants from all different religions: Buddhist; Hindus; Muslims and Christians. The study also has given consideration to include participants from different ethnicities living in the affected areas: Sinhalese, Tamils, Moors and Burghers.

5.3.1.1.3 Educational level and employment

Since education is one of the important factors in empowering a person this study looked into the educational level of women who participated in the study. Data was collected under three categories: Primary education; Secondary education and Tertiary education. Primary education included education up to Grade 6 while Secondary education is up to GCE Advanced level. Tertiary education included Bachelor's degree to doctorate, certification or diploma and vocational education / training. Table 5.2 presents the level of education of community members who participated in the study.

Educational level	Percentage
Primary education	38.30%
Secondary education	57.45%
Tertiary education	4.26%

Table 5.2 Participants' educational level

Among 58 people who were considered for the study, 53 participants said that they have others dependent on them and among 45 women who were interviewed, 28 women said they either depend on their partners or others. This gave a good opportunity to search for opinions on what they want and what could be done to empower them, from a typical group of women from these disaster affected communities.

5.3.2 Analysis of interviews with community members

During the second phase of data collection, interviews were conducted using structured interview guidelines among disaster affected community members. Interviews were conducted among community members individually and were recorded with their consent. Chapter 3 provides more information on data collection and analysis of the second phase. As mentioned earlier in chapter 3 (section 3.3.3.2), the recorded interviews were then transcribed and uploaded into Nvivo (version 9) software. Having transcribed the interviews, the major themes of classification were drawn with literature review and experts' interviews. The coding structure developed on empowering women in PDR is

shown in Figure: 5.5. The cognitive maps were developed considering aspects related to reconstruction.

🔨 Name
Empowering women during PDR
Empowerment - Influencing factors
Enablers
Hindrances
Post Disaster Reconstruction
PDR - Opportunities
PDR - Obstacles
Practices
Women's Empowerment Practices
PDR - Development pratices
la ◯ Women's roles in PDR
During Pre-construction phase
During Construction phase
During Post-construction phase
⊖ O Women's difficulties
🗈 🔘 Internal
External

Figure 5.5 Coding structure for empowering women in PDR

5.3.2.1 Women's status in post disaster reconstruction

The study identified the difficulties that women face during PDR under two main categories: Internal difficulties and External difficulties as shown in Figure 5.6. Under this category, the study identified four types of difficulties that women face: personality, health, knowledge and skills. While the factors that do not fall under the above category were categorised as External difficulties. Under External difficulties the study identified five types: economical, societal, family, exiting practices and other external difficulties.

5.3.2.1.1 Internal difficulties

The internal difficulties are the ones that women face with regard to their own physical or mental capacity. Figure 5.7 shows different internal difficulties that women face during PDR. The difficulties about which women had a major control in overcoming were

classified under this category. Among the 58 people who were interviewed, it was noted that 65.5% of members (38 people) pointed to at least one internal difficulty and emphasised the need to overcome them. Health was the major difficulty among other internal difficulties, recording from 47% of people. This included women considering reconstruction as physically challenging work for them and, physical health issues and mental worries that women face during and after reconstruction.

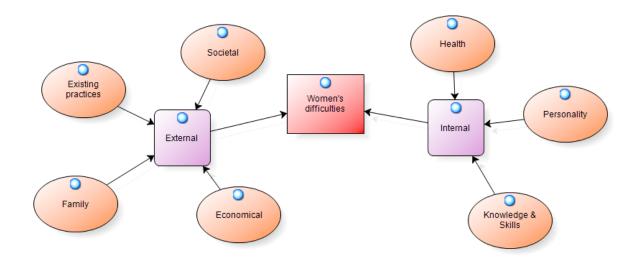


Figure 5.6 Women's difficulties in PDR

5.3.2.1.1.1 Health issues

A male participant mentioned that 'it is difficult for women to get involved in the reconstruction especially things related to cement. It is right for men do that. In construction there are stone or sand which is heavier for women. But for men they can do heavier work. But for women it is better to do work which is suitable for their physical abilities. But for work related to stones I do not mentally feel it is right to do by them." (Male, 46). It could be noted here and also in other interviews that perception of the construction activities. The macho culture in construction was also deeply rooted in women's and their family members' minds. It was also found that husbands or parents were not interested in sending their wives or daughters to reconstruction activities unless there was an absolute necessity. However, it was pointed out by many participants about their female family members' participation in their own house reconstruction. The next section identifies many activities that women have undertaken towards reconstruction.

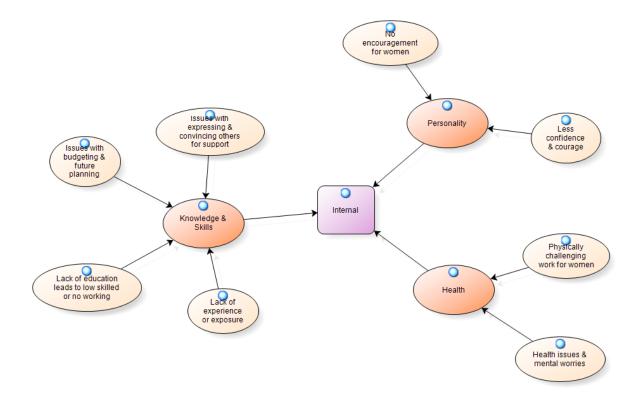


Figure 5.7 Women's internal difficulties

In one of the villages where the householders were asked to bring their own construction materials, women had to hire a vehicle and bring materials for reconstruction on their own and they found many difficulties. Women said that they have to load and unload materials on their own and later store them in the right place at the construction site. They also had to break the stones for reconstruction purposes. If those women would not have carried out these activities, the next day scheduled reconstruction would not have taken place. Since the labour component was not reimbursed by certain funding organisations women had to do things on their own instead of hiring labourers which could save money from giving wages to labourers. Another lady said that she had to climb upstairs through a temporary ladder and bring down timbers. Thus, when women were involved in unskilled work in reconstruction they faced with many health issues like back pains, their skin was badly damaged, pain in the heart, found difficulties in their pregnancies, etc.

A female participant (Age 35) said that '*there is leakage in the roof. We cannot do any work by climbing up, so we just draining water*'. This reflects the difficulty women face in terms of physical energy that is required to get involved in maintenance activities. Another lady (Age 62) said that she is too old to get involved in reconstruction activities. However,

she also said that she could give a hand in construction. One of the participants who was a construction worker at technical level said that the work was interesting and she was able to successfully carry out her job. She also has given suggestions to engineers as she had more knowledge on local conditions for reconstruction. This clearly shows the extent of construction being a physically challenging job for women depends on women's skills and level of involvement. In addition, generally, women are mainly involved in maintaining houses on a regular basis in these areas. This has led them to face the stress and hassle of handling the obstacles that reconstruction has left behind. Some women said that the stress and problems in managing the reconstruction posed them with mental worries.

Women faced physical and mental health issues due to improper reconstruction. One of the male participants said that, 'two houses were built in one compound. The toilet water from both houses goes to one pit. The pit is in next compound. Women only face more problem than us because we are not at home. We get smell from toilets. If I have the pit in my compound then I can sort it out. But here we have to deal like a community issue. So during the day women only have to face the problem and when we come back it is night and we can't sort the problem (Age 43).

In another community, construction of toilets has taken place in such a way where the foul water from the toilet and kitchen waste water go into one pit. Since this area is a muddy area and there is no chance for the filled water to go out of the pit, households with four individuals find it difficult to get the water to drain. This causes serious problems in using their toilets. Sometimes water stays inside the squatting pan and thus it does not allow them to use the toilet. One of the main problems that they mentioned was the smell of toilets.

Another problem which was highlighted in this community is rain water drainage. During rainy days, the rain water reaches their house plinth level in one section of the village which ultimately brings a lot of unhealthy situations. Reconstruction did not consider the local soil condition and drainage of rain water. Since most of the ground levels for houses are lower than road levels water runs into the house compounds. Although people initially thought that it would drain, it didn't happen like that. In one community where the canals were constructed properly water was not running properly and kitchen waste water was running through a canal to the same place pit. This creates bad smell and hygienic issues. This has resulted in mosquitoes and other issues with cleanliness, which women tend to address. Compared to men, women find this problem to be much more serious especially when they have to go to another place to use a toilet.

One of the issues that reconstruction has mainly missed was women's livelihood activities. Generally, women from these communities do not go outside for work and stay at home or near to home in carrying out their income earning activities. As mentioned before, although these tsunami affected people are from fishing communities they have changed their occupation to farming or others due to war and the tsunami. It was found in the study that most of the women are involved in small scale business or individual daily labour work related to fishing (such as picking fish from nets, drying them, preparing fish for processing, etc.) or farming (such as picking vegetables, planting seeds/ plants, cleaning vegetables, helping for storing, etc.). Apart from these, a few other main livelihood activities that these women do at home are growing hens, goats and cows; sewing; weaving; small scale business on food preparation; home vegetable gardening, etc. However, in many cases women were not able to carry out these activities due to a lack of space within a compound allocated for a household. This shows the lack of consideration by reconstruction about life style and alternative arrangements for income earning activities. This can lead to further problems later on. Provision of mere houses or roads may not fulfil the community's needs. Thus, construction needs to look into these aspects and collaborate with other sectors while carrying out reconstruction.

5.3.2.1.1.2 Knowledge and skills issues

The second internal difficulty that was highlighted in the study was related to knowledge and skills of women (related to management of reconstruction, 22% of people mentioned this type of difficulty). It was noted in the study that women feel that due to their lack of education they are left with lower skilled work or have no work. One of the interesting quotations from an interviewee, 'since I didn't study I have to depend on my husband. Since I didn't study I'm growing goats. That is also not educated and I'm also not educated' (Female, 39). While conducting the interviews a participant regretted losing the opportunities that PDR brought them since they were not aware of it. A participant mentioned that 'If we would have known we would have done work and saved. But since we didn't know we gave money and gave it to others to do it. In fact, we lost the opportunities' (Female, 38). She also continued to say that 'If we would have known before, we would have earned about at least Rs. 500 per day. We made a mistake on this'. However, another lady said that since she didn't know how to do it and since she can't do something, she didn't know she had to get someone else to do it. This shows that depending on an individual person as to the way to view this difficulty differs.

It was found among women that their lack of experience on construction activities and limited exposure to managing reconstruction or any related activities limited their contribution towards PDR. While mentioning about women's contribution on PDR, one interviewee mentioned that '*They had to put lot of hard work to help us. If they know anything they can help us. But they do not know anything about construction work'* (Male, 47).

Another issue that was highlighted by both men and women is that women find it difficult to emphasise their needs and are less able to convince the institutional figures to receive their support. A female participant stated that (Female, 24) 'When it is women it is easy for me to express. When men are there sometimes they don't understand our problem'. This lady belongs to the Islam community and her cultural limitations may have limited her skill development. This was also noted in other religious women in the northern province too. One of the cultural barriers of suppressing women due to their lack of knowledge has led them to limit themselves from expressing their need. Another woman who has lost her husband and living with three children depending on her (from Tamil community) said that 'They will ask more and more questions. We only know what is needed for us and what we want. Others can't understand that' (Female, 32).

One of the aspects that was pointed out by a couple of male participants was that women sometimes find it difficult to do proper budgeting and planning in reconstruction. An interviewee cited that, '*We can construct according to our income. We can't construct just because wife or children want to have a house like what they want. We can plan according to our income*' (Male, 45). However, this was not pointed out by any female participants.

5.3.2.1.1.3 Personality issues

One of the main factors that was highlighted in interviews was related to women's personality, and especially their lower confidence and courage that was projected by

women. One of the interviewees stated that, 'Women have a feeling of less self-confidence. They sometimes find it difficult to go out and work with people who have been educated. They have to be educated' (Men, 37). Sometimes this has led them to feel fear of taking a job or taking a loan to do some work. One of the female participants said 'If you would have come earlier and encouraged women then we would have done lot of things and developed us more' (Female, 36).

Another feature that was pointed out was lack of encouragement for women to get involved in reconstruction activities. One of the interviewees (Male, 52) said that, 'In reconstruction normally if someone comes and tells that we can do the work for Rs. 40 and if another comes and asks for Rs 20 then they will get hold of the second one. Also those constructors will bring their own people and will not use our women here. Women won't get opportunities by that. But if opportunities would have been given then they would have contributed to it'. Among the female participants who were interviewed it was noted that in order to suppress the differences of opinions between husbands and wives within a family in front of other people, women tend to go quieter. This ultimately sends women to the back of the stage.

5.3.2.1.2 External difficulties

The external difficulties that women face in PDR can be explained under following the categories: economical, societal, family and existing practice (Figure 5.8). As mentioned above, the difficulties that do not fall into internal difficulties are considered as external difficulties.

5.3.2.1.2.1 Economical issues

Economic factors play a major part in determining the difficulties that women face in these communities after disasters. 19% of people who were interviewed cited at least one difficulty related to financial matters. One of the affected female community members said that after the tsunami they had a storm and her house roof tiles were blown away. She doesn't have money to buy tiles and hence has to face leakages and flooding of water from rain into the house during rainy seasons. In another community, since the whole village was constructed newly after the tsunami, they have to pay a lump sum to get electricity for

the house. This community was relocated from their original location which was near to the sea. Since the community members can't afford to pay that amount they do not have electricity now. Although PDR offered them a house it has not made arrangements for other utility services.

In addition, though women like to do some small scale income earning activities they are unable to start an activity due to lack of capital. Some women said that since they are not capable of keeping an asset as a mortgage for loans or to get loans from local community society they are struggling more. They said that people are reluctant to sign for them.

Wherever the funding organisations had requirements of reimbursing the money to people only when a certain level of construction was completed, some female headed families found it difficult to complete the house and receive reimbursement. Especially, when prices of cement bags went up they suffered to complete the construction within the given amount. Although this problem was there for both men and women the families which had only females had to face more problems in handling this issue. In certain instances, due to a lack of money, only basic construction was completed and they were left with no alternative arrangement for money to complete the rest of the work like rendering the walls, toilets, having a tube well for water, painting, grills for windows, etc.

It was highlighted in the interviews that due to women's lesser financial capacity they are unable to contribute to decision making or carry out work in PDR. A participant said 'During reconstruction process since women do not have strength and money/capital they are unable to do. Mostly men only have money. So women have to do from the capital from men. So it is difficult to do what they want. If they have enough capital they also can take construction projects' (Female, 24). This not only reflects women's financial limitations but also the culture of male heads in families and access to funding to men due to cultural aspects.

5.3.2.1.2.2 Societal issues

Another major difficulty which was pointed out by almost all the interviewees, and is an aspect which is inbuilt within communities, is the difficulties due to cultural and societal barriers. Although this difficulty is common for all different ethnic groups the extent and the characteristics of the problem are slightly different to each community. A lady said

'We like our daughters to go for work and we know that is good for them. But due to village's views and talk we are scared about sending them for work because it can give them trouble' (Female, 50). This shows how society's views limit women's participation in income earning activity.

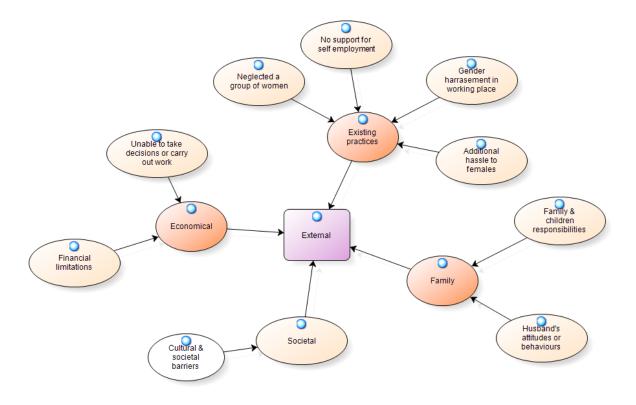


Figure 5.8 External difficulties for women

Another woman said that though other households have got water for their houses, their house hasn't got any. She feels that since her ethnicity is different from the majority in the community she has been discriminated against. Although regulations are not written with discriminations local conditions and people may have an influence in receiving support for other community members. Many women said that some people are jealous about each other and hence some people don't get any support. Although this is a common problem it all adds up when it comes to work in reconstruction.

The image of construction plays another role in encouraging women in reconstruction activities. One of the participants said 'here women do not involve in construction work. They can do construction work within their house but not for outside as a business. In this place it is not generally accepted' (Female, 50). This was seen in many women's

interviews. However, some women had alternative ways of overcoming this difficulty which are discussed in later sections.

5.3.2.1.2.3 Family responsibilities and issues

Women's responsibility towards family and children is another common difficulty. While commenting about women's roles in reconstruction activities a female participant said, 'We have to cook and supervise the construction people and also look after our children because husband goes for work. This was difficult as we have to do alone. We have to give food for them on time as well' (Female, 32). This shows the struggle women have in handling family responsibility and getting involved in reconstruction activities. Responsibility towards children was mainly highlighted by many as a difficulty in getting involved in reconstruction as it takes place according to a schedule.

While commenting about this difficulty, a male participant said, 'Women have the interest to do things but they also have responsibilities for their family' (Male, 37). It was noted in the study that males too recognised this as a responsibility with difficulty that women need to face in PDR. One of the former construction workers from the affected community said 'When we put concrete we need to stay long which is possible for men while it will be difficult for women to stay' (Female, 24). This shows that pattern of working in construction and responsibility of women towards family presents problems for women in getting involved in reconstruction activities.

Husbands' attitudes or behaviours were another factor that has a major psychological impact on women. It was explicitly pointed out by the interviewees that husbands' attitudes towards their wives on going to work or getting involved in reconstruction activities, or getting involved in decision making for reconstruction, is a major factor that determines women's involvement in PDR and their development. However, it was interesting to note that some women tend to deny that they face this problem within their family while continuing to stress that this problem exists in their community. A male participant emphasised the need to create a confidence and reliance on the process of empowerment is very important in encouraging women and their families to support it. Another female participant said that society looks at women's forwardness and this may change the husband's attitudes towards his wife going to work. An interesting quote from a male participant was '....mostly women ask men before they do anything. Women are the

ones who will finally decide but they always ask men. There is male dominance in our culture from those days to now' (Male, 37). In addition, since decisions related to reconstruction involve larger sums of money and due to financial difficulties at home, the husband makes the decision. This limits women's participation in decision making for reconstruction.

5.3.2.1.2.4 Issues with existing practices

It was found in the study that some exiting practices pose a threat or trouble for women. Women were faced with gender harassment in organisations during PDR. This has led them to leave the organisations. A female participant said '*I was working in a construction firm. When I was temporary I was working in the office but when I was made permanent I was asked to go to the site. And my superior wasn't that good in handling people. Therefore, I had to leave the job as my family members also weren't happy about that' (Female, 24). Here, the interviewee referred to gender harassment from her superior in the construction organisation. It was noted in the interviews that although some women were not personally experienced with gender harassment, the word of mouth on this has made many other women stay away from construction. Some women mentioned that the speed of spreading this information is faster in villages due to their lifestyle which ultimately affects women's actions towards their development.*

It was noted that some women were neglected from other members of the community. In one community in the eastern province, a lady said that although initiatives are targeting women they have not done anything for women who are over 60 years of age. Thus, especially women who are old and alone are left without any support. From the interviews it could be noted that by leaving out older or single women, or certain categories of women (in a community) from the support given, the PDR is ultimately making them disempowered from how they were before the tsunami. In another community an interviewee mentioned '*There is lady who has her land and the deed. But since she was alone they did not give a house for her. There are some people like this. They think that it is not worth to construct a house and give it to one person. But they are thinking that at least if they get a temporary house that would be fine' (Female, 38). Although in disaster management, shelter homes are treated as a temporary housing for the disaster recovery stage, a misunderstanding of using temporary housing as permanent housing has left many* people living in those temporary huts for a longer time. This has brought many issues for women. Hence, there is a need to look into these neglected people even after so many years from the tsunami.

While talking about practices on women's empowerment in their society, a single parent said '*The community society does not have any priority for widows. There are no concessions for girls who do not have husbands. The rules are applicable for all in the same manner*' (Female, 32). While another lady said, '*those who have been put into pit there is no one to help and lift us*' (Female, 37). It was noted from the study that there are places where many young girls have been severely affected due to natural disasters and civil war in the northern province. However, no effective support has been offered to them. There was a strong need for their empowerment and a proper structure to guide them towards this process. Since many of these girls are widows and have children depending on them, the process of empowerment would not only benefit women but also their next generation.

Less or no support for women's self-employment was another aspect that was highlighted in the interviews. Although some women have benefited from support with selfemployment, for many women this has not been the case. One male participant said 'there are many women who have lost their husbands due to tsunami. They do not have any job opportunities. Nobody did any help for encouraging them to do some work. Just constructing the house only will not be enough' (Male, 52). He further said, 'There is a need to give some help in advance in order for them to have job opportunities'. A male participant mentioned that in India, women are given many opportunities when constructing big buildings. Women carry and give sand, cement, mix mixtures, etc. He further mentioned that although there are women here who can do this, opportunities were not given. This shows that PDR has not provided income earning opportunities for women in PDR.

Another aspect which was noted from the study, while constructing the house the land was not effectively used. In other words, while constructing the house by providing space for additional huts or space to carry out a livelihood activity the PDR would have allowed women to do something after their house construction. However, since the house was constructed in the middle of the land they have left a permanent barrier for further development. Apart from building regulations on leaving space for front and around the building, houses could be constructed in such a way to overcome this problem for households. Since women tend to carry out their activities in and around houses this problem affects women more than men. In another community where the whole community was relocated, it was found that only a very small plot was allocated for each house. This has left them with no option for additional space for people. This has not only affected their livelihood activities but also has brought in many security and social problems to the community.

During reconstruction, female headed families had to face additional problems. A female participant said 'When there are men they will look at it and carefully construct it. But when there are only ladies the labourers sell the resources or misuse. They use lesser cement and construct the house and, give it. Since ladies do not know or do not look after like men or do not know about it, workers do not put more cement and just put more sand and construct' (Female, 56). These issues show that women have more problems in handling PDR due to their nature and the way they have been brought up. Hence, there is a need to give them the support and guidance to overcome these problems.

5.3.2.2 Post Disaster Reconstruction

In order to analyse what PDR could do to empower women, the study looked into the opportunities and obstacles that PDR has brought into these communities. Figure 5.9 presents the opportunities and obstacles that PDR could bring into communities. Furthermore, in order to understand what communities' feel on these aspects they were asked to give their views on post tsunami reconstruction.

5.3.2.2.1 Opportunities

The opportunities that PDR could offer to women were investigated from two different angles: at their household level and community level (refer to Figure: 5.9).

5.3.2.2.1.1 At household level

The most common opportunity that was cited by many participants was that they got better permanent housing (45%). One of the participants said '*It provided houses for many*

who lived in huts' (Male, 30). While another participant from eastern province said, 'The houses that were giving are with more facilities compared to earlier houses that they were living in' (Female, 24). This shows the significant effect of PDR on people's life after the tsunami. This has ultimately enhanced their lifestyle. However, some organisations which were involved in donor driven reconstruction where no participation of community members was involved had complains that people were not given an opportunity. Women also mentioned that they got assets with rights which are good for them and for their future generation.

The study found that PDR provided some women with some educational support and training. During PDR, different organisations were involved in providing training for employment and livelihood activities. One of the participant said '*Even for girls they taught masonry. It was 7 days course for 21 people including men. They gave things for masonry like tools so that people could do work. They were taken to far away places*' (Female, 34).

It was highlighted in the interviews that PDR has given them the experience on housing reconstruction which women were not much aware earlier. An interviewee said '*It has given experiences to women about reconstruction. They have taken full experience on this*' (Male, 45). Another lady said that she was able to learn and exercise value for money in reconstruction. She specifically mentioned that she learnt it from the reconstruction process as she has to handle housing reconstruction and the money that was given to her from funding organisations.

Women mentioned that the tsunami PDR has made women more aware about their rights. Some of the women's statements reflect their confidence and experience that PDR has brought to women with regard to reconstruction. A lady said '*This gave us the experience on how to do and the confidence that we could do while working with masons*' (Female, 32) while another said '...*during construction we learned how to check the level using the equipment*' (Female, 32).

The study found that women were given experience to learn and develop their confidence. Generally, women and men felt that after the tsunami women have got more opportunities to get out of the house and work. Those who lost their properties were depressed and PDR gave some good opportunities to get out from the sorrow as a distraction. Interviews with women reflect that PDR has brought the experience and exposure to many women who were totally dependent on men. While describing about women's empowerment compared to earlier days a participant said, 'Our women have mainly worked to feed children, wash the clothes, and look after husband, children. When tsunami came these women have come out and have broken many barriers they had. They have identified themselves that they have all these abilities and rights for them. They have felt that we have been at home with all these rights and abilities' (Female, 24).

It was also found in the study that PDR could offer women some job opportunities. PDR has given some job opportunities to some women. However, people felt that PDR has a bigger potential to give them job opportunities if more community participation took place with better administration. Apart from construction related trades other organisations have worked in certain areas to provide work for women such as the fishing sector, and the food sector. A foreign organisation was mainly involved in training and providing job opportunities for women but it was not related to construction.

PDR has given support for women's self-employment. However, support for selfemployment related to construction was rarely found within the sample communities. Some women mentioned that there are a few places where brick machines were given and women were making them. A male participant said that he is a mason and at his house ladies can be trained on construction trades then that would be really good for him, and they can do some reconstruction work with him. Some women were also given financial support for their development either for buying machines or tools for livelihood activities or building a shop for a business.

Many people accepted that their standard of living has gone up. A fishermen from the southern province said that after the tsunami people got a lot. He further said that people who had one boat got five boats and certain people who had one house got many (Male, 40). Another man from the northern province said that their living conditions have gone up and the current state of their village is not in the state as it was before 2004 as it has developed a lot now (Male, 40). As mentioned earlier, since the houses were given with more facilities than the ones where these people were living, their standard of living has gone up.

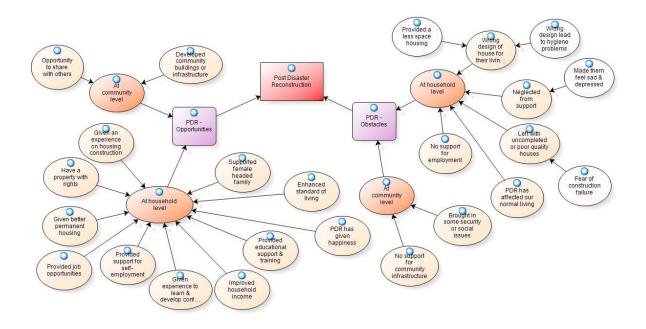


Figure 5.9 Opportunities and Obstacles of PDR

PDR has provided health and other nearby facilities for people. This was very useful for women as they don't need to walk or travel for long distances to treat them or their children. Those who have kids find it very convenient. In one of the villages which was fully relocated, a health facility, reading centre, nursery and shopping place were constructed nearby. This has facilitated women's lives so much.

Apart from getting a permanent house, some people received property rights. Some people who did not have land and were living near to the sea due to their occupation were allocated a house in a different place. This has not only provided them with shelter but also the property rights. This helps them and also their future generations. Some women view this as a property that they could give to their children later on while some say that we have an asset in their name. This could empower them when taking loans.

PDR had practices in certain places where special treatment or assistance was given to female headed families. However, it was found that this practice was not implemented fairly in all the communities that were considered for the study. One lady from the northern province said that after her interview to a paper on the struggles that she was going through there was financial support from a foreign organisation. This shows the need and importance of combining media with reconstruction in order to support and develop women and their families.

People mentioned that with the support, their income has gone up after the tsunami. They said that they are able to cope better with life. Some interviewees said that PDR has given them happiness. Although nothing can replace the lives that the tsunami has taken, post tsunami reconstruction was seen as an opportunity which has brought happiness to them. Some female headed women feel happy about achieving something.

5.3.2.2.1.2 At community level

The second category of opportunities was seen from a community level. It was found that PDR has developed community buildings or infrastructure and, given an opportunity to share this with others.

PDR was quoted as an opportunity that helped them to develop their community buildings or infrastructure. Generally, it was noted in most of the villages that PDR has provided communities with some community buildings. In certain places, roads were constructed to connect the new village and the main city. This has not only developed the families but also the community and the city as a whole. One of the participants said 'We got buildings for our societies. NECTAP (an NGO) built this building for us for 21 lakhs with boundary walls. Even divisional secretariat is functioning here. Rooms for sports club, women's society and fishing society and one more masons' (Male, 40). He further said, 'There is a building for clinics too. This is functioning daily. This is for the whole village with other villages. About 1000 families benefit from this clinic. World vision built that. The next clinic is about 3km from this'. This has helped the families a lot and improved children's health. The whole village used to live near to the sea thus children were more prone to sickness earlier. That means the workload for women was up. In addition, this village was given with a 5.5 lakhs building for people who do laundering. They could launder inside the building. This has provided facilities for those people and improved their working conditions.

In another village, a community centre, playground, a nursery, school, common bathing place, church/temple were given to communities. However, people complained about functionality of the community centre and school.

PDR was seen as an opportunity to share information with others. Women who used to stay inside the house have come out and learnt a lot from this. They say that PDR has

brought an opportunity to share with others and develop the community. Within a village, houses were constructed and given to two ethnic communities. This gives them an opportunity to get to know about each other and share their knowledge and skills on community engagement. Since people were asked to live side by side the concept of co-existence of people in conflict areas was nicely applied. The design and implementation of this particular village could be seen as a solution addressing both natural disasters and civil war in the country.

5.3.2.2.2 Obstacles

Similar to opportunities, obstacles were also viewed from two angles: Household level and Community level (refer to Figure: 5.9). The obstacles at household level included uncompleted or poor quality houses; wrong design for their life style; negligence of support for certain groups of people; impact on normal living; no support for employment; etc.

5.3.2.2.2.1 At household level

Some interviewees said that they were left with uncompleted or poor quality houses. Some said since they were not allowed to get involved in construction it was not done properly and they couldn't monitor it during construction. Thus, there are cracks, leakages, falling plaster, etc. A few communities complained that many houses in their villages were not completed. One participant said '*Outside, the structure looks good. But inside they have kept half wall and old rafters and roof tiles. Inside the house, if we get rain we have to keep on draining the water, so can't live here in rainy season'* (Female, 35).

Another lady said that she is scared to live in her house as they are not sure whether the roof will come down as the rafters were made with older wood. She was more scared when there is a storm as the whole roof might come down. During the tsunami PDR the price of cement bags went up and there was more demand for cement bags than supply in the market. This led to a delay in construction. Apart from this, some of the organisations which were constructing houses for the community suddenly handed over the responsibility of constructing the house to the community and left. Hence, people had to use their own assets and money to construct the rest.

Some interviewees said that the given design of the house was not appropriate for their living style. In certain places, the wrong designs have led to hygiene problems as mentioned earlier. Another problem that was cited by women was the kitchen was adjoining the bathroom. This creates hygienic problems. A lady said that *'in town people are educated and they know how to use and will carefully manage it. But here since people are from village they may not know how to use and sometimes it won't be hygienic. If I say frankly there are people who use the beach as their toilet. About 90% of people didn't live in good houses earlier. So they do not know how these houses are and how to use the sink' (Female, 24). This shows the importance and need of educating them after construction.*

Another problem that was cited by many people from one village was, less space inside the house. In addition, due to a lack of careful planning in design the space was not utilised effectively. For example, a half wall was constructed in a living room to divide a space and make it as a room. However, people felt that they couldn't use it either as a room or living room. Having a reasonable size living room is important for a house.

One of the main problems which was highlighted by people was the customs that their ethnic/religious group adopts while constructing their houses. An interviewee said '*if they would have given to us to decide the main door and position of the house that would have been a better solution. But they didn't do anything like that (Male, 45).* In a particular community, direction of the main door or position of the house was an important belief that they do not overlook. Another participant mentioned that location of rooms away from the kitchen is bad for their house.

Some interviewees felt that certain people were neglected from the support and this has ultimately made them feel sad and depressed. One lady said '*I'm still living in temporary shelter hut. There wasn't any room inside. There is no well or toilet. We use bed sheet to cover like walls*' (Female, 64). It was very sad to see that this lady lives in a hut made out of hay that was used for temporary shelter after the tsunami. No electricity or any other services could be given to this house. It was noted that women who do not have men as a support found it difficult to pull through when they are left in a more critical state. However, there are women who are from female headed families and, have successfully completed their houses and found employment too.

One lady from the southern province said 'We had a separate house. At that time I felt like I lost my shop and house and, I did not receive anything. We felt like we were left down really badly and depressed. After that I did not feel like doing anything. We did make complain. We did not go for fight with him' (Female, 41). This reflects that negligence of certain women can lead them to a more depressed state and would not help them to become empowered later.

Many women from two communities cited that PDR has affected people's normal living and this was a major problem in their newly relocated place. They said that drugs and misuse of women have affected the majority of the society. This has also affected other people who were not involved in it. Since houses were constructed very close to each other it has finally affected other members and children. Some women said that proximity between houses and no boundary walls for houses have created difficulties for them with regard to privacy, security and social issues. In addition, since water is supplied from a central location, when there is a broken or burst pipe it takes a week or so for them to get it repaired. During this time, they need to go to another place for water. This has affected women much more than men.

Some women complained that there are many women who have lost their husbands due to the tsunami. However, they did not get any support on job opportunities. As mentioned earlier, since generally contractors tend to bring their own workers, women from the local community were not given any opportunity. One of the community members said that since construction was constructed by outside people the local people were just idling and did not have anything to do. This has led to getting into illegal activities. If they have been given some employment opportunities from PDR they would have learnt and empowered themselves. In certain places the loss of women's livelihood assets were not replaced while men's assets were replaced. This has caused frustration among female headed families.

5.3.2.2.2.2 At community level

The second category of obstacles was viewed from a community level. It included no support for community infrastructure; and this brought security and social issues.

Some of the interviewees felt that there wasn't any support for community infrastructure: members from a community in the eastern province said that since the schools are very far from their relocated place they are finding it difficult to send their children to school. For the safety of girls they need to send them by van. However, since all houses can't afford them some children don't go to school which affects them badly. In another village, they are unable to build new community buildings as it is a new place and it needs to get registered before anything could be approved. Since this administration is taking more time it is affecting their community development. They do not have even a small hut to hold a meeting. In another place, even roads were not laid for people to travel and that has brought many inconveniences for people especially during rainy seasons. In one of the communities in the eastern province, although the funding organisation constructed the houses and community infrastructure, additional considerations were not given on its functionality and suitability for communities.

Some viewed PDR as a process that brought in some security or social issues. As mentioned earlier, construction of houses close to each other has brought out conflicts between people and created more problems. In another instance, although the effort in building community infrastructure was highly noted as a great contribution towards community development it was noted as a tool for creating problems for women. One lady said, 'They have left two buildings which are not useful for us, they are old site offices. People are misusing it. And people have stolen things from that. It is just wasting the land' (Female, 33). Another lady said that one of the community buildings has been misused for illegal activities too.

Although PDR has brought many people out of their houses and developed them, some women said, due to some influencing people's attitudes and behaviours they had to face security issues from them when they go and ask for things. One of the considered communities had a different concern. They said that they have been isolated from further support by saying that we belong to one particular funding organisation and we have been given everything. This has not only separated them from other support but also from others in the community.

5.3.2.3 Women's empowerment and post disaster reconstruction

This section has three sub sections. Firstly it explains the factors that influence women's empowerment where factors that positively and negatively influence women's empowerment were identified from interviews. Secondly, the practices that community would have heard or that they have made use of are described. The practices related to women's empowerment and other related to post disaster reconstruction within communities are considered for the study. Thirdly, the roles that women or men felt that women could carry out during PDR are identified. Since it is important to understand what women feel about the roles that they could do they were asked about the roles that they could perform or they have performed during the post tsunami reconstruction. Finally, the suggestions from community members about the way women could be empowered is identified and explained.

5.3.2.3.1 Influencing factors

The factors that influence women's empowerment were investigated as enablers that promote women's empowerment and hindrances that pose barriers for the process of women's empowerment.

Enablers: The following section illustrates the enabling factors for women's empowerment in PDR. These include economical factors; social-cultural factors; educational factors; personal factors and others (refer to Figure: 5.10).

Financial support was cited as a major enabling factor for women's empowerment. 62% of participants expressed at least one of factors related economic factors. One lady said '*Need some money to start something as a capital*' (Female, 35). When a financial support is available women could take initiatives to carry out an income earning activity. In addition, when they are economically empowered they are able to break their barriers and take decisions to take up initiatives. Figure 5.10 shows the enabling factors for women's empowerment in PDR.

Support for employment was referred to as another economical factor that enables women's empowerment. In addition, provision of some tools or machines that can act as capital for self-employment can help women's empowerment. Those who want to run a small business can be offered support to put up a shop. While explaining on how this could empower women a lady said, 'When they want to do a shop or any self-employment then they move with people and overcome that shyness. That will give them some interest and encouragement. But they need to be explained and facts should be given to them' (Female, 24).

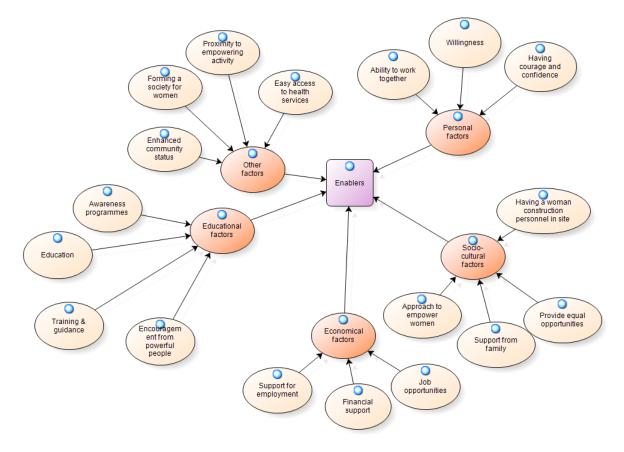


Figure 5.10 Enablers for women's empowerment in PDR

However, some women may find it difficult to start a business on their own. Hence, they may be reluctant to start a business or take up any assistance. In this case, depending on women's opinions, additional initiatives can be undertaken to help them to work in groups or on an individual basis. Women highlighted that this should be undertaken depending on their own perspective and will. In addition to providing training to women, it would be good to give them something as an encouragement to start employment from that training such as a small capital project or equipment. In certain places, sewing machines have been given to women. However, within the considered communities, none of the women received any support for construction related employment. Apart from normal support,

some women who may be in a very vulnerable state should be given special considerations.

There was a complaint that if job opportunities were given for women during PDR, women would have taken part in PDR and developed themselves. Many women expressed their interest in doing something as an income earning activity as it could not only help them but also their family and children. Generally it was noted that job opportunities which are relevant to their family occupation was welcomed by women. However, younger women tend to welcome more opportunities which are not necessarily from their area in specific jobs. One of the participants said '*Self-employment opportunities like hens growing, goats growing are good for women. Since educational level is less in this area training people in construction would be harder as they won't have much knowledge or education here'* (Male, 46).

In contrast a lady says 'In construction, if an educated woman is there then other women can contribute to it. In wall there is no need for writings or studies. We only need mind and brain. When a woman engineer comes and says that you all come and I'll train you all. Then we all can get trained and then those women can take some contracts and take some more women for fool job (for labour job). If an educated women comes and tells us like what is the proportion of mixture for cement mixture, how to keep frame and etc. then we can do it. Otherwise it would be hard' (Female, 31). This clearly shows the approach in training women to get involved in construction while considering their social factors can empower them rather than just leaving them out on the basis that they are not educated. In further explaining on how women who did not get educated can be included in PDR the same lady continued to say that 'If they ask us to write or learn then we won't go because I learnt only up to 3rd grade. So I won't go. So you need to write and give us in paper. They should teach and ask us to learn and memorise. Then women can do the construction. Not only in this country in other countries also there are women who are doing. If this type of training is given then women can do, I will do'. It was noted in the interviews that some women preferred employment opportunities in groups while others preferred individual involvement.

Social and cultural factors play another major role in women's empowerment. Support from family for women was quoted as an important factor to overcome socio-cultural barriers to women. While describing about women's involvement in PDR a participant said 'Since generally men do and they won't ask or allow us to do. So I'm unable to do. An encouragement needs to be given to women to join work' (Female, 39). Whereas another lady who has immensely contributed towards PDR said 'I was confident that I could do. I have a man in support, so I was courageous that I can do. I have the will that I can do' (Female, 35). Although this lady was confident and courageous it can be noted that she mentions about her husband's support. Generally, it was noted from interviews that women tend to base their involvement depending on the family's or husband's support.

Many women said that having a female construction professional would very much encourage them to go for work in reconstruction. It was noted from an interviewee above. Another interviewee said 'When a woman engineer or a lady person also worked in that place we would have gone and did the work. There are about 28 women here without any work. If a women would come, we will ask the AGA that we are also willing to work in this' (Female, 38)

Providing opportunities to women and making sure there are equal opportunities for women would enhance women's empowerment. Providing opportunities for women to express their needs and difficulties is one of the factors that would help in initial steps of process of empowerment. A single mother with two kids said '*We need to be given be equal state with men. When we are called for meeting, since we do not have husbands we need to talk about our family problems. So we need to be given an opportunity to talk about it. So please give us that. At this current state women and men need to earn equally, then only we can survive' (Female, 37). This shows her desperation to express her problems to authorities.*

Although generally studies focus on equal opportunities in organisations very interestingly, this study found that women need to even face inequalities within the household. However, it was noted that the extent of this barrier depends on different religions, ethnicity and geographical background. The approach to empowering women is another aspect that needs to be carefully considered. It could be noted from interviews that gaining not only women's confidence and trust on the parties who are in-charge of women's empowerment but also from her family members is significant in her development. One of the participants said '*The approach to women to develop them like through church or some reliable way is much better*' (Male, 37).

Education, training programmes and awareness programmes are a few of the most quoted methods for empowering women. 69% of people expressed at least one factor related to education. An interviewee said 'in order to empower women they need to educate themselves' (Female, 50). Developing the related knowledge and skills of women would enable them to get involved in PDR. Many women said that training related to their livelihood activities would be very beneficial for them. Both men and women from the communities recognised that conducting training programmes for self-employment, and providing guidance to these women would tremendously empower them. An organisation called Sarvodaya has provided training to women on marketing, business planning and management to conduct small businesses. A few other organisations have provided training for both men and women on construction trades like carpentry, masonry and wiring. An interviewee said 'Now most of the times women are working like labourers in reconstruction. After some time if training is given then women can construct know' (Female, 31). While another lady said, 'If training is given on how to do painting for a group of women it is better for us. It would be hard if we have to do the work on our own. When women group get together and do then there won't be problem. Also they can give training to others. Rather than sitting at home if women do something like this that would be good' (Female, 24).

An interviewee said 'They need to be given some self-confidence by training through sessions or seminars. Those who don't have written knowledge they can be taught through mouth. Then they can talk to their husbands and with children they can do something about it. Even the children will get the interest and courage from their mothers by looking at them' (Female, 24). This shows the importance of having training sessions on various skills and knowledge for women in empowering them.

It was emphasised in interviews to conduct awareness programmes on women's rights, available job opportunities, training, resources, information and support, women's potential, etc. The study found that women who are in these communities need to be educated about their abilities and their potential through sessions or awareness programmes. A lady said '*Should hold some session and awareness programmes to bring*

up their confidence and make them aware about their rights. There are people like me who are still inside the house. They need to be brought out by awareness programmes. They have the interest but they are unable to come out' (Female, 31).

Women widely recognised in the study that they need encouragement from people who are in leading positions. They emphasised the importance of seeing other women role models in PDR or receiving encouragement from them or others and this would help them to get involved in PDR. A lady from an Islamic community said '*Some women get scared and stay at home. So need to give encouragement to women to get involved*' (Female, 24). The other factor that was mentioned by participants was, having previous experience on reconstruction. Hence, arrangement of site visits or exposure visits could be conducted where women could witness other women at work. This would help them to develop their confidence and knowledge.

Unless a woman is willing to do get involved and develop herself nothing could be useful in empowering her (refers to the personal factor). A gentleman who is the president of a community's society said '...women should have interest. They should be willing to do it. If they do then they can come up in their life. Only women should think and do to develop them and the society, not men. They should have high interest' (Male, 37). While another lady said 'Some people although not known about it they are willing to take part in the process and learn about it' (Female, 34). Another factor that was quoted as an important factor for women's empowerment was women's confidence and courage to get involved in activities.

There were a few other factors which were identified as enablers that need to be considered while planning the process of empowerment, such as, women's proximity to empowering activity; forming a society for women in communities; easy access to health service; and enhanced community status. While explaining about women's society, the president of a community's fishing society said 'Women's society is doing women's empowerment such as job employment. That itself is an enabling factor. Women's society is able to function on its own and through that they want to develop women. They have come to a stage where they can do anything' (Male, 40). In this community, the women's society had successfully completed construction of a nursery. Women were immensely involved in management of the construction. They feel the experience that they received

from this has given them the confidence to undertake another construction project. This was appreciated by authorities and other men in the society. While speaking about women's societies a lady said '*If women work together as a group it would be better, specially to handle gender harassment. Though many women have talent they are unable to show their talent*' (Female, 24).

In many communities in the sample it was noted that there aren't any nearby job opportunities for these women. Thus, unless they have the confidence to do an income earning activity on their own, most of the women tend to just waste their spare time. While speaking on this aspect, a participant said '*If organisations come to help women within our village to develop them like opening a company then we can empower women.* Because some husbands won't like us going to other houses but they may not say anything if we are going to an organisation and working (Female, 24).

Hindrances: The following paragraphs describe the factors that hinder women's empowerment. As mentioned above, economic factors play a major role in women's attitudes and behaviours while empowering them. Women found that lack of capital to carry out any activities; their family's financial problems and status; their community's state; fewer opportunities for women to work and no further support for empowerment as some of the factors that hinder them from their empowerment (31% of participants expressed at least one of these factors). While speaking about capital a lady said '*lack of capital for us to do a business. If we have money then we can expand and do a proper business*' (Female, 35). Another male participant said that the financial state of the family affects women's empowerment. He said '*some women though they may be educated but due to family difficulties they don't go for work*' (Male, 34).

There were many factors related to social and cultural aspects which were quoted as disempowering women (refers to Socio-cultural factors). 64% of participants expressed at least one of the hindrances related to socio-cultural factors. One of the major factors that was cited was cultural barriers and society's perspective on women. A lady said 'Society's perception on women working, mostly they say that men can work anywhere. Only women can understand women's state and difficulty' (Female, 38). Another lady from the Islamic community said 'The culture and perception about women going to work and moving

outside is still there. They do not prefer women going for work. Our women are not improved because of this. They are only average on this in our Muslims' (Female, 34).

Apart from this, family members' attitudes; family and responsibility for children; no support from others, are stated as some of other hindrances that women face in the community. In addition, due to some women's behaviours the whole process of empowerment gets hindered. A participant said '*Due to some ladies' behaviour in some organisations there is a negative impression about ladies going and working in certain organisations. Due to that if we start for some good cause I do not know to what extend the respect from the society will be there'* (Female, 24). Figure 5.11 shows the hindrances of women's empowerment in PDR.

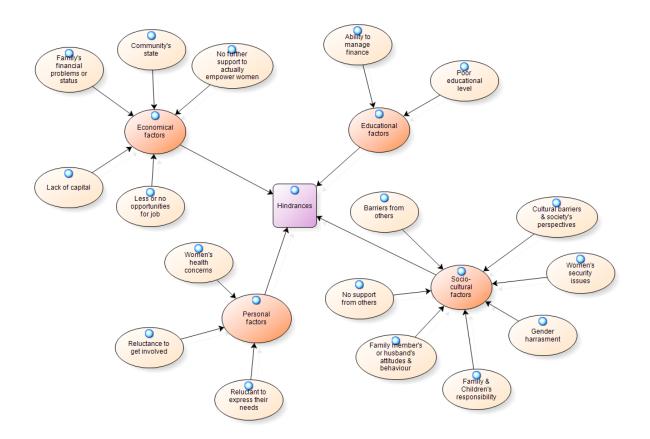


Figure 5.11 Hindrances for women's empowerment in PDR

As mentioned earlier, women's poor educational level was another major factor which acts as a hindrance to women's empowerment (refer to educational factors). A lady from the southern province said '*To improve the family income women are willing to come out*

and do the work. Freedom is given to most of the women in this area but their education level is problem' (Female, 46).

Women's reluctance to express their needs or to get involved and women's health concerns are some of the factors that were cited as hindrances related to their personality for women's empowerment (refer to Personal factors). A participant said 'When women are expecting then, they can't go for reconstruction work' (Female, 31). She further said 'In reconstruction we need to tire ourselves physically like mixing, then it would be hard'. In explaining about women's lack of confidence a participant said 'Less self-confidence and courage, if we can overcome then we can improve. That's the main thing which is giving trouble for me' (Female, 39). While another participant said, 'Some people though known about the skills they may not be willing to give things or educate other people' (Female, 34).

5.3.2.3.2 Current practices

Women's empowerment related practices at community level: During the interviews with community members it was identified that practices by women's society at community level; NGOs working on women's rights or violence against women; NGO or INGO organisations' schemes on women's development; and government initiatives on domestic violence are some practices that women know about women's empowerment. Unfortunately, many laws and policies that were implemented by the government are rarely known by community members.

Most of the communities had a women's society for their community women. In a community, the women's society gives support for women (for example to make food items and make an earning from it) or loans to women. They also create avenues for self-employment for women. However, one of the problems that was pointed out, some women although they take up loans for livelihood they do not return the capital back and end up in conflict with society members. Some women's societies have given additional concessions for widows. A few societies have given support for events like funerals to women. A women's society from the southern province gave loans for accidental loss. In one community there was a system where 20 ladies got together and took something (for example, whenever they go to each house they take 1 kg of rice, total of 20 kgs) to houses

every week on a cycle. They took turns and did this every Sunday. They ask about problems about others and try to help them in a fair and transparent way. In this way they kept on going to each house in a cycle.

It was noted that many women were aware about initiatives on domestic violence from sessions that were conducted in their communities. A participant said 'we had some training too through societies. Setsarana have come and did some programmes on discrimination against women and for children dropping from school' (Female, 41). Another lady from the eastern province said 'There is a society when women are raped then if we talk to them they get them and punish them' (Female, 39). In addition, some other NGOs too have worked on developing women's knowledge on their rights and procedures to address violence against women.

An organisation called 'Samurthi' has given loans for women for their development. While another participant said that she learnt carpentry, making things with cement from a NGO for 6 months. Later, she was involved in teaching that to others. This programme was targeted at both women and men. While describing about women's empowerment during PDR a lady who was involved in PDR both at household and community level said 'Women's RDS is giving the responsibility to women to construct the whole house. So women are taking the responsibility to do. They are giving more responsibility to women to construct the houses. They have more trust on women. Because when a loan is given it is difficult for men to manage it but women can take the responsibility to do the whole work' (Female, 34). This reflects that when women are ready to take over reconstruction activities the PDR is willing to help them.

PDR related practices at community level: In order to identify any practices which are related to women's empowerment during PDR, community members were asked about their knowledge or familiarity on PDR practices. It was mainly noted that people are more aware about the rules that funding organisations or contracting organisations or other NGOs implemented rather than laws or policies from government. An interviewee said 'Since many private organisations got involved in tsunami we were known much. Government was helping people who were under real poverty level. Since we dealt with organisations through District Secretariat, we know the organisation's rules and regulations such as this is the size of the window/door. They had an agreement with all

that and we signed it. So we knew only their regulations and rules (Female, 38). Further, although some people had heard about the tsunami act they did not know the content of it. The notion of buffer zones where people were not allowed to construct houses within 100/200 metres was mostly known to people due to their relocation.

5.3.2.3.3 Women's roles in PDR

During Pre-construction phase: Community members were asked during the interviews about women's roles in PDR. During the pre-construction phase women were involved in making decisions on housing plans that were given to them by funding organisations. Some women also suggested alterations to the given plans. Within owner drive projects women contributed with their husbands or family members while designing the plans for the house. One lady said '*I only decided that the bathroom should locate outside and what fittings should be placed in it and things like that*' (Female, 44). While describing about women's roles in PDR, one participant said organisations can ask women about what they want like plates for shelves in the houses, location of kitchen, shrine room. Many participants emphasised that since women are going to be at home most of the time and in most of the cases women only manage the house, it is better to ask them rather than men. The participant continued to say that women know how their houses should be and they can imagine it. Thus, if opportunities are given to women to talk and have a discussion rather than technical officers or engineers taking the whole decision, women can get involved in giving good ideas.

During the interviews with women it was widely noted that women have contributed in clearing the site before reconstruction. In certain cases women were paid for their contribution while in others they have volunteered to carry out this activity for their family or for their community. A participant said '*Red cross took all women and cleaned the canals. They gave money for that also. They gave about Rs. 300 or 400 for work from morning 8am to evening 2pm only*' (Male, 40).

Apart from getting involved in reconstruction related activities women were engaged in helping the organisations in administrating the PDR process. A lady said 'After tsunami lot of people got houses but some did not get houses. So I got involved in it and solved the matters and got houses for them. I was doing for community. There were 2 women without

husbands. So I went and spoke to NGOs and got 2 lands for them' (Female, 46). This shows the extent of work that women could contribute towards PDR.

During the Construction phase: During the interviews women were asked about the roles that they performed and roles that they could perform in reconstruction activities. Many women mentioned that they helped the masons or their family members in mixing concrete mixture or other mixtures. In addition, some women mentioned that they have assisted in masonry work while others said they also did masonry work along with their family members. A lady who got involved in masonry work said 'I can do masonry work also like putting the cement and keeping the cement blocks' (Female, 35). Women who have got involved in reconstruction are noted to have confidence in carrying out the activity again. This could be easily turned into an employment by them. A member of a community's society said 'Here girls have been labour for masons for daily wage. Later, when they get to know then can do like a job for them' (Male, 40).

A lady from the southern province said that she laid tiles in her bathroom. Furthermore, she was involved in carpentry work; rendering walls; painting the house and wiring for the house; these were some of the activities that were mentioned as the roles women could perform in PDR. A lady from the southern province said '*The contractor did rendering for only one room. For other rooms we have to render and paint and we did that work*' (Female, 44). Many women mentioned that if training is given to them they could carry out activities like wiring, painting and carpentry.

One of the most cited contributions of women in PDR was at an un-skilled level. Women said that they helped their husbands or family members to transport construction materials, draw water from well for concreting, cleaned tiles for the roof, they cleaned the site, supported the masons, etc. while constructing their homes. When describing about women's contribution towards PDR a gentleman said '*My wife helped me. Since my earning was less it would cost me more to get additional labour. So she helped me. She also shared the suffering in building the house. She has the interest and hence we improved. When we do, there is sense of belonging. Since we put our effort we would like to improve the house further than leaving it behind' (Male, 46). Some women have provided the support for neighbours. Many have provided food and drink for construction*

workers. Within this group, some women have made this as an income earning activity for them.

Women have said that they made decisions on fittings and fixtures; house interior decorations; and, other purchases for the house. A participant said '*In order to reduce the spending I was the one who mainly involved in painting with my son. We decided on what kind of paint and what sort of things to do*' (Female, 44). She continued to say that '*I only decided that the bathroom should locate outside and what fittings should be placed in it and things like that*'.

Women have also provided supervision during PDR. Many were involved in management of their house construction. When describing about her wife's involvement in PDR a gentleman said 'When we were constructing, when I'm not there she supervised the workers. She has the capacity to supervise and give suggestions' (Male, 46). While another gentleman said 'Her contribution is more in our house construction. Since I go for work she was involved in more' (Male, 46). Management of finance by women is another role that women have performed in PDR. Some said women were better than men in managing the finance given for their house construction. One of a community society's member accused some men in their community of wasting the given money and women from those houses had to find alternative ways to manage the remaining construction. The member further said that women had successfully completed their houses and saved their husbands from being found guilty for misusing the money. Women were appreciated for their interpersonal skills. Some women have acted as liaison between construction workers, funding organisations and community members.

If women have the knowledge and skills to carry out reconstruction activities women could work on construction projects. A lady said that she worked in designing a building near to Nilavali where they constructed a hall. Since she was studying at that time and the company wanted a local person she got involved in it. Women have contributed towards reconstruction of their houses by finding alternative ways of funding either by selling their own assets or keeping it as a mortgage.

Women were given tools for making bricks or blocks in a place in the eastern province during PDR. Thus, by providing training and initial capital for women PDR could help them to develop their skills and income earning capacity. Another aspect that was pointed out by a few women was, working in child care facilities. Generally, women are finding it difficult to cope with work and family responsibilities. Responsibility towards rearing their children was one of the main difficulties that was cited by women and men. Hence, starting a child care facility and recruiting women into this would assist many.

During the Post-construction phase: Generally women were involved in maintaining the house. A gentleman stated 'She is the one who maintains the house. So need her support' (Female, 43). Women could be involved in identifying defaults in construction. A lady said 'they can identify the small defaults and tell their husbands or masons and get it rectified' (Female, 24). In addition, women could engage in improving the house further. Women could learn some skills about decoration and develop their houses. A participant said 'Can decorate the house and have additional vases. I can do interior decorations inside the house' (Female, 36). It was noted that women were involved in making decision on furniture.

Although PDR constructed the houses and some community buildings, mostly there were many aspects in the community which were left for further development. Women could get involved in community projects. Women could share information with others and help institutions to identify resources within the community. Women can identify the available resources and with additional support they could create an earning. A gentleman said that *'There is a playground here. If they have some things like horse, vehicle to make the children to play and like a park. So people can maintain and run this and make some money from this. 10 women can maintain and so things for children then it would be good (Female, 37). This shows that women could do business development from PDR. Although in certain instances PDR did not directly deliver an opportunity for women to earn an income or develop skills PDR possessed the potential to empower women. However, an organised administrative structure is important in carrying out these activities.*

Thus, having a women's society would tremendously help women. It could be noted from the above sections that many practices known on women's empowerment was related to community societies. Since community society is more close to women and is aware about local conditions, being a member of that society would not only help a lady but also others in the community. While discussing about women's society in their community, an experienced member from another society said, 'the women's society did a work on reconstruction. There are no men in that, it is for them only. They did a building by a contract. In that they got Rs. 1.5 lakhs as profits. AGA office gave that for them. That came for us but they said they wanted to do and we also agreed and they did that. They got people for daily wage and got it done. It was Rs. 14 lakhs worth of construction. They went around and got the materials and got it done' (Male, 40). It could be noted that development of a women's society would very much help women to develop further. A participant said 'We have a women's group and we try to understand others problem and, have a scheme and help them financially. Many women get involved in this' (Female, 34).

5.3.2.3.4 People's suggestions on empowering women

During the interviews the participants were asked for suggestions on how their community women could be empowered. The suggestions on women's empowerment included both at individual level and at community level. These suggestions are listed under the following categories: economic, social, educational, health and personal. People suggested recommendations on current practices such as: promote community participation in PDR; provide equal opportunities and reward women for their work; approaching women in the right way; considering different sections of women in communities; supporting women to work in groups; etc.

Economic empowerment: One of the most commonly cited suggestions on economic empowerment of women was providing support or capital loans for employment. On this regard, a participant said 'Some women would prefer loans while others prefer some tools or equipment in order for women to carry out an income earning activity'. A lady with five children said, 'If some support is given I can do further. Since I have some women dependant on me if some support is given I'll carefully work for our development' (Female, 45).

Apart from support for women, community members expressed their interest to have job opportunities for women near to their home. Since many women from eastern and northern provinces were affected by both natural disasters and civil war their economic empowerment has been hindered very badly. Their continuous displacement has affected their livelihood activities. Many women from communities which are relocated find

difficulties in starting up a business or an income earning activity at home. In addition these difficulties faced by women, a fair representation of different groups of women should be considered. Women who have empowered themselves would become catalysts for change in their communities. While explaining about job opportunities a participant said 'If a garment factory or some job opportunity comes near to our place then definitely I can work. If job opportunities are created and given to us then we can work together than just giving money' (Female, 38). Another participant said 'When women are given some wages then women can do. But in this place there are no opportunities for women. If there are chances then women can do and will do. Those who have studied have work but people like me who didn't study can't go to work. They stay at home and suffer' (Female, 31). In addition, it was noted that some women and men said that construction did not seem a suitable job for women and they want to have a job which is suitable and appropriate for their community women. This shows that people involved in PDR need to think creatively and support those community women through providing additional infrastructure to facilitate a relevant income earning scheme. This would definitely need those community women's involvement.

In addition to the above suggestions, participants also suggested to provide support which is not a loan but as a non-returnable start up support for women. A lady with two dependents, explained her situation as, '*If a small amount of money is given then people like me can start something and do. As we can't assure about repaying the loan it is difficult to take a loan for me*' (Female, 35). Providing the needed infrastructure could empower women economically. In describing this, an interviewee said '*If there is a local market then women can do some marketing. This would be good. But the process of doing these and giving to people is not in good order*' (Male, 37).

Overcoming social injustice and empowering: Barriers related to social and cultural aspects present major barriers to women in empowering them. However, there are many aspects that need to be considered in order to bring social justice and empower women. As mentioned earlier, having female workers in construction sites would encourage women to join reconstruction activities. Further, educating parents and husbands through sessions or awareness programmes on women's education and employment would help women's empowerment. Through locally based organisations, arrangements can be made for exposure visits for women and their families to other parts of the country. These exposure

visits could include witnessing women working on different fields of careers, meeting up with women role models, getting an opportunity to speak to women who have empowered themselves. This would help women to develop their confidence and courage. The exposure visits could not only help women's empowerment but also facilitate harmony for peace building.

During the interviews it was said that it is important to understand the local conditions while providing infrastructure or training to communities. Disturbing the balance between local societal forces and women would damage the process of empowerment badly.

Empowering through education: Communities have suggested education as one of the top measures for women's empowerment. In explaining about their community's state on women's education, a participant from a community's society stated that 'If we need to improve their state more, then parents should not make them to marry early instead should make them to study further and develop themselves. Parents hold about 70% and society has 30% on this matter. But many cases it is about 50 -50 between parents and society to develop women in the society. Encourage them to continue their higher studies and develop their status' (Male, 34). This gentleman states that women's families could break the social barriers if they support their daughters rather than just fully obliging to society. Girls who are at a younger age should be encouraged to study further. Girls who are at a middle age or have left their schooling can be educated through training and sessions on relevant skills and knowledge. It should be noted that women need to be trained in skills that they would like to have and benefit from.

Providing training on a skill which cannot be appreciated by their family members or cannot be used to undertake work would not benefit her much. With regard to training on construction related skills, women who are willing to get trained could be offered opportunities. A participant said 'If women are interested in it they can make/cut flower/decorative stones/blocks. So they can do at home in smaller quantities and they can nicely make it' (Male, 37). Another gentleman said 'if training related to cement mixtures like what proportions; how to make it; how to sieve aggregates; what is the depth for laying foundations; what is the height for lintel; how to plan for room construction like dimensions; etc. are given to them in the training then they can do it' (Male, 52). If women can be trained and educated in groups then they could train other women and carry

out work in groups. These women could act in groups at their community level which could earn a living for them.

In addition, the interviewees emphasised the importance of making women aware about employment opportunities by providing information to them. Many women complained saying that the relevant information did not reach them on time to make the most of it. This shows the lack of information flow from institutions to communities.

Conducting awareness programmes on women's rights, available resources, information and support is another measure that was quoted by many interviewees. As mentioned in earlier sections, it is important to make women and their family members aware about women's empowerment. Unless women's families support them it is harder for women to break their economic and social injustice. Reconstruction could provide schools or common buildings for communities to conduct tuition classes by community members for community children. This would help the local economy.

Empowering Health and wellbeing: Women were severely affected after the tsunami in terms of their physical and mental health. Those who lost loved ones took so long to come out of their mental state. Hence, providing counselling would address the problems. Those who are not in their right mind cannot be further helped to empower them. Hence, bringing women and health services was a measure that was cited by community members for empowering women. The reconstruction could play a major role in this process by providing facilities like hospitals, clinics, other buildings and infrastructure for easy access to health facilities.

Personal Empowerment: Women's lack of confidence and courage to get involved in activities was quoted as a barrier that women face. Due to cultural and societal barriers women tend to stay indoors. A lady said '*Women should feel that not only men work women also can work*' (Female, 28). Some women tend to have lack of willingness to empower themselves. A female participant quoted, '*water (tsunami) came inside and took us (women) outside*'. Self-development programmes; workshops; events; and competitions can be conducted to develop women's confidence and courage. Also as mentioned earlier, different sessions and visits could be arranged to encourage women to come out and make effort to empower themselves. Guest speakers could be arranged to deliver inspirational speeches to women.

In order to address the issues with regard to women's responsibilities towards their children, child care facilities could be arranged. This would help women to solve issues on multi commitments. Women's societies could be given the task of identifying and building a building for this task. This would empower local women at different levels and on many aspects.

The following section presents the findings from the questionnaires which was part of the second phase of data collection. This helped the researcher to triangulate some of the data that was collected during the first phase of data collection.

5.3.3 Questionnaire with community members

A structured survey was conducted among the people who were affected by disasters in Sri Lanka. Those who participated in the second phase were given an opportunity to participate in the surveys. These respondents included both men and women from all three provinces. The sample consists of 41% people from the northern province; 47% from the eastern province and 13% from the southern province (refer to Figure 5.12). The survey instrument included both closed and open ended questions. The survey was undertaken by 32 respondents and the majority of the respondents were women. Most of them in this survey were married (almost 97%). 60% of respondents fall under 26-39 age category while 31% fall under 40-59 age category. The majority of the survey respondents were from coastal communities whose main income earning activity is related to fishing. Men from those communities work in fishing while women do small livelihood activities at home or get involved in support activities in the fishery sector. However, it was noted that many women from the eastern province in the sample were doing some other activities not related to fishing since most of them were relocated to different locations away from the seaside due to regulations on buffer zoning. Within them, 50% of them were employed at household level or community level.

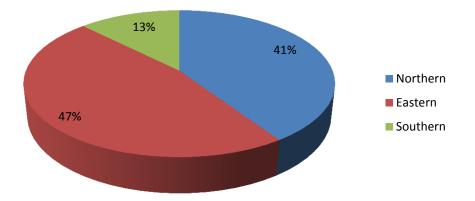


Figure 5.12 Percentage of participants from different provinces

5.3.3.1 Analysis of surveys

The survey was divided into four main sections. Firstly, the survey attempted to identify the importance of women's empowerment from the disaster affected people. Thus, reasons that were identified from the first phase were given as options with an option, open for more answers from them. Secondly, the survey attempted to identify the importance of factors that influence women's empowerment. In other words, in order to identify the importance of the factors that were identified by experts during the first phase, the affected community respondents were asked to rank the factors using a Likert scale. Thirdly, people were asked to pick any known policies or government acts or national committees or international conventions/frameworks from the list and state any of their personal experiences with regard to them. Finally, people were asked to identify the difficulties that women faced during PDR very specifically with regard to reconstruction. The survey instrument was formed as a second part of the second data collection phase instrument. However, people were not necessarily required to complete both sections of the instrument. In addition, respondents who were willing to get involved in the research were given an opportunity to take part in the survey.

5.3.3.1.1 Why women's empowerment?

The survey consists of 7 reasons that were identified from the first phase. They are given in Table 5.3. It was found that almost all the reasons cited in the survey were selected as some of the reasons for empowering women. However, it can be noted that 'empowering women will reduce gender based violence' did not score as other reasons. Most of the women mentioned that they personally do not have such a problem however there are women who are subject to gender based violence and they need to be empowered. This was a finding which was highlighted in the second phase interviews too. In addition to the above, there were a few more reasons that were quoted by women. They are,

'if you stay at house you may feel like foolish, but if you go to work you can mix with people and you can overcome that, so you will not be side-lined from community; can increase the income' (Female, 46)

'it will improve their state, they will learn lot of things; it gives them the experience' (Male, 46)

Reasons	Total answered	Yes	No
To reduce gender based violence (health & verbal assault)	31	68%	32%%
To obtain financial support (for collateral)	32	100%	0%
To emphasise the need for inclusion of women's needs	32	100%	0%
To increase self-reliance (decrease the dependency)	32	100%	0%
Provide sustainable income generation for living for them and dependents	32	100%	0%
Need to distract them from worries on loss of deaths and develop their courage to live	32	100%	0%
Need to improve their ability - express their needs & problems	32	100%	0%

Table 5.3 Reasons for women's empowerment

These show that empowering women can help women to develop her reputation in her social circle and, widen their skill and knowledge. Meanwhile, another two ladies mentioned, 'need to develop their courage' (Female, 39) and; 'not to be men's slave, women should feel that they also can do things' (Female, 24). Another lady from the eastern province said 'courage to look after their families; some women would like to bring up their children because their husbands are hitting their children. So they would like to go for work' (Age 36). This shows that men's abuse of children can also be overcome by empowering women. This is an important link that needs to be considered by government and NGOs dealing with children's issues. This would help to address both issues. Another respondent said that empowering women will help to improve family income.

5.3.3.1.2 Women's difficulties related to reconstruction

The survey had questions to pick any difficulties that they, as women, have faced with such a challenge during reconstruction activities (including pre, during reconstruction phases) or any women known to them have undergone such a difficulty. It can be noted from Table 5.4 that cultural barriers that are not broken within the communities pose them a bigger challenge than any other.

Difficulties	Total answered	Yes	No
DURING PRE-CONSTRUCTION			
Cultural barriers that have not been broken	31	84%	16%
Women's voices are less (in common workshops/ meetings)	31	65%	35%
Equal opportunities are not given to women	31	77%	23%
Tendency of ignoring female leadership/Instructions	29	79%	21%
Stereotyping	31	71%	29%
DURING CONSTRUCTION			

Table 5.4 Difficulties that women face during PDR

Although initiatives are taken, do not remain in practice	25	76%	24%
Insensitive nature of institutions & people who work in the implementation	32	50%	50%
Attitudes of people in the political area towards women's issues	28	43%	57%
Success of the implementation of any legislation or policy on women's empowerment	14	50%	50%

Secondly, society's attitude on ignoring women's leadership or instructions has caused problems in carrying out their reconstruction activities. However, some women did not feel at all like that. 77% of women from the sample felt that they were not given equal opportunities in pre-construction activities, compared to the pre-construction phase women's agreement with challenges during the reconstruction phase is lesser. One of the difficulties that scored more than others is 'although initiatives are taken, do not remain in practice'.

Another lady said 'It would be good if they consider women and do. If you call them then they will. But if you do not consider and leave to aside then there are more problems. It is better not to keep them in side lines but to bring in to the process' (Female, 46).

5.3.3.1.3 Importance of factors influencing women's empowerment

The survey consists of 13 factors that were identified from the interviews with experts. Survey respondents were asked to rank them in relation to how important each factor was for women's empowerment. There were five options: Very low; Low; Neither; High and Very high importance are the scales used to rank them. After the data collection the survey data was coded for data analysis. The factors were coded as below.

Later, using descriptive statistics, the percentage of importance (at various ranks) for each factor were computed using MS excel 2010. The results are shown in Table 5.5. As it can be noted from the table, most of the factors scored relatively high importance within the community members except the factors F12 and F13 which are on 'Provision of suitable

working environment/conditions of work' and 'Support to women to mitigate the violence against women'. Mostly, it was noted among those respondents who did not feel its important that they couldn't recognise or identify any suitable condition for them. Similar to earlier findings, women's view on gender violence (due to no/less personal experience) do not count it as an important factor compared to others. 'Women's coping capacity to household shocks' is a factor that scored 'very high' from all the respondents. This shows the impact that the tsunami has left them with even after so many years.

Factors	Total answered	Very low	Low	Neither	High	Very High	Total percentage
F1- Women's legal entitlement to their properties/assets	31	0%	0%	3%	23%	74%	100%
F2 - Women's access to other resources	31	0%	0%	0%	23%	77%	100%
F3 - Women's economic participation such as presence in the workforce	31	0%	3%	0%	26%	71%	100%
F4 - Quality of women's economic involvement beyond their mere presence as workers	30	0%	0%	10%	20%	70%	100%
F5 - Women's participation in their household income	31	0%	0%	0%	16%	84%	100%

Table 5.5 Importance	of factors influencing	g women's empowerment
- asie ene importante		

Factors	Total answered	Very low	Low	Neither	High	Very High	Total percentage
F6 - Women's political empowerment (in terms of women's equitable representation in decision making structures, women's voice in formulation of policies affecting their societies	30	0%	0%	7%	17%	77%	100%
F7 - Women's participation in household decision making	31	0%	0%	0%	19%	81%	100%
F8 - Women's coping capacity to household shocks	31	0%	0%	0%	0%	100 %	100%
F9 - Women's educational attainment (in terms of quality and content of education)	31	0%	0%	0%	10%	90%	100%
F10 -Development of women's relevant knowledge and skills	31	0%	0%	0%	13%	87%	100%
F11 - Women's access to health and wellbeing (in terms of access to	31	0%	0%	0%	16%	84%	100%

Factors	Total answered	Very low	Low	Neither	High	Very High	Total percentage
sufficient nutrition, health care, reproductive facilities, etc.)							
F12 - Provision of suitable working environment/conditi ons of work	31	0%	0%	0%	52%	48%	100%
F13 - Support to women to mitigate the violence against women	30	10%	7%	0%	33%	50%	100%

5.3.3.1.4 Awareness on any relevant practices

It was noted from the survey that most of the policies or committees or government acts or any international conventions/ frameworks related to disaster management or women's empowerment were not generally known to people who were affected by the tsunami. It was very disappointing to see that most of the women who were involved in empowering women at community level too were not aware about these, except about the unit in the police station for reporting gender based violence. This clearly shows that women themselves are not aware about the existing support systems for them and distribution of information on women's rights for their wellbeing is not done properly from the government or other agencies that are responsible for this. This was also found from the findings resulting from the expert interviews.

The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW); The Declaration of Violence Against Women (DEVAW); The Tsunami Housing Policy; The Tsunami (Special Provisions) Act; the National committee on Women were some of the important options given in the survey. It was noted that only the

Tsunami Housing policy and National committee on women were items that were heard about by people. A couple of respondents from the southern province had heard about these. One lady said that she knows about the 'Domestic violence act'. A lady from the eastern province said 'there is a group, they come and check and ask us to come and complain especially on gender violence. It is a government one' (Female, 36). The Convention on the Elimination of All Forms of Discrimination against Women is an option which was hardly known to people from affected communities. These results clearly show that mostly, women are not aware about national level practices and international level practices. However, they are well aware about their community level activities of their village in terms of their women's group tasks.

5.4 Group community members' perspectives

5.4.1 Background information on participants

This phase of data collection involved four groups of women who were affected by natural disasters. The structured interview guideline that was used for the second phase of data collection was also used in this phase. This phase facilitates validation of the findings from the second phase, as well as providing an opportunity to gather information from women who couldn't participate in individual interviews. Women were offered an opportunity to express their views in a friendly environment where they felt comfortable expressing their ideas. This phase had separate individuals who did not participate in the earlier phases and were affected by disasters.

The first group (N1) consists of 15 women from the eastern province. It included all age categories of women, but mostly comprised of middle age women, who are dependent on their husbands. They were relocated from their original homes after the tsunami, which were near to the sea. In this community, two different ethnic communities lived happily next to each other. They had nicely divided their houses to accommodate each group, side by side, in the village. The village had community buildings, a temple and mosque, and other community infrastructures catering for some of the needs of each ethnicity.

The second group (V1) comprised of 6 women from a village in the northern province. These women were aged between 35 and 52. They had been mostly married, had become single parents (due to tsunami or war), with children depending on them, and they all did some paid work, except one woman. They had studied up to primary or secondary education. They were from tsunami affected areas and were given some funding by the government to reconstruct their houses. However, since the prices of the materials went up, most of them couldn't complete their houses.

The third group (T1) was also from the northern province and comprised of 13 women. these women were from different age groups and some of them were married while other weren't. Most of the women were not employed and depended on their husbands or parents. They had studied up to primary or secondary education. This group of women were from a community where there is a women's society and they got together and constructed a community building.

The fourth group (P1) was from the eastern province. It comprised of 6 women. Most of the women were married, except one, and they were between 26 and 39 years of age. Among the women who were married, they had at least two children depending on them. They weren't employed and were depending on their husbands or parents. They had studied up to primary or secondary education.

5.4.2 Analysis of interviews with community groups

5.4.2.1 Women's status in post disaster reconstruction

5.4.2.1.1 Internal difficulties

5.4.2.1.1.1 Health

As mentioned in section 5.3.2.1, internal difficulties are the ones that women face with regard to their own physical or mental capacity. Some women who have to do the management of their house construction on their own, found it difficult especially when there were additional problems such as shortage of materials or increasing prices, and thus budgeting for house construction was a particular difficulty. A lady from the T1 group said '*I'm a widow. So I have to do things on my own. They gave us to do the work. I have to go and buy the materials and bring it. It was hard for me*'. When they had already made so much effort in terms of expending physical energy, women sometimes found

involvement in reconstruction a physically challenging task. This created mental worries and health issues for women. Apart from these, inappropriate construction has led to additional health issues for women and their children, which has increased the women's workload. Members from the N1 group mentioned the problems of toilet construction and how it affects their hygiene.

5.4.2.1.1.2 Knowledge and skills

Some women said they did not have experience in constructing houses and thus they couldn't do the job well. One of the participants from group T1 said that some women are reluctant to express their needs and they need to undergo counselling which could sort out many of their problems.

5.4.2.1.1.3 Personality

It was noted in the interviews that women emphasised the need to improve women's courage to carry out work in construction and their willingness to come forward to empower them.

5.4.2.1.2 External difficulties

5.4.2.1.2.1 Economical

Many people who couldn't complete their house construction from the money given to them by other government or other organisations had to use their own money. However, many participants cited that women had to keep their jewellery and other things as security to get loans or mortgages. Those who couldn't find finance couldn't complete their houses. Some women said they couldn't reclaim their assets that they kept for loans. A lady who has a son that depends on her, said that she cannot think about building a house as it just isn't possible for her. She said 'Some organisations should give me some support to do it. I even find it difficult to have my daily food how can I even think about a house. Since we were displaced due to war we couldn't receive any support that came to us'. This shows that when disasters happen one after the other, women sometimes find it difficult to pull through and continue their life. Some women are not able to do any income earning activities due to a lack of capital. One of the participants quoted an incident where a woman was left alone and she couldn't find an alternative to earn, so she ultimately ended up in illegal activities for her living.

5.4.2.1.2.2 Societal

Most of the participants highlighted the effect of cultural and societal barriers on women. This has caused additional barriers to women's empowerment. One of the participants from group P1 said '*I like to be a mason because if I'm a mason then I can do lot of things and can do a house on my own. I have gone through so much. But society is the problem. I have painted our house; have the rendered the floor and made smoother even. If they teach me how to do mason work I will be the first person to do that. We can do carpentry; vanishing, etc. We can do white painting for the first coat. Labourers do small work and charge. So if we know how to do then we can do'.*

In contrast to general opinion on societal views, an elderly lady said 'At the current state – the culture is not a problem for women to come up. It was there earlier days. Most of the cases there are not much of a problem now. Earlier days they say it not good to go and do things. But since there is a change in situations there aren't any barriers like that to girls. They are going and doing work also. If they work, then they can work and earn and buy things that they like' (Female, 62). People with this view were in the minority among all four groups of people and they were mostly from older age groups.

5.4.2.1.2.3 Family

Family responsibility was quoted as another barrier for women in getting involved in any activities. This was highly quoted within the interviews.

5.4.2.1.2.4 Existing practices

It was found from the group interviews that women felt that they are not given equal opportunities. In certain places women were neglected from given support, although this was not reported by many of them.

5.4.2.1.2.5 Additional hassles for females

Members from group N1 said 'In windows they didn't put any grill. This would be ok for foreign countries but for us we have thieves and it may not be suitable for us. This could be a big problem for women'. A lady from the T1 group said that at first the funding organisation said they would do it, but later they left without completing it. It seems that sometimes certain people try to cheat women who are alone without any support, and especially men's support. This may be due to the local contractors and certain people's nature rather than institutions themselves.

In a village in the northern province the deed of the land that was used for reconstruction was not given to the people and hence they are unable to even dig a well for their water usage. Thus, women have to go to different places to get water.

5.4.2.2 Post disaster reconstruction

5.4.2.2.1 Opportunities

5.4.2.2.1.1 At household level

Many participants in these groups felt that they should thank the funding bodies for giving them permanent housing whether it was big or small. Many women said that they got some funding and with their family members' help they finished the construction of their houses. Most of them got a contractor to do the construction work, except some, who gave their assistance to support the construction, mostly at an unskilled level. Participants from group N1 felt that if reconstruction would have provided an opportunity for some training and allowed them to construct themselves, they would have learnt more things.

A lady from group T1 who got involved in community level construction said 'At that time when we built it we did not have experience. But if we get it now we can do better than before. At that time the funds were limited. So we could not do better. But we did as per their estimate. Later they asked for accounts also. So we prepared the accounts and gave it to them'. This shows that reconstruction has given the experience in project management and financial management to women. Another lady from group P1 also said that 'It has brought experience for us. It has made us to do construction since we don't have men. So it had made us to do things for us to improve'. This shows that PDR has empowered them in this instance. Another participant from group P1 said 'It has made us to know, how to do cement mixture, what is needed for windows, etc. With construction we have learnt what we need and how to do. It has given us the experience'.

It was noted that those who have taken part in reconstruction activities feel more confident in themselves and willing do it again if another chance is given to them. Some women said that before the tsunami they did not know how to do things or get certain things done at council level. However, the tsunami PDR has given them the chance to see outside of 'their world' and now they can do things on their own rather than depending on their parents or husbands.

Group members from N1 felt that PDR could offer them job opportunities in reconstruction with some training. A lady (Female, 69) from this group said 'We would have taken some sand and stones and given for work. We have put so much of hard work and we would have done it. So if they (reconstruction people) also would have come together we would have done it'.

Since they were affected by the tsunami and left without anything, they feel happy that they got something as support and somewhere to live. So some say that this was indeed a big help and they felt happy about it. A lady from group P1 said '*I* was so interested in building a house for us. With so much of trouble we got a land. With so much confidence and determination I was so involved in it. I did not have any experience before. But after we got land I had thoughts of what I wanted and I have finished my house. I'm happy that has been done'.

5.4.2.2.1.2 At community level

Participants from group T1 said that they got some community infrastructure facilities that were built by several organisations.

5.4.2.2.2 Obstacles

5.4.2.2.2.1 At household level

A member from group N1 said that there are water leakages in the house. She said that 'we can't cook while it is raining'. It was also noted that some participants complained that there was no door or door frame for their houses. Participants said that the reconstruction people used a barrel to construct the toilet pit and thus a lot of issues are created from that. Women complained that the reconstruction people constructed according to their plans and requirements than for community needs. Since these community members lost all of their belongings in the tsunami, firstly they wanted to just go and sit somewhere. Hence, they couldn't identify the problems that the reconstructed house could leave them with. A lady from group N1 said 'They should have given the money to the family and asked them to build it. They said it took Rs. 8 lakhs but it has cost lesser than that because of too much of work. Even the quality of the floor slab is bad, it can break very quickly. If they would have given the money to us we would have used our own labour and would have done a better work' (Female, 26).

Meanwhile some participants from the northern province said that since the materials prices went up so drastically they couldn't complete their houses. Participants from group T1 said that many organisations came and started to build their houses, however, many of their houses were not completed. They said there are about 20 houses like that in their small community. Some houses do not have a roof and some people are still living in transitional huts.

While explaining about the serious conditions after the tsunami reconstruction, a participant said 'Though we lost lives, asset and things we were not given things permanently. They have given partly done houses to us. These are our lands, so we have to do the rest of the work by us'. Although these people have asked the organisations to allow them to carry out the construction, they were not given the opportunity. However, when the materials prices went up they left the responsibility to the community. Those organisations provided some materials only to show that they have supported them. A participant said, 'They showed a false account and left. Some of us do not have electricity. Those who have finished the construction, the government gave the money and gave electricity. But for us, we do not have light and our children have to study under lamps. So

it is difficult for us'. People from this place have one well for a few houses. However, due to flooding, the surface water has filled the well and they have ended up going to different places for water. Similar to the problem that was cited about toilets in the eastern province, group T1 participants also said that their toilet pit gets filled up quickly mainly due to rain water.

Members from group N1 said that their association brought them 3 designs and asked them to choose a type of design that they would prefer. They all selected a similar design, but that the designs weren't suitable as they couldn't construct their house according to their customs and traditions. They further said that their land space is not enough for them. Since they don't have enough facilities, they need more space within their compound, especially when their family is involved in agriculture. They further said that since it is muddy land, they find it very difficult during rainy seasons. The water gets collected and it creates more problems. Some said that their houses are different from the initial plans.

The construction of toilets attached to houses was commented upon widely, as a negative aspect of reconstruction, since the toilet was constructed next to the kitchen. Since people from these communities prefer to have the toilet in a corner of the compound, and want to have an excavated ground pit for the toilet, the construction of toilets next to kitchens created issues among them. In addition, many from the northern and eastern provinces complained that they did not have shelves in the house and women find it difficult to manage their storage and have to make additional purchases.

Another lady from group N1 said that it was not constructed according to customary procedures. According to the Tamil tradition, the entrance of the house should be towards the east side. Since these houses were constructed according to a pattern, some houses have satisfied this aspect of important customary procedure, while others haven't. Tamils also have some customs on where the kitchen should be located in the house. Thus, construction of a house which doesn't comply with their certain important customs tends to create more concerns within the communities, due to their ideology and beliefs.

A participant from group N1 said that their house had been divided into very small rooms. Hence, even for a small event they can't use it to invite people and they don't have a living room. It is harder for them to accommodate any others coming home. Although this may seem like asking for more, looking at providing homes as permanent houses it should not be seen as a problem for their long term living.

Some of the women participants in group V1 complained that they were not given any support although they are from female headed families. People from T1 said that certain parts of their village are flooded. This has brought some additional problems for them, especially for women who have to look after their children. Since the new place was constructed on lower land, it gets flooded quickly. Hence, a lady felt that instead of giving flood relief for them, if reconstruction had originally helped them to sort this problem it would have been better for them.

Participants from group N1 said that the reconstruction effort couldn't even use their own men for work and they brought their own labour and completed it. A lady from group N1 said '*Even our association within community didn't provide any work for women for us. They did on their own, they didn't consult us*'. Some people from group N1 said that they were not given any support for their income earning activity. In explaining about the PDR role on this, a lady said 'If they would have put a small shop, then women can do with that'.

Since in the northern province, there was lack of land in a village, many had to live on temple land and they had to pay money to the temple. This was difficult for some women who found it difficult to even survive. A lady from group V1said '*People who had support* and had known people got houses and others like me who did not get the support. I'm a widow but I did not get anything'.

5.4.2.2.2.2 Community level

Participants from group V1 said that they were not given any support for community infrastructure. Among participants, although most of the women say that PDR gave opportunities, some say that it brought a lot of problems also (Group N1 member). Group N1 felt that their community buildings and infrastructure was built before they had any input and moved in. Since it was constructed by a foreign organisation and it was done through an association, they couldn't talk about anything with them. They only invited the community in to lay the first stone for the foundations. Since they did not consider the functionality and location of the buildings, it has brought some social issues.

5.4.2.3 Women's empowerment and post disaster reconstruction

5.4.2.3.1 Influencing factors

5.4.2.3.1.1 Enablers

Many cited finance as a major factor for women's empowerment. A participant from group T1 said '*I think if an organisation funds us some money to buy a machine and do some work then we can do some work. Later we can take over that. We can smartly do it*'. A participant from group P1 said women can be given some equipment instead of money.

Education was cited as a major factor for women's empowerment by almost all the participants. However, elderly people tend to say that since they are older it would not be appropriate for them now. A lady from the northern province said '*We can take as a contract and do some work. If we were given training we can do together*'. Participants from group T1 said that if some institutions had given them training they could do work like painting. However, some women felt they could only do work related to cooking or home gardening or husbandry activities. Participants from group P1 said that a training course on carpentry, masonry, painting, rendering, etc. could help women. They further said if they are trained then they could use that knowledge to earn income. Then they could train other people and then they could do work in a group.

Counselling for women who have undergone severe disaster effects, can help them a lot. This was heavily emphasised by women in group T1. A lady from group V1 said that parents should encourage girls to study. Further, a few of the participants said that there should be childcare facilities. This could help women to go to work and also allow the elder children to go to school rather than looking after the younger siblings. Women's family support was seen as an important factor in empowering them. One of the ladies from group T1 who worked in a community building construction said '*My husband helped me a lot specially to buy materials. Anyway we need a support, we can't do alone know*'.

It was noted that having a women's society and doing some empowering activities to women would be effective. In sharing her experience on community activity a lady from group T1 said '*Netlok gave Rs. 10 lakhs to our women's society. So we are giving that*

money to women to do work on a rotation. We are giving about Rs. 30, 000 to grow chickens and goats and after making profits they have to pay back after one year. For those who were really affected we give more money to them. So they can benefit more as the interest also less it is good. We also do saving like saving Rs. 50 per month. There are about 140 people in it. In everybody's account there are about Rs. 5000 or so and we give interest for that'. This shows the variety of activities that these societies do for women's empowerment. Another lady said she has taken money from that society and she is doing some tailoring like school uniform stitching for children and growing goats for her living.

Land or space for empowering activities was cited as one of the enabling factors for women's empowerment. Provision of support for self-employment can also facilitate women's empowerment. A participant from group N1 said '*No other job opportunities were created. So for women to do something from home they do not have space have house garden even. So instead of constructing in crowded places like this they would have constructed in our place which is very spacious for us. It can be small house but they should have left some space and since the place is muddy no tree or plant can grow here. So they should select the right place'.*

5.4.2.3.1.2 Hindrances

Financial limitations were as a major hindering factor for women's empowerment. A lack of capital has limited women's activities on any income earning activities. Right to property was another factor that was cited as a hindering factor for women's empowerment among T1 group members.

Many women said that society's mentalities have posed them with threats or barriers and hindered their or their daughter's progress. However, it was noted that some women said that they did not care about it and they have done their work anyway. One of the participants said that the wrong name imposed on women should be lifted. In emphasising the need to break the cultural barriers she further continued to say, '*In fact women are doing lot of work than men, we can do more work but we are not given the rights. Because of the bad words, even for married women they are making bad comment. So women are going like turtles, they go inside the shell and then not coming out of it'. Another aspect was the jealousy among people to help each other, and this has prevented information and support reaching all women.*

A participant from group P1 said 'now they are less than before. Those days we don't go out. Now we can go after tsunami. Even I got to know about bank dealings after tsunami'. In addition to society's view, parental restrictions on women also limits women's empowerment. One of the participants said that mothers have to trust their daughters and have confidence in them. In an eastern province village, since this was a newly created village and since it is far from schools, girls who go to school find it difficult to go daily. They have to face bullying while waiting for their buses on the road, and this has prevented some female children from attending their schools. This was also noted in the northern province.

Women's family responsibility was cited as a barrier for women's involvement in reconstruction. However, a lady from group T1 said that though she couldn't get involved earlier due to children, now she is able to get involved in women's empowerment activities. This not only helps her but also other ladies in the society.

5.4.2.3.2 Current practices

It was noted that many people among all four groups were not aware about any policies or acts or any committees on women's empowerment or related to PDR from central or local government. However, some members from group N1 have seen some organisations given psychosocial help for women affected by the tsunami. It was very prominent in the interviews that these women are well aware of the activities that their local women's society does for them.

5.4.2.3.3 Women's roles in PDR

5.4.2.3.3.1 Pre-construction

A member from group N1 said 'If we were given an opportunity to say about our ideas, at least we would have told them where to keep the stone'. Members from group N1 said that if they were given opportunities they would have communicated their requirements during the planning stage. Many mentioned that they could have got involved in designing the house or in expressing the ideas for their house plans.

5.4.2.3.3.2 Construction

Many participants said that if they were offered the opportunity, they would have participated in reconstruction activities. One lady said that they should have at least given the opportunity to women who were educated. They said, if they are offered training on painting, designing for decoration, designing blocks, wiring, mixing cement mixtures, shaping concrete blocks, mason training, they would have got involved in it. Interestingly, one girl whose father was a painter did the painting for her house. Some women were involved in purchasing materials for their house construction. Another lady from group P1 said that she was involved in laying the foundations for their house. She said 'If a person at home can do then we as women also can do'. Another lady further mentioned that if they are trained they can get together and go to other houses and do that work as employment. Another participant stated 'These people are going to farm and doing hard work. So definitely we can do that type of work also. If we are building our own house, we would have put so much work, day and night and would have done so much of work. So they should have used us'. However, one of the members from group N1 said that she was not in a position to work in reconstruction however she felt that they would have offered the jobs to men. It was noted that women got involved in unskilled labour work in reconstruction like carrying sand, aggregates, clearing sites before construction, cleaning construction sites, cleaning old roof tiles, organising in arranging the religious customary activities involved in reconstruction according to their culture, preparing food for construction workers, etc.

It was also found from the interviews that women generally do not do construction work but do jobs related to their area of occupation (like fishing or farming). However, some said that they could do it if there were opportunities.

Women from group T1 said that they got involved in construction of a community building for their village. About 10 women got together and formed the group. Later they did a community building using the money which was given by some organisations. Although generally their fishing society (where men predominantly administer the activities) do these types of work, the women's group has taken the initiative to carry out this construction. There was encouragement from the local government authority. Later they registered their women's group in the AGA office and got the money in instalments. Since there was a clash from the fishing society that their role has gone to a women's society, initially the women didn't receive any support from them. They had only a president, secretary and treasurer. They bought land with the money, but did not have any other money. Since there wasn't any support, these women contributed their labour and saved money and used it for land purchase and construction. This shows that although women tend to shy away from getting involved in reconstruction projects, if they wish to and are willing to come forward, they are able to use the opportunities to empower themselves and also others. Women have hired external workers on daily wage basis to complete the construction work and got involved in management of construction projects and finance. This was monitored from the government officials.

5.4.2.3.3.3 Post-construction

Women from group N1 said that they did take decisions with their husbands on modifications after the reconstruction of their houses. Women contributed immensely towards maintenance of the constructed houses.

5.4.2.3.4 People's suggestions

Women said that they can't always rely on men. When they lose them, then only then they realise how hard other things are for women. Thus, women felt that they needed to know all the things necessary for living an independent life. In addition, they have a need to look after their children without being dependent on others. Some felt that moving with others can help them to learn things and they will be stronger than before the tsunami. In explaining about a way to empower women many suggested providing capital or financial support for women. Some said providing capital through equipment also can help women.

Injustice from societal and cultural barriers posed greater barriers to women. Hence, awareness programmes should be conducted among women and their parents and husbands. In addition, women should be provided with counselling to overcome their mental barriers.

A participant from the N1 group said '*The hospital and postal office are in a far places*'. This shows that although a couple of facilities are provided to a newly created village they have a need to travel long distances for other main activities. Hence, reconstruction needs

to provide better road infrastructure and the transport sector needs to accommodate newly developed areas in their schedule. Otherwise, important facilities like clinics should be provided near to them as it is a basic need for women and children.

Facilitating women to get involved in extracurricular activities was cited as a mode to developing women's personality development through schools. In addition, conducting seminars and counselling are some of the ways to develop women's strength of personality. This is recognised as a very important factor for women's empowerment.

A lady from the eastern province said 'If they create a school very near to our place then it would be good. There are enough students to have a school nearby. This would solve lot of problems. Even people who have studied already can be used within this place. Those who are very poor can't afford to send to tuition and if they miss a class due to transportation then they won't teach for them again. Our children are behind in studies due these problems'. Many emphasised the importance of conducting training programs on skills and knowledge development.

It was noted that women's societies in villages are providing great support for their community women. A participant from the eastern province said that they can't do things alone and they need a women's association to do things together. This was highlighted by many other women in other groups as well.

5.5 Summary and link

This chapter presented the analysis of data that were collected during all three phases of data collection. Firstly, the 15 interviews with experts working in disaster management, reconstruction and women's development were analysed. This phase of data collection identified the perspectives of experts on women's status in post disaster situations including the difficulties and the roles that they play in PDR; importance of women's empowerment; effects of PDR on women's empowerment; the influencing factors; and the related practices.

Secondly, it analysed the interviews and surveys with disaster affected community members. Following the findings from the first phase the second phase of data collection instruments were developed. 58 people including men and women from disaster affected

communities from the main three provinces were considered for the study. The data collected from this phase was analysed to understand the perspectives of communities on women's empowerment. Meanwhile, the third phase presented the analysis of the structured interviews that were conducted among different community member groups. This was conducted to validate the findings from the second phase. The following chapter will present the summary of the findings from the research using the analysis presented in this chapter.

CHAPTER 6 RESEARCH FINDINGS

6.1 Introduction

Chapter 5 presented the data analysis of semi-structured interviews that were conducted among experts; structured interviews and questionnaires conducted among disaster affected communities; and, structured interviews among groups of communities. This chapter presents the research findings based on the analysis detailed in chapter 5. In addition, the literature review presented in chapter 2 has also been considered as a way of triangulating the results. Accordingly, this chapter is structured as follows:

- Firstly, the chapter presents the reasons for women's empowerment in PDR being considered important by considering the findings on difficulties that women face in post disaster situations and also presenting the results on the opportunities that PDR could offer to women.
- Secondly, it presents the results on strategies formulated for women's empowerment in PDR. In this section, it reports the factors that influence women's empowerment and the roles that the community felt that women could perform in PDR. Following that, it presents a table with formulated strategies using the above findings and the suggestions from community members.
- Finally, it summarises the findings of the research.

6.2 Importance of women's empowerment in post disaster reconstruction

Women face many difficulties especially during post disaster situations, where the vulnerabilities that women had before the disaster sometimes become magnified, and this presents more challenges to women. The PDR is seen as an opportunity which could help to rebuild the affected communities in terms of its physical, social, and economic conditions. Hence, there is a need to empower women by considering the opportunities that PDR could offer to this process of women's empowerment. The study identified many reasons behind the importance of implementing women's empowerment in PDR. Although many studies investigate the livelihood activities of women, there were hardly any studies in utilising

reconstruction activities to empower women. In this context, the study investigated both experts who work in relevant fields and the communities who were affected by disasters. The research found that both experts and communities feel that empowerment of women could help women to obtain financial support; emphasise the need for inclusion of women in PDR; increase self-reliance and decrease women's dependency on others (otherwise, which sometimes, leads them to a more vulnerable state); to provide sustainable income generation for living expenses (for women and others who depend on them); to distract from worries on loss of loved ones and develop their courage to live; improve their ability especially to express their needs and difficulties; and, to reduce gender based violence (in terms of their health and verbal assault). Although many community women did not accept GBV as a reason for the need to empower *themselves*, they accepted it as a reason for implementing (other) women's empowerment.

6.2.1 Why women's empowerment?

In this section, the challenges that women face in post disaster situations are presented. The difficulties that women face are mainly categorised into two sections: internal difficulties and external difficulties. The internal difficulties are further sub categorised into three sub categories: health, knowledge and skills, and personality; while external difficulties are further sub categorised into: economical, societal, family and existing practices. Table 6.1 presents the findings on women's difficulties in post disaster situations. A state of a woman's accommodation after 7 years who had been affected by tsunami in 2004 can be seen in Figure 6.1.



Figure 6.1 Communities living in temporary shelters even after PDR

It was interesting to note that though experts from the first phase felt that women face gender based violence in post disaster situations, none of the women in the sample acknowledged this as a problem that they faced, except they said 'some others' have faced such a problem. Secondly, mishandling of women's rights to property was another aspect that was highly emphasised during the first phase, however, none of the women from the sample mentioned this. This may be due to relocation of people to different places and many haven't received their deeds and those who are living in the same place do not see that as a problem since they feel a male in the house is the head of household anyway. However, rights to property scored a higher importance among other factors that influence women's empowerment.

Table 6.1 Women's difficulties in the post disaster phase

Type of difficulty	Subcategory	Difficulties
Internal difficulty (refer to section 5.3.2.1)	Health	Women's involvement using their excessive physical energy in construction is seen as a physically challenging work for women. This was found in both the communities' and the experts' perspectives in the field.
		Women's involvement in construction sometimes brings them physical health issues like back pain, issues in pregnancy, damage of skin, etc. and mental worries in handling the construction project especially when variations occur (due to scale of project that they need to handle, they are stressed and worried) (Women's coalition for disaster management, 2005).
		Inappropriate construction has brought hygiene problems and resulted in women and children getting sick or having increased chances of catching infectious diseases. Sometimes it also brought worries over poor quality of construction. Experts who have worked on reconstruction have also cited similar problems where women have to face health issues with regard to toilet construction and also the kitchen features (for example, where the height of the kitchen worktops was not at a suitable height for women, this has caused them severe back pains). Since most of the women spend more time at home and take care of the house maintenance these problems are bigger concerns for women.
	Knowledge and skills	Women's lack of knowledge and skills related to construction leave them at the unskilled level. Women sometimes miss the opportunities coming their way. Experts too felt the same problem within disaster affected women.

Type of difficulty	Subcategory	Difficulties	
		Both experts and communities felt that since women are lacking in their experience related to construction, their contribution becomes less. Community women felt that they need to do hard work to participate in it (Hidellage, 2008).	
		Sometimes women find it difficult to express their needs or convince the officials in receiving their support (communication skills). While some of the interviewees from the community felt that they find it difficult to convey the message, the experts felt that this is due women's suppression in the patriarchal culture. However, both experts and women mentions that some women are good in conveying their needs.	
	Personality	Women's lack of confidence and courage have hindered their development. This was quoted by many women interviewees in the second phase.	
		Women also find it difficult due to lack of encouragement from their family or others.	
External difficulty (refer to section 5.3.2.1)	Economical	Women's financial limitation is the biggest challenge than anything as it is connected with many other things. Women have found it difficult to find capital to start generating an income. Some women were not able to get loans (Enarson, 2000).	
		Whenever there was a huge variation in cost of construction from the estimated support grant, women found it difficult to manage the situation. It was noted that women from the northern province have seriously felt this problem where they are from female headed families.	
		Women felt the additional support system wasn't there to support them.	

Type of difficulty	Subcategory	Difficulties
		Women's lesser financial capacity has limited them from taking decisions at home.
	Societal	The second biggest barrier that women felt was the cultural and societal barrier. It has restricted them from getting involved in activities that could empower them (Gokhale, 2008).
		Sometimes community views on the construction image does not encourage women to get involved in construction.
	FamilyWomen's responsibility towards family and children has been quoted a women's empowerment. Women are unable to get involved in employm Although this issue persists before disasters, the amount of workload in disaster. This was highlighted in the findings from all three phases (Ariyabandu and Wickramasinghe, 2003).Women need to multi task when they need to supervise their house constru responsibilities and some women, sometimes find it difficult (Gokhale, 2008)	
The construction industry's pattern of working presents women some characteristic construction especially when they have their own family to look after.		The construction industry's pattern of working presents women some challenges to work in construction especially when they have their own family to look after.
		Their husband's attitudes and behaviours towards women going to work is another aspect that women find difficult to manage in balancing their family and getting involved in an income earning activity. Some women felt that male dominance in the culture further supresses them.

Type of difficulty	Subcategory	Difficulties
	Existing practices/other	In certain organisations which work on PDR, gender harassment has been observed and this has made women who were part of those organisations leave the organisation. Families did not like their women members being employed in those organisations due to society's views. Some women prefer not to join the organisations due to bad image created by some people.
		In certain places, women who were alone and did not have any support were totally neglected and have not got any accommodation to stay in. Although this was not a common occurrence it has been noted in a few places which were considered under the sample (World bank, 2011).
		In certain places, the shelter homes have been left as permanent homes. Some funding organisations have left certain construction works uncompleted. These were not at all appropriate for living yet people still live in those huts (an example of this problem is shown in Figure 6.1). There were many other houses in this state within the community. Those who were financially capable, rented another house while those who didn't have the capacity to rent another house stayed in these huts. Although men and women have to face this problem, women have to face this problem to a greater extent due to their securities and loss of their privacy (according to their culture). This was highlighted within the first phase of data collection (among working professionals).
		In certain instances, when communities were asked to collect their own materials and carry out the construction, women who were from female headed families found it difficult. Some women said since they did not know the contractors may cheat in the management of their

Type of difficulty	Subcategory	Difficulties
		house construction. Although many women from communities who did not face this issue for themselves they knew instances where it had happened to others. One of the experts from a contracting company too acknowledged that this difficulty did exist among female headed households where they did not have any other support.

6.2.2 Why post disaster reconstruction?

PDR is a process which is an interaction between complex social, technological and economic factors that could act as a platform to not only develops disaster affected segments but also the entire community (refer to section 2.2.3). Accordingly, in investigating the potential that PDR holds for women's empowerment, this section presents the opportunities that PDR could offer to the communities, and especially women, and the obstacles that it could bring to the context of investigation. Table 6.2 presents the above findings from the analysis carried out in chapter 5 (see section 5.3.2.2). Figures 6.2 and 6.3 show the state of a reconstructed house and wrong housing design for the affected communities.



Figure 6.2 State of incomplete housing construction after PDR



Figure 6.3 Result of unsuitable housing design for communities

Table 6.2 Post Disaster Reconstruction

PDR	Subcategory	Opportunities/ Obstacles
Opportunities (refer to section 5.3.2.2)	At household level	PDR has given better permanent housing for communities. Women felt that they are in better accommodation with facilities.
		It has offered training and development for women. It has also facilitated to develop their knowledge and skills.
		PDR has given women the experience on housing reconstruction. This could be used for future purposes.
		Since PDR has given the experience on different aspects of life especially after a disaster, it has developed women's confidence. Women felt that they are seeing a new world now and they can do things on their own rather than depending on others. This was highlighted by both communities and experts.
		PDR could offer job opportunities to women within construction, onsite or offsite. In addition, it can provide opportunities to women on other sectors which are part of reconstruction's supply chain.
		It can provide support for women's self-employment within PDR such as providing machines for bricks or block making.

PDR	Subcategory	Opportunities/ Obstacles
		PDR has enhanced communities' standard of living and thus, women's lives have become better in many places.
		PDR has facilitated in improving families' household income
		In certain places it has provided women with property rights, especially those who were living within a buffer zone were allocated with land inland. The officials have given the ownership of land and property in a joint ownership between men and women.
		PDR has offered additional support for reconstruction and livelihood for female headed households. This has assisted their involvement in PDR.
		Those who have received permanent housing and other support for living (after disasters) have felt that PDR has brought them some happiness although the lives lost in the disaster cannot be overcome.
	At community level	PDR has offered communities with new community buildings and infrastructures in certain places. Infrastructures included roads, medical clinics, community society's office building, temple/mosque/church, etc.
		It has given an opportunity to share the experience and their knowledge with other members of the community. This has developed a community engagement culture and improved women's personalities as well.

PDR	Subcategory	Opportunities/ Obstacles
Obstacles (refer to section 5.3.2.2)	At household level	In many places, the PDR has left incomplete or poor quality buildings (refer to Figure 6.2) (Jones, 2006). Although PDR intends to provide good quality houses, the people involved in reconstruction have not managed the reconstruction properly. Some of the funding organisations have mismanaged or misused the funds (and left these types of constructions) then fled. This has created permanent problems for many. Those who gave their own lands now have to go and stay in another place if they can't finish their construction. In one particular community in the sample, there is no chimney in the house and hence women cannot cook inside the house. Thus, they have constructed a temporary hut for cooking (See a lady cooking outside the house while it is raining outside, in Figure 6.3).
		Communities complained that certain aspects of their housing plan are not appropriate to their living style (for example, toilet and kitchen next to each other, etc.). Especially people from northern and eastern provinces said that their normal customary procedures are not adhered to in house reconstruction. Due to their ideology, the wrong house design construction can create negative effects on families. This has created lots of concerns within the communities. Some women said that their normal living pattern has changed. Those who were relocated had to change their type of employment and sometimes had to go faraway places for medical or other services.

PDR	Subcategory	Opportunities/ Obstacles
		Some community members felt that they were neglected from the given support. A few ladies who are alone felt that they were not given any support since they are alone. Some of the officials said that it was not worth giving a whole house to a single person. They were asked to stay with others.
		Some women felt that PDR couldn't offer them any support for employment. Since they have lost their husbands they are in a more vulnerable state. Providing only housing may not solve their problems in the long run. This was highlighted by many interviewees in the second phase.
	At community level	Although many organisations were involved in building community infrastructure, some of the communities felt that there wasn't any support for their community infrastructure, thus they were unable to hold a meeting in a common place (Hidellage, 2008). Mainly those who were relocated were the participants, who complained about this. Some women complained that since they were relocated to a new place their daughters are unable to go to school due to its distance from their homes. Sometimes when their children miss studies they cannot catch up later as there aren't any other ways for them to send them for tuition. Hence, having a school or a building where a person from their local community can teach them is preferable to nothing at all.
		In one of the communities, women complained that PDR has brought some security issues and social issues due to inappropriate community buildings that were not constructed for its purpose.

6.2.3 Practices on women's empowerment and its issues

In Sri Lanka, although there are no specific national legislations on women's empowerment it does have a ministry on women's affairs. In addition, Sri Lanka has certain legal provisions within other legislations, polices and committees which can contribute to women's empowerment, such as, the Domestic Violence Act, human rights constitutions, the Women's charter, the National committee for women, the Women's bureau, the Tsunami Act, etc. However, the study found that even though polices are gender neutral, they are not gender sensitive enough. In addition, the international bill on women's rights, Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) serves as an important guiding document for gender sensitive approaches.

It was also found from the analysis of data collected from all three phases, that there aren't any particular government policies on women's empowerment during PDR in Sri Lanka. Further, the specific clauses in acts, committees, policy, and international convention with regard to women's empowerment are hardly known to communities, except the government's initiation on gender based violence in adhering to the international call. Women hardly knew about any practices from local or central government on women's empowerment, although there is a ministry for this. It was highlighted in the interviews with experts that dissemination of any legal information is mainly restricted to the capital of the country.

However, it was noted that women were aware about the practices that their individual community women's society activities and some are aware about the practices that the funding bodies are implementing within their reconstruction. Unless it is a definite requirement for the organisations that deal with the reconstruction process, following the practices at ground level, it would be a hard task for many (as it was highlighted in the first phase of the findings). Since it involves cost and time for reconstruction processes in adopting a practice which will support women's empowerment, it is a challenge that needs to be looked into. This indicates the importance of having gender sensitive approaches to post disaster reconstruction from the government at the community level or resident level using local community's societies and adopting practices that would encourage the stakeholders of reconstruction to adhere to them.

6.3 Integrating women's empowerment into post disaster construction

The above sections presented the findings on the need for women's empowerment in PDR by reporting the findings on women's status in post disaster situations and the opportunities that PDR could bring to women. In addition, the obstacles that PDR could also leave behind were presented. This section presents the factors that experts and communities felt could influence women's empowerment and the roles that community felt that women could do.

6.3.1 Factors influencing women's empowerment

This section looks at the factors that could influence women's empowerment. Table 6.3 reports the factors that enable or hinder women's empowerment. These are the factors that the communities felt would help the process of empowerment for women in PDR. Therefore, these factors need to be considered during the strategy formulation. Although it may not be possible to provide support for each and every factor, the government can consider the factors that are of priority for each community while providing its support.

Type of factors	Enablers	Hindrances
Economical factors (refer to section 5.3.2.3)	 Financial support in terms of money or capital or equipment Support for women's employment Job opportunities 	 Lack of capital Family's financial problems or status Less or no opportunities for job Community's status No further support to actually empower women
Educational factors (refer to section 5.3.2.3)	 Awareness programmes on women's rights and property rights Education 	 Lack of education Issues in women's ability to manage finance

Table 6.3 Influencing factors	on women's empowerment
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Type of factors	Enablers	Hindrances
	 Training and guidance Encouragement from inspirational people or role models 	
Socio cultural factors (refer to section 5.3.1.2)	 Provide equal opportunities Support from family Having women working as professionals on construction sites Approach to women's empowerment within the community (that can be entrusted by women and their families) 	 Cultural barriers and society's perspectives Women's security issues Gender harassment Family and children's responsibility Barriers from others No support from others
Personal factors (refer to section 5.3.2.3)	 Women's willingness to work towards their empowerment Women having courage and confidence in themselves Women's ability to work together 	
Others (refer to section 5.3.2.3)	 Forming a society for women in their community Enhanced community's status where women reside Women's easy access to their health service Women's proximity to the place where they engage in their empowering activities 	

6.3.2 Women's roles in post disaster reconstruction

Women's roles during PDR are presented under three phases: pre-construction; during reconstruction and post-reconstruction. It was noted in the study that many women are willing to provide suggestions on house plans and internal decorations. Women have also contributed to pre-construction activities such as clearing construction sites and cleaning materials for construction. Women could also provide information about their requirements, life style, and ideas for their houses.

During reconstruction, women were mostly seen doing unskilled work. The study found that women got involved in unskilled labour work in reconstruction like carrying sand, aggregates, clearing sites before construction, cleaning construction site, cleaning old roof tiles, organising and arranging religious customary activities involved in reconstruction according to their culture, preparing food for construction workers, etc. It was noted in the study that many women were interested in joining reconstruction activities, saying that if they had been offered the opportunity, they would have been willing to participate in it. This shows that women are a bit reluctant to enter construction because it does not give a welcoming image to women. Further, women also mentioned that if they are offered training on painting, designing for decoration, designing blocks, wiring, mixing cement mixtures, shaping concrete blocks, mason training they would be interested in participating in this. Women have also got involved in construction of a whole community building. They have undertaken the tasks from project management to unskilled labour work.

During post-reconstruction, women were involved in deciding on purchasing furniture and other decorative items for their house. In certain places, after the structural construction, some funding organisations left the place. In this instance, women have taken the responsibility to decide on interior decorations and with the support from their family members, have carried out the work. Since women from these places were involved in maintaining the houses the responsibility of the constructed building was with women most of the time. Women also were involved in making modifications along with their husbands.

6.3.3 Strategy formulation

This section considers the findings on women's difficulties, the factors that influence women's empowerment, the opportunities that PDR brings into communities and the roles that women could play in PDR. In addition to the above, by considering the people's suggestions on how they would prefer to have women's empowerment, the following Table 6.4 presents the strategies that are formulated for women's empowerment in PDR. It has been formulated to address many concerns that were pointed out by the communities.

			Strategies for women's empowerment in PDR
Post Disaster Reconstruction	Pre-Reconstruction phase	At Household Level	 Promote women's involvement in reconstruction by encouraging contractors to get women's participation in reconstruction. Special arrangements can be made to award contractors for higher women's involvement as their social responsibility. Government could bring in rating schemes for funding organisations which could improve their profile for bidding purposes. The management of PDR (as a nation) needs to have a system that has decentralised units which approves the housing designs by considering the local conditions (like ground soil type, water level, weather condition, any chances and frequency of any disasters happening, community's life style, their customary procedures and beliefs, etc.) than mere approval from a central unit. This would help to overcome the unsuitable house designs for local communities. Women from disaster affected communities, and especially the ones in female headed families, need to be encouraged to attend meetings (briefing meetings) and make arrangements to hear their needs and difficulties before the reconstruction. Women's involvement can be promoted through payment for their work in pre-construction activities like clearing sites, cleaning old materials that could be reused for reconstruction.
		At Community	• Provide education on the construction process and, training in developing some softer skills like management of finance and projects; communication skills; negotiations skills; etc. through workshops

	Strategies for women's empowerment in PDR
Level	or seminars (using educational institutions and NGOs working on women's development).
	• Conduct awareness programmes that promote women's involvement in reconstruction (facilitate women
	to have exposure visits to other areas and facilitate them to meet other women who have been involved
	in construction).
	• Provide short training courses on construction trade related skills to women who are willing to get
	trained.
	• Educational and other NGOs together with government need to conduct workshops that help women to
	develop their confidence and courage to get empowered.
	• Provide leaflets and short sessions to parents and families to encourage women's participation. Provide
	adequate reasons for promoting women's empowerment in their communities. It could be done with
	other trustworthy institutions like religious institutions and leaders to gain the acceptance from the
	community much quicker.
	• Many awareness programmes need to be conducted to promote women and their families to get
	involved in reconstruction and address the issue on construction's image. Women who work on
	construction can be brought in to encourage more women's participation in the reconstruction process.
	• Women could be encouraged to produce off site construction materials like blocks, bricks and other
	decorative cement products, small wood products, etc. Equipment could be given to community
	women's societies to make the production centrally and encourage other women to participate in a
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		Strategies for women's empowerment in PDR
		 central location within the community. Initially, additional arrangements can be made to purchase those products in facilitating their production till they understand the market and demand. This could be done at all three phases of construction. Women's involvement in major decisions regarding community development activities needs to be included in the planning. Divisional offices need to encourage women's society's participation through especial encouragement or rewarding.
During Reconstruction	At Household Level	 The organisation that is involved in PDR needs to provide additional support and guidance for women who do not have any other support (in terms of financial assistance or provision of physical labour support). Government needs to bring an incentive for organisations that promote activities related to women's empowerment (in achieving the Millennium goal 3) Provide assistance in finance to complete their reconstruction through their women's society in the community. This would help to monitor the progress better. Provide adequate support for female headed families on managing the reconstruction process and its variation. Government can assist for free consultancy for these women. Women can also be encouraged to work with other construction professionals to learn on site and save some money for their house construction. PDR needs to construct the house considering the space available and allow some space for women to

	Strategies for women's empowerment in PDR
	 carry out their livelihood activities. Facilitate women to attend programmes that develop their confidence and courage. Provide counselling to women who were severely affected by disasters. In addition to construction, PDR could provide additional small constructions like shops next to a house a tent for husbandry activities, drying agricultural products, etc. This would help women to carry out an income earning activity by being at home or near to home. Women need to be made aware about their rights and property rights that they have within the post disaster phase. This could be done through local women's societies.
At Community Level	 Encourage the women's societies to register their groups with AGAs in their division. Women from these societies can undertake certain community infrastructure buildings that are normally carried out later on. Encourage women from disaster affected families to get involved in reconstruction. PDR can work with the women's society to facilitate these women to come out of their houses to get involved in reconstruction. Promote the culture of community engagement within villages. Encourage the formation of women's groups in every village through small funding assistance (probably using the local political electoral candidates).

Strategies for women's empowerment in PDR

- Conduct programmes that create awareness between community members about cultural and societal barriers. Religious and other leaders from the community can facilitate this process. Videos on addressing these cultural issues that hinder women's empowerment can be played to them. Although reconstruction may not be directly involved in this, it could help them to provide a better infrastructure to hold these programmes within the community itself. (This needs to be continued even after reconstruction, if a change is expected to happen). PDR needs to get hold of organisations like Sarvodhaya, CENWOR, etc.)
- Provide childcare facilities for women for an affordable price to allow them to get involved in an income earning activity.
- Conduct awareness programmes at community level inviting both women's husbands and parents to attend with women. This needs to be conducted in a friendly manner and also with substance to make the changes in their perspectives towards women going to work.
- Committees on dealing with gender harassments in organisations should be formed to hear any whistle blowers' thoughts and take action to remedy these problems. Community level women's society can act as a mediator between women and other external organisations dealing with this regard.
- PDR can conduct workshops and encourage women to learn a few skills at community level and facilitate use of these skills for their house construction like painting, rendering, wiring, etc.

		Strategies for women's empowerment in PDR
	At Household	• Government can allocate funding for providing short loans for low income earners (like they did for
	Level	people from shanty areas). This would help to break done the vicious cycle of poverty among these communities.
		• PDR needs to conduct post occupancy evaluation and present reports for further modifications wherever required.
		• Women who were neglected initially need to be reconsidered for further support from other sources.
uc		• PDR needs to have a committee to look after women who have not been given a permanent house and
uctio		neglected totally and, provide alternative ways to sort out their accommodation.
nstr		• Women can be encouraged to identify defaults in their house construction.
Post-Reconstruction		• Women need to be educated about the usage of new facilities in their houses.
Pos	At Community	• Government needs to bring in a unit (like RADA) that monitors the reconstruction process in order to
	Level	check the quality of construction before allowing the communities to move in (like health and safety
		regulations needs to brought in).
		• Encourage the women's bank (in Sri Lanka) to get involved in disaster affected communities. Promote
		assistance (both financially and by providing training on business development) for women's income
		earning activities, through self-groups; provide business ideas and equipment to carry out an income
		earning activity relevant for their location. PDR could provide a building for women's activities within

	Strategies for women's empowerment in PDR
	 the community. Women could be promoted to get involved in this construction. PDR needs to encourage more women construction professionals to be seen in the reconstruction sites.
	This could promote local women getting involved in reconstruction.PDR could link women's activities with media. This could encourage many women to share their
	experience with others. This could be a group empowerment approach and will encourage many more women to get involved in activities like this.
	• PDR should take action to consult communities about their new life styles and their problems in adapting to it. Wherever necessary, PDR need to work with other sectors like transport sections, medical professions and the post office in deciding whether any more construction needs to be done to provide
	the communities with sustainable and better living conditions before deciding on a community infrastructure to be allocated.

6.4 Overall research findings

The undertaken research was carried out based on the conceptual framework that was developed at the beginning of the research. Conceptual framework facilitated the researcher to identify the major areas, keys issues within the research problem and key concepts involved in the study. Following the literature review, the researcher collected empirical evidence to further analyse the research problem. Initially, the research identified the difficulties that women face in PDR and then investigated the opportunities and obstacles that PDR could bring to the communities and, established the factors that influence women's empowerment. The research also identified the roles that women play in PDR and the practices related to women's empowerment in PDR. Subsequently, the research formulated the strategies for women's empowerment in PDR. The Figure 6.4 presents a summary of the research findings which are presented in the above sections. This figure presents the research finding in connection to the developed conceptual framework.

According to the theory on women's empowerment 'existence of stratification and oppression' is the step 1 and 'conscientising' is the step 2 in the path towards women's empowerment. In the undertaken research, the identification of the difficulties that women face is represented as the step 1 in the path towards women's empowerment. While conducting the interviews to understand women's difficulties the research also was involved in the step 2, 'conscientising' (facilitated women in identifying their state). The other steps in the path towards women's empowerment: 'mobilisation'; 'maximising' and 'creating order' can be carried out through an actual implementation of the formulated strategies. The Figure 6.4 can also be treated as a framework that guides the formulation of strategies for women's empowerment in PDR.

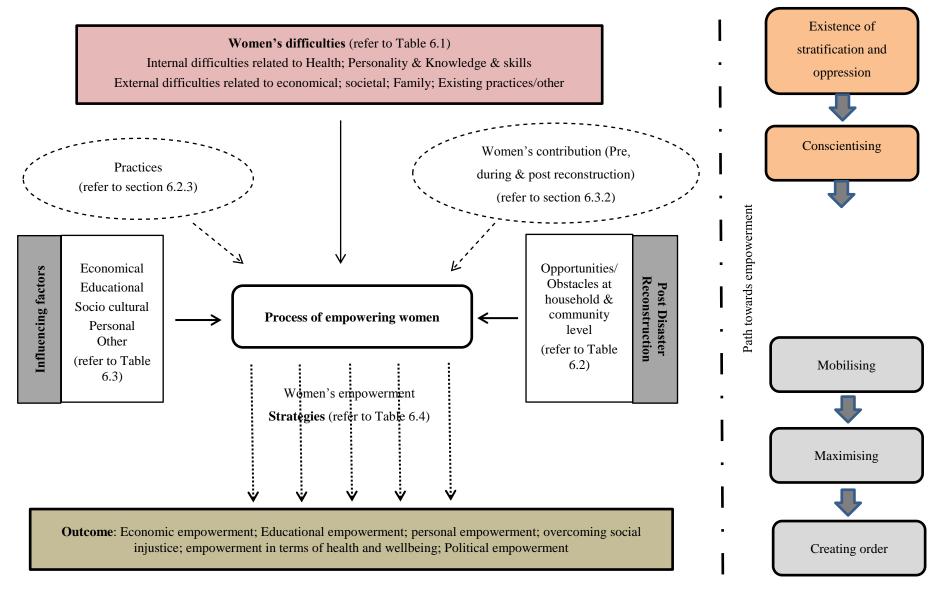


Figure 6.4 Overall research findings in connection to the conceptual framework

6.5 Summary and link

This chapter reported the findings of the research based on the empirical evidence collected through the experts' interviews and communities' interviews. The data collected through questionnaires and group interviews is used for triangulating the results with the information gathered from the literature review. Accordingly, the importance of women's empowerment and how women's empowerment could be integrated into different phases of PDR at different levels are presented in this chapter, using the results from chapter 5.

In order to explain the importance of women's empowerment, it has presented the difficulties that women face and the opportunities that PDR can offer to women to empower them, together with the obstacles. The chapter summarised the importance of women's empowerment in post disaster reconstruction by identifying the internal and external difficulties that women face during post disaster. Internal difficulties include the difficulties related to health, knowledge and skills and personal traits. While external difficulties include economical, societal, family, existing practices, etc. In addition, by identifying the opportunities and obstacles that post disaster reconstruction could bring into the households and communities the above objective was achieved. Following that, existing practices of women's empowerment within the post disaster situations were identified with the issues associated with them.

Consequently, the factors that enable or hinder women's empowerment were described in terms of economical, educational, socio-cultural and personal aspects. Furthermore, the roles that women played or could play during reconstruction were identified. Finally, the strategies that integrate women's empowerment in post diseases reconstruction were formulated and suggested for each phase of reconstruction at household level and community level. These strategies need to be considered depending on the conditions of the community which is going to be developed and the needs of people. The conceptual framework for the research can now be completed with the information as shown in Figure 6.4. The next chapter will draw the conclusions, highlight the contributions of this research, the limitations of the study and finally suggest further research.

CHAPTER 7 CONCLUSIONS

7.1 Introduction

The thesis comprised of seven chapters and commenced with an introduction to the thesis in chapter 1. Chapter 2 presented the critical literature review of the research, chapter 3 illustrated the research methodology i.e. the entire research process of the study. Thereafter, chapter 4 presented the conceptual framework for the research and chapter 5 presented the analysis of empirical data gathered from experts and communities. Subsequently, the findings derived from the data analysis carried out in chapter 5 were reported under chapter 6. Finally, this chapter summarises the conclusions of the thesis.

In this chapter, firstly, it presents the summary of the research aim and objectives of the research followed by the key findings for each objective being presented. Thereafter, the contribution from the research to theory and practice are presented. Finally, this chapter sets out possible further research studies from this research and summarises the chapter.

7.2 Summary of research aim and objectives

The research explored and investigated the concept of empowerment for women within post disaster reconstruction, in order to formulate strategies that integrate community women's empowerment during disaster reconstruction activities. In achieving this aim, the research specifically investigated the status of women in post disaster situations and how they could be empowered using PDR activities. Accordingly, the following objectives were developed and examined through literature review and empirical investigations.

- Understand the concept of empowerment for women
- Determine the importance of women's empowerment during PDR
- Establish the key factors which influence women's empowerment
- Explore and investigate the current practices of women's empowerment within PDR
- Formulate strategies to integrate women's empowerment during PDR

7.3 Summary of key finings

Chapter 6 presented the findings of the research. The summary of key findings of the research are presented under each objective in this section.

7.3.1 Objective 1: Understand the concept of empowerment for women

Objective 1 focused on understanding the concept of empowerment and it was carried out through a thorough review of literature. The review of literature on the origins of the concept of empowerment traces back to the Brazilian humanitarian and educator, Paulo Freire's work, when he proposed a plan for liberating the oppressed people through education.

The term empowerment has been defined in several ways across many disciplines, and empowerment as a concept is open to a number of different interpretations for different contexts. Empowerment has been referred as encouraging people to make decisions and initiate actions with less control and direction. In addition, it has been collectively defined as the process of giving employees the authority to take decisions, relating to their work processes and functions, and within the limits provided by management, but requiring them to assume full responsibility and risk for their actions (within construction organisations). Empowerment is also seen from two different perspectives: a cognition (psychological approach) or social act (sociological approach). Empowerment is viewed as a process, an outcome, or both.

Empowerment is understood from different dimensions such as; sociological, psychological, economical, political and other dimensions. In addition, empowerment could happen at individual level or collective level. The process of empowerment has been analysed into five progressive stages: identification of an existing social disturbance, conscientising, mobilising, maximising, and creating a new order.

As mentioned above, empowerment has two aspects: personal empowerment and collective empowerment and each has its own components. Individual empowerment components are: meaning, competence, self-determination and impact, while in the collective level it has: collective belonging, involvement in the community, control over organisation in the community and community building. Individual empowerment aims to

achieve a state of liberation strong enough to impact one's power in life, community and society. On the other hand, collective empowerment attempts to establish community building where the members of the community can feel a sense of freedom, belonging, and power that can lead to constructive social change.

The concept of empowerment for women begins from the understanding that those women who have been denied the ability to make strategic life choices can acquire such ability through this concept in terms of three interrelated dimensions: resources (preconditions), agency (process) and achievements (outcomes). Women's empowerment can be viewed as an outcome of a process whereby individual attitudes and capabilities, combined with collaborative actions, and reciprocally influenced by resources, results in a transformation to the desired achievements.

While explaining about empowerment within developing countries and developed countries, this thesis differentiates the view of the concept by its contextual factors such as culture, beliefs, and regulatory frameworks. Furthermore, female submission and their restricted mobility in certain places of developing countries emphasises the need to address women's problems, especially in rural communities whereas, in developed countries, the concept on women's empowerment is viewed in terms of women's economic and social independence. Women's empowerment is viewed as a means of creating equality of opportunity and equity of outcomes for women in developed countries. In this context, the undertaken research views women's empowerment as both an outcome and a process by which women can gain power to diminish any negative internal or external forces to their development, and improve their status in terms of economical, political and social conditions.

7.3.2 Objective 2: Determine the importance of women's empowerment during post disaster reconstruction

Objective two was achieved through literature review, experts' semi-structured interviews and questionnaires. The importance behind women's empowerment was initially understood from the literature and then through experts' perspectives. Following that, the empirical evidence on the importance of women's empowerment in PDR that was gathered in the first phase was further triangulated by using questionnaires conducted among disaster affected community members. Through this process, the study identified many reasons behind the importance of implementing women's empowerment in PDR. The research found that both experts and communities feel that empowerment of women could help women to obtain financial support; emphasise the need for inclusion of women in PDR; increase self-reliance and decrease women's dependency on others (which sometimes leads them to a more vulnerable state); provide sustainable income generation for living expenses (for women and others who depend on them); distract from worries on loss of loved ones, and develop their courage to live; and to improve their ability especially to express their needs and difficulties. In addition, it will help to reduce GBV (in terms of their health and verbal assault) more generally. Although many community women did not accept GBV as a reason for their need to empower themselves, they accepted it as a reason for implementing women's empowerment.

In addition to the above, the study further identified the difficulties that women face in post disaster situations to show the need for empowering women and to set the target to address the issues through the process of empowerment (refer to chapter 6, Table 6.1). Furthermore, the research also identified the possibilities of opportunities (refer to chapter 6, Table 6.2) that PDR could bring into the communities and which could be used as a means (in addition to other factors that support women's empowerment) to empower women in PDR.

7.3.3 Objective 3: Establish the key factors that influence women's empowerment

In order to understand the application of women's empowerment in PDR, the factors that would influence women's empowerment were identified from expert interviews. Later, communities were asked to rank these factors depending on importance for their own empowerment using questionnaires. In addition, communities were asked to identify the factors that would influence their women's empowerment. This process of identification was done before the questionnaire was carried out to avoid influence on community's views from experts' views. This was later triangulated using the literature that was conducted from the beginning of the study.

The factors that would enable or hinder women's empowerment were identified from different dimensions: economical; educational; socio cultural; personal and others. Table 6.3 (refer section 6.3.1) presents the factors that enable or hinder women's empowerment under these dimensions.

7.3.4 Objective 4: Explore and investigate the current practices of women's empowerment within post disaster reconstruction

Since the study was conducted within Sri Lanka, the practices on women's empowerment in Sri Lanka were investigated. It was found that Sri Lanka does not have a specific national policy for women's empowerment in PDR. However, Sri Lanka has a ministry on women's development. There is a women's bureau in Sri Lanka which was created to be the national machinery for women's development in keeping with the state policies through socio-economic empowerment. It has different projects at grassroots level. Sri Lanka also has a national committee that works to ensure equality through gender mainstreaming, being free from harassment and ensuring conducive environment for women.

There are certain legal provisions within other legislations and polices related to women's empowerment, such as, the domestic violence act, human rights constitutions, women's charter, Tsunami act, etc. Although these polices are gender neutral, they are not gender sensitive enough. The international bill on women's rights, Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) serves as an important guiding document for gender sensitive approaches in Sri Lanka. The study found that community members from disaster affected areas are mostly not aware about these legal provisions or practices from local or central government on women's empowerment, except the government's initiation on gender based violence in order to adhere to the international committee's requirements. This indicates the issues in dissemination of legal information. It was also noted by the experts that dissemination of any legal information is the main reason behind this.

Nevertheless, it was found from interviews within communities that women are aware of the practices that are implemented by their community's women's society. With regard to reconstruction, some women are aware of the practices that their funding bodies are implementing for their reconstruction. However, it was also pointed out by communities that there are inconsistencies in the rules that these organisations practise. This shows that implementing practices at ground level is a better way than implementing centrally from the government. In addition, imposing a requirement to have practices on women's empowerment for organisations that work on reconstruction would assist this process.

7.3.5 Objective 5: Formulate strategies to integrate empowerment of women during post disaster reconstruction

By considering the above aspects on women's empowerment within the post disaster reconstruction phase, the study formulated strategies that could be recommended for implementing women's empowerment in future PDR projects. These were formulated by considering the difficulties that women face in post disaster situations and the opportunities that PDR could bring into these communities. This was further triangulated from the suggestions from the disaster affected communities (both men and women) and also the experts. The strategies were listed under different phases of reconstruction (Pre-reconstruction; during reconstruction; and post reconstruction) at household level and community level in order to attain individual empowerment and collective empowerment. The details on the strategies that were recommended from the research are listed under chapter 6, Table 6.4.

7.4 Contribution to theory

Even though women's empowerment in post disaster activities has been widely highlighted among related studies, little research has been done in the way of integrating women's empowerment in post disaster reconstruction. Furthermore, the literature hardly contains any empirical evidence on the elements in the process of women's empowerment within the reconstruction context. Hence, in order to address this gap in the knowledge domain, this study explored the difficulties that women face in post disaster situations; the opportunities and obstacles that PDR could bring into the communities; the roles that women could play in reconstruction; current practices on women's empowerment in Sri Lanka within the PDR context and the factors that influence women's empowerment. In addition, since it is important to gather women's perspectives on their own empowerment empirical evidence was collected from women (and also from men in the community to avoid any disempowerment for men) and experts who work on these disciplines. Finally, the research formulated strategies that integrate women's empowerment into post disaster reconstruction. It is expected that this contribution to the existing body of knowledge would add a greater understanding on the process of women's empowerment during PDR in Sri Lanka.

7.5 Contribution to practice

The research was mainly conducted to provide an understanding on how to integrate women's empowerment in PDR. Since it involves women's empowerment it is important to know women's perspectives on their own empowerment. Hence, the study conducted its empirical evidence collection from communities which were affected by disasters. In order to provide strategies which would be useful for the practices in PDR and also to provide a better view on the research problem for the policy makers who seek for information from grassroots level, the study has considered the views from both experts who are working in the relevant disciplines and the people who were affected by disasters. Therefore, it is believed that this contribution on the understanding of the research problem and, the formulated strategies which were also suggested by people and experts would add greater contribution to the practice including the ministry of child development and women's affairs in Sri Lanka, which is looking forward to bringing in new policies related to women's empowerment. Further, it can also help the NGOs and INGOs which are involved in women's development projects in Sri Lanka and, other research institutions.

7.6 Limitations of the study

The research undertaken has conducted questionnaires to validate the factors and importance of women's empowerment that were identified from the first phase. However, due to time and cost limitations it was conducted among 32 individual community members. Besides, the analysis of the questionnaires used descriptive analysis techniques due to the small sample size. This limited further analysis using inferential statistics which could be used for further generalisation. Furthermore, the proportion of the members from

the southern province of the country in the sample was relatively low compared to the other two provinces. Although this was rectified using previous studies it would have been better to have more interviewees from the southern province as well. This is another limitation in the sample representation of the study. Although this research developed a framework highlighting the different aspects of women's empowerment, it needs to be tested within a PDR project.

7.7 Further research

7.7.1 Application of the developed framework to a post disaster reconstruction project

As stated under section 7.6, since the developed framework was not tested and validated on an actual PDR project, so a future research could be conducted to validate the framework. In order to develop the framework further, this framework could be applied to two different projects: a project where only women are involved in PDR and a project where both men and women are involved in PDR. This could add more detail to be considered for each context.

7.7.2 Conduct the same study separately for different provinces

It was highlighted in the expert interviews that requirements of women from one province may be different to other provinces. Hence, a further similar study could be carried out in the different provinces to formulate strategies that would be more appropriate for each province. This would help the research to further focus on different ethnic groups within the same province who may be different from others on certain aspects of women's empowerment. This would help to provide more specific strategies and add further details on the developed framework for each province.

7.7.3 Consider the views of men and women separately for the same study

Although the views of men and women were gathered and analysed together in the study, it would be better to conduct the study using their views separately. This would help the organisations that work on women's empowerment to address the issues (that come across during the implementation of the concept of women's empowerment) that are created due to society's cultural norms, beliefs and practices. This would help future projects on women's empowerment to get implemented quicker at community level.

7.8 Final note

The chapter summarised the research focus and the key findings under each objective of the study that were obtained from literature, semi-structured interviews, structured interviews, questionnaires and group interviews. The research attempted the concept of empowerment for women within the context of post disaster reconstruction. Following that, the study identified the importance of women's empowerment such as: empowerment of women could help women to obtain financial support; emphasise the need for inclusion of women in PDR; increase self-reliance and decrease women's dependency on others; provide sustainable income generation for living expenses; distract from worries on loss of loved ones, and develop their courage to live; and to improve their ability especially to express their needs and difficulties. In addition, it will also help to reduce GBV.

In addition, the study identified the factors that would enable or hinder women's empowerment under different dimensions: economical; educational; socio cultural; personal and others. Finally, the research investigated the existing practices of women's empowerment within post disaster reconstruction and formulated strategies that would integrate women's empowerment for different phases of post disaster reconstruction at household level and community level. These strategies are recommended to consider for projects depending on community's needs. This would help to overcome the problems that women face, and ultimately their family and the community.

The chapter further summarised the contribution of research towards knowledge and practice. In addition, it explained the limitations of the study. Finally, the chapter outlined

the possible future research from the current study, which could further develop the practices of women's empowerment in PDR.

APPENDIX A LIST OF PUBLICATIONS

Based on the PhD research

A. Conference papers

- Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2012). 'Signals' for Women's Empowerment in Post Disaster Reconstruction. College of Science and Technology Research Showcase, 20th June 2012, Salford: University of Salford. (*Awarded for best poster presentation from School of the Built Environment*)
- Thurairajah, N. and Amaratunga, D.G. (2010) Emerging Research on Women's empowerment in Post Disaster Reconstruction. International Conference on Sustainable Built Environment (ICSBE), 12th – 14th December 2010, Kandy: University of Peradeniya.
- Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2010) Gender Inequality in Post Disaster Reconstruction: Does it prevail?, Construction, Building and Real Estate Research Conference 2008, 2nd – 3rd September 2010, Paris: The Royal Institution of Chartered Surveyors.
- Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2010) Gender Fairness in post disaster reconstruction: Role of Human rights legislations, Salford Human Rights Conference 2010 - 'Ten years on': A Multi-perspective Evaluation of the Human Rights Act', 4th – 5th June 2010, Salford: CIB.
- Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2010) Women's Empowerment in Disaster reconstruction: Critical perspectives on Policies and Frameworks, The 2010 CIB World Congress, 10th – 13th May 2010, Salford: CIB.
- Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2009) Empowering women in communities: a comparison between developed and developing countries, Conference on development and wellbeing in Sri Lanka, 2nd – 3rd April 2009, Colombo: University of Colombo.
- Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2009) Empowerment of Women in Post Disaster Reconstruction: Research methodological perspectives, 9th International Postgraduate Research Conference, 29th - 30th January 2009, Salford: Research Institute for the Built and Human Environment. (*This was awarded for best paper-Postgraduate intermediate level*)

- Thurairajah, N., Amaratunga, D.G. and Haigh, R.(2008) Enabling Women's Empowerment in Post Disaster Reconstruction, Construction, Building and Real Estate Research Conference 2008, 4th – 5th September 2008, Dublin: The Royal Institution of Chartered Surveyors.
- Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2008) Post disaster reconstruction as an opportunity for development: women's perspective, CIB W89: International Conference in Building Education and Research, 10th - 15th February 2008, Kandalama.
- Thurairajah, N. and Amaratunga, D.G. (2013) Does Post Disaster Reconstruction Empower the Affected Community?: Community's Perspective. International Conference on Building Resilience: Individual, institutional and societal coping strategies to address the challenges associated with disaster risk, 17th – 19th September 2013, Ahungalla: The University of Salford and RMIT University. (Paper submitted)

B. Journal paper

 Thurairajah, N. and Baldry, D. (2010) Women's Empowerment in Post Disaster Reconstruction: Perspectives on Policies and Frameworks. International Journal of Strategic Property Management. 14. Pp. 345-359.

C. Book chapter

 Thurairajah, N. (2011) Empowerment in disaster response and reconstruction: Role of women. In: Amaratunga, D. and Haigh, R. Post-Disaster Reconstruction of the Built Environment: Rebuilding for Resilience. Oxford: Wiley-Blackwell.

D. Magazine

1. Thurairajah, N. and Ginige, K. (2010) Disaster, Women and Empowerment: Moving Forward. *Research Innovation and Internationalisation News (RISE)*.

Other publications

A. Conference papers

- Bichard, E. and Thurairajah, N., (2011) Achieving Sustainable Retrofit: Human Barriers and Solutions, World Sustainable Building Conference, 18th – 21st October 2011, Helsinki: SB11.
- Thurairajah, N., Amaratunga, D.G. and Bichard, E., (2010) Engaging the Public in Anticipating and Mitigating the Effects of Flooding: International Perspectives, The 2010 CIB World Congress, 10th – 13th May 2010, Salford: CIB.

- Thurairajah, N., Ginige, K., Amaratunga, D.G. and Haigh, R. (2010) Meliorating Women's Representation within Leadership positions in the UK Construction Industry, The 2010 CIB World Congress, 10th – 13th May 2010, Salford: CIB.
- Ginige, K.N., Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2008) Role of women leaders in the UK construction industry and their career barriers, CIB W89: International Conference in Building Education and Research, 10th - 15th February 2008, Kandalama.
- Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2007) Confronting Barriers to women in leadership positions: A study on Construction industry, 7th International Postgraduate Research Conference, 28th - 29th March 2007, Salford: Research Institute for the Built and Human Environment.
- Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2007) Study on Women Leadership in Construction Organisations, 23rd Annual Conference and Annual General Meeting, 1st – 3rd September 2007, Belfast: Association of Researchers in construction Management, 367 -376.
- Thurairajah, N., Amaratunga, D.G. and Haigh, R. (2007) Women's Educational Attainment and their Experiences in Construction Education, The 3rd Annual Built Environment Education Conference, 12th - 13th September 2007, Salford: Centre for Education in the Built Environment.

B. Journal papers

- Bichard, E. and Thurairajah, N. (2013) Behaviour Change Strategies for Energy Efficiency in Owner-occupied Housing. Construction Innovation: Information, Process, Management. 13(2). Pp. 165-185
- Bichard, E. and Thurairajah, N. (2013) Trialling Behaviour Change Strategies to Motivate Interest in Property Level Flood Protection. International Journal of Disaster Resilience in the Built Environment (accepted for publication)
- Ginige, K., Amaratunga, D.G., Haigh, R. and Thurairajah, N. (2008) Importance of women leaders in the UK construction industry and the barriers to their career development. Journal for Education in the Built Environment

C. Reports

1. Bichard, E. and Thurairajah, N. (2011) Resilient Homes (Phase 2): The Timperley Green Homes trial on methods to motivate home-owners to address property-level

effects of climate change (for: Environment Agency and Trafford Borough Council), Salford: University of Salford.

2. Amaratunga, R.D.G., Haigh, R.P., Ginige, K. and Thurairajah, N. (2008) Constructing Women Leaders. Salford: University of Salford.

APPENDIX B INTERVIEW GUIDELINES FOR EXPERTS

Interview Guidelines - Experts

EMPOWERING WOMEN DURING POST DISASTER RECONSTRUCTION

The study aims to explore and investigate the concept of empowerment for women within post disaster reconstruction in order to formulate a strategy that integrates community women's empowerment during disaster reconstruction activities. Hence, study focuses on identifying the key factors which enable or hinder women's empowerment and exploring the current practices of empowerment of women within post disaster reconstruction. In order to get the overall perspective it will capture the views from individuals from the affected community and experts who are involved in disaster reconstruction, women's social and economic empowerment, and policy development.

Definition

The study uses the following definition for its concept.

Empowerment is a process by which individuals acquire the ability to make strategic life choices in terms of three interrelated dimensions that include resources (preconditions), agency (process) and achievements (outcomes).

Confidentiality

The researcher sincerely thank you for your valuable contribution to this research and ensures her assurance in maintaining the confidentiality of data. The information collected during the interview will be used for the sole purpose of the study. The findings of the study will not be attributed to any specific interviewees.

Contact details

Nirooja Thurairajah School of the Built Environment The Research Institute for the Built and Human Environment 3rd Floor, Maxwell Building The University of Salford Salford M5 4WT, UK. E-mail: <u>N.Thurairajah2@salford.ac.uk</u>

Personal Information

- 1. Job title
- 2. Type of organisation
- 3. Gender
- 4. Relevance of work experience disaster management or women's social or economic development or reconstruction

Women's status and their development in post disaster reconstruction

- Do women face any difficulties during post disaster reconstruction? If yes,
 - a. What are the difficulties that women face related to built environment? (At their household or community level)
 - b. How can these difficulties be addressed?
- 2. Does post disaster reconstruction present opportunities or obstacles to the process of women's empowerment?
 - a. If opportunities,
 - i. What are they?
 - ii. How those opportunities empower women?
 - b. If barriers, what are the barriers?

- 3. What are the other factors that can enable women's empowerment during post disaster reconstruction?
 - a. How do these factors have an influence on empowering women?
- 4. What are the other factors which can hinder women's empowerment during post disaster reconstruction?
 - a. How do these factors have an influence on empowering women?

Current policies on women's empowerment

- 1. Are there any regulations or organisational policies related to women's empowerment or post disaster reconstruction?
 - a. If yes, what are they?
 - b. How do these policies contribute to women's empowerment?
- 2. Who are involved in setting the agenda for these policies?
 - a. How community's needs and challenges are identified for these policies?
 - b. Is the community considered in the process of identification?
 - i. If yes, how it has been incorporated in policy development?
 - ii. If no, how the needs and challenges are identified?
- 3. Who are involved in implementing these polices in practice?
 - a. Is the community involved in implementing these policies in practice?
 - i. If yes, how are they contributing in implementation these policies?
 - ii. If no,
 - 1. Who are involved in this?
 - 2. What are the benefits and problems of others involvement?
- 4. Are the current policies related to women's empowerment implemented successfully?
 - a. If yes, what are the factors contributing to their success?
 - b. If no, what are the problems associated with these policies?
- 5. Have community's issues/concerns regarding the policies been considered for further modification?
 - a. If yes, how it is done?
 - b. If no, what are the sources/parties who can help to overcome this situation?

APPENDIX C INSTRUCTIONS FOR INTERVIEWS

EMPOWERING WOMEN DURING POST DISASTER RECONSTRUCTION

The interview is part of a research study which aims to explore the difficulties that women face within the post disaster reconstruction and investigate the application of the concept of empowerment for women in the post disaster reconstruction. In order to capture the overall perspective, the study seeks for the opinions from women and men who were affected by natural disasters and, experts who are involved in disaster reconstruction, women's social and economic empowerment and policy development.

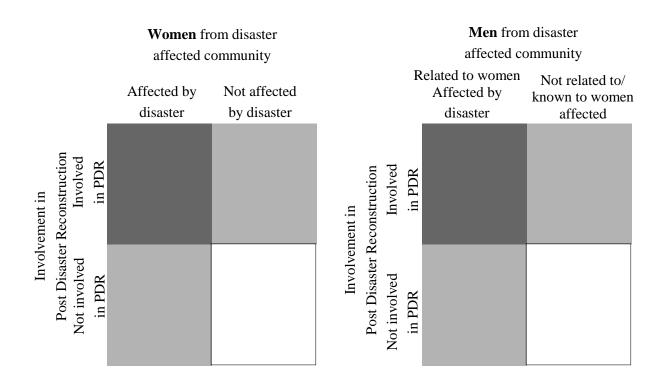
Explanations for the terms used in this study

Empowerment is a process of *giving women the authority* to take strategic decisions, relating to their *personal and work* functions and, *building capacities* leading to greater participation and greater decision-making power and control in order *to result in a transformation to desired achievements* from post disaster reconstruction.

Post disaster reconstruction includes *planning and management of the construction of structures* (buildings, highways, bridges, railroads, dams, etc.) after a disaster. The rebuilding process can not only reconstruct the impacted areas, but also to improve the socio-economic and physical conditions of the disaster impacted population.

Who can participate for this interview?

If you are a member of the community (women or men) that was affected by natural disasters and have involved in the post disaster reconstruction of your community, you are welcome to take part in this interview. For more information on whether you could participate in this interview please refer the diagrams below. If you fall under any of the categories that are indicated by the *shaded areas please mark your category* and proceed to questions.



What do you need to do next?

- 1. Please read the instructions given in this document (Instructions for interviews) and tick your appropriate category
- 2. You could read the study brief to gain more understanding on the research study
- 3. Please complete your consent form before proceeding to the interview
- 4. Finally please contribute to this study by sharing your experience and opinions by answering to questions in the 'Interview guideline' and 'Additional questions'

Confidentiality

The researcher sincerely thank you for your valuable contribution to this research and ensures her assurance in maintaining the confidentiality of data. The information collected during the interview will be used for the sole purpose of the study. The findings of the study will not be attributed to any specific interviewees.

Contact details

Nirooja Thurairajah

School of the Built Environment - Maxwell Building

The University of Salford, Salford M5 4WT, UK.

E-mail: N.Thurairajah2@salford.ac.uk

APPENDIX D PHD RESEARCH BRIEF

EMPOWERING WOMEN DURING POST DISASTER RECONSTRUCTION

Research overview:

The study aims to explore and investigate the concept of empowerment for women within the context of post disaster reconstruction. The current status of women's unequal access to resources, limited rights to decision-making and limited participation in post disaster bespeaks the need for empowering women who are from the affected community during post disaster reconstruction.

Research objectives:

- Understand the concept of empowerment for women
- Determine the importance of women's empowerment during post disaster reconstruction
- Establish the key factors which enable or hinder women's empowerment during post disaster reconstruction
- Explore and investigate the current practices of empowerment of women during post disaster reconstruction
- Formulate strategies to integrate empowerment of women during post disaster reconstruction

Data collection:

Data collection will be based on two phases:

- First phase gathered experts' opinions on women's current status, state of the concept of empowerment, factors affecting or enabling empowerment, etc. through interviews and document reviews
- Second phase will gather data from the affected community on the difficulties that women face, importance of women's empowerment and its enablers and hindrances, the existing measures for women's empowerment and its problems in the post disaster reconstruction through interviews and document reviews

Expected outcomes:

This research tries to provide an understanding on the process of women's empowerment in post disaster reconstruction and to formulate a strategy that integrates women's empowerment into post disaster reconstruction activities. Post natural disaster settings in Sri Lanka will be used as the overall basis for this study.

Supervisors:

Researcher:

Prof. Dilanthi Amaratunga E-mail: <u>R.D.G.Amaratunga@salford.ac.uk</u> Nirooja Thurairajah

E-mail: N.Thurairajah2@salford.ac.uk

Dr. Richard Haigh

E-mail: <u>R.P.Haigh@salford.ac.uk</u>

School of the Built Environment 3rd Floor, Maxwell Building The University of Salford Salford M5 4WT, UK.

APPENDIX E CONSENT FORM

Research Participant Consent Form

Title of Project: Empowering Women during Post disaster Reconstruction

Name of Researcher: Nirooja Thurairajah

Name of Supervisors: Prof. Dilanthi Amaratunga & Dr. Richard Haigh

(Delete as appropriate)

- I confirm that I have read and understood the information sheet for the above study and what my contribution will be.
- I have been given the opportunity to ask questions (face to face, via telephone and e-mail)
- > I agree to take part in the interview
- > I agree to the interview being tape recorded
- I agree to digital images being taken during the research exercises
- I understand that my participation is voluntary and that I can withdraw from the research at any time without giving any reason
- > I agree to take part in the above study

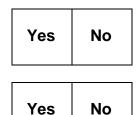
Name of participant

Signature

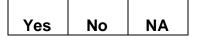
Date

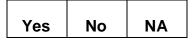
Name of researcher Nirooja Thurairajah

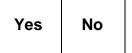
Researcher's e-mail N.Thurairajah2@salford.ac.uk address

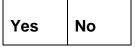












APPENDIX F INTERVIEW GUIDELINES FOR MEN

Section 01 - Personal Information

- 1. Gender:
- 2. Age:
- 3. Can you briefly state your experience that could be related to this study. (Your experience that familiarised you to the experience that women face during the post disaster reconstruction and/or your involvement in the post disaster reconstruction)

Section 02 - Women's status and their development in the post disaster reconstruction

1. Do women face any difficulties during the post disaster reconstruction?

If yes,

c. What are the difficulties that women face, which are *related to construction of houses/infrastructures* during the following stages (at different levels)?

Stages	At household level	At community level
During planning and		
designing of reconstruction		
(eg: Appraisal, Design brief,		
Designing, pre-construction		
activities including tendering)		
During reconstruction		
process		
(eg: Mobilisation, construction to		
practical completion)		
During most manufical		
During post practical		
completion		
(eg: Final inspection of		
construction Assisting occupancy)		

2. Does post disaster reconstruction provide opportunities or present obstacles *to women or women's empowerment* (personal/career related development)?

Opportunities	Obstacles

3. What are the roles that women could play in the post disaster reconstruction during the following stages (at different levels)?

Stages	Roles - at household level	Roles - at community level
During planning and		
designing of		
reconstruction		
(eg: Appraisal, Design brief,		
Designing, pre-construction		
activities including tendering)		
During reconstruction		
process		
(eg: Mobilisation, construction		
to practical completion)		
During post practical		
completion		
(eg: Final inspection of		
construction Assisting		
occupancy)		

4. Do any roles stated above (Q 3) could address any problems that you have stated above (Q1 & Q2) or enhance women's position from their current status? (If yes, please state them)

Roles	Problems

- 5. What are the other factors which can *enable* women's empowerment during the post disaster reconstruction?
- 6. What are the other factors which can *hinder* women's empowerment during the post disaster reconstruction?

Please provide the answers for question 5 & 6 in the following table

Enabling factors	Hindering factors

Section 03 - Current Policies on Women's Empowerment

1. Are you aware of any policies/act/regulations related to the following?

If yes, please state them under different areas mentioned below.

Women's empowerment/ development/	Disaster management (within post
gender aspects	disaster reconstruction)

If no, please omit the following question (2)

 Did you get any opportunity to use any of the above policies/regulations in post disaster reconstruction or to have known any instances where those were used for women? (Please state the incidents)

If yes,

- a. Are you aware of any issues/concerns regarding the policies that had been considered for above incidents?
- b. Do you have any suggestions for further modification?

Section 04 – General

1. Do you have any other suggestions on enhancing women's empowerment during the post disaster reconstruction?

APPENDIX G INTERVIEW GUIDELINES FOR WOMEN

Section 01 - Personal Information

- 1. Gender:
- 2. Age:
- 3. Civil status:
- 4. Number of dependants on you:
 - a. Children (number) -
 - b. Others (number) -

5.	Are y	you employed (Please circle the answer):	Yes	No
6.	Spou	se's details		
	a.	Employed (Please circle the answer):	Yes	No
	b.	Are you dependant on his employment (Plea	ase circle the an	swer):
			Yes	No

7. Level of educational qualifications:

Please tick the appropriate	Level of education
	Primary education
	Secondary education
Tertiary education	
	Certificate/ Diploma
	Vocational education and training
	Bachelor's degree
	Master's degree/ Doctorate

8. Can you describe your experience in participating in any decision making activities during the post disaster reconstruction at the following levels (it can be in terms of your personal or work life functions)

At household level	At community level

Section 02 - Women's status and their development in the post disaster reconstruction

- Do women face any difficulties during the post disaster reconstruction? If yes,
 - d. What are the difficulties that women face, which are *related to construction of houses/infrastructures* during the following stages (at different levels)?

Stages	At household level	At community level
During planning and		
designing of		
reconstruction		
(eg: Appraisal, Design brief,		
Designing, pre-construction		
activities including tendering)		
During reconstruction		
process		
(eg: Mobilisation,		
construction to practical		
completion)		
During post practical		
completion		

Stages	At household level	At community level
(eg: Final inspection of		
construction Assisting		
occupancy)		

2. Does post disaster reconstruction provide opportunities or present obstacles *to women or women's empowerment* (personal/career related development)?

Opportunities	Obstacles

3. What are the roles that women could play in the post disaster reconstruction during the following stages (at different levels)?

Stages	Roles - at household level	Roles - at community level
During planning and		
designing of		
reconstruction		
(eg: Appraisal, Design brief,		
Designing, pre-construction		
activities including tendering)		
During reconstruction		
process		
(eg: Mobilisation, construction		
to practical completion)		

Roles - at household level	Roles - at community level
	Roles - at household level

 Do any roles stated above (Q 3) could address any problems that you have stated above (Q1 & Q2) or enhance women's position from their current status? (If yes, please state them)

Roles	Problems/ Enhancement

- 5. What are the other factors which can *enable* women's empowerment during the post disaster reconstruction?
- 6. What are the other factors which can *hinder* women's empowerment during the post disaster reconstruction?

Please provide the answers for question 5 & 6 in the following table

Enabling factors	Hindering factors

Section 03 - Current Policies on Women's Empowerment

1. Are you aware of any policies/act/regulations related to the following?

If yes, please state them under different areas mentioned below.

Women's empowerment/ development/ gender aspects	Disaster management (within post disaster reconstruction)

If no, please omit the following question (2)

2. Did you get any opportunity to use any of the above policies/regulations? (Please state the incidents)

If yes,

- a. Do you have any issues/concerns regarding the policies that had been considered for above incidents?
- b. Do you have any suggestions for further modification?

Section 04 - General

1. Do you have any other suggestions on enhancing women's empowerment during the post disaster reconstruction?

APPENDIX H ADDITIONAL QUESTIONS

Women's Empowerment

- **1.** Why do you think women's empowerment is important (*Please tick the appropriate*)
 - \Box To reduce gender based violence (health & verbal assault) -
 - □ To obtain financial support (for collateral) -
 - \Box To emphasise the need for inclusion of women's needs -
 - □ To increase self-reliance (decrease the dependency) -
 - \Box Provide sustainable income generation for living for them and dependents -
 - Need to distract them from worries on loss of deaths and develop their courage to live -
 - \Box Need to improve their ability express their needs & problems -
 - □ Any other (Please state them)

2. Please rank the importance of the following factors for women's empowerment

a) Women's legal entitlement to their properties/assets

(Eg: Having their property in their name or in joint ownership)

Very low	Low	Neither	High	Very high

b) Women's access to other resources

(eg: Women have the access to financial support provided by external parties for their post disaster reconstruction)

Very low	Low	Neither	High	Very high

c) Women's economic participation such as presence in the workforce

(eg: Working in a paid job)

Very low	Low	Neither	High	Very high

 d) Quality of women's economic involvement beyond their mere presence as workers (involving in a less paid job, facing absence of upward mobility and further opportunities) –

	□ Very low		□ Neither	□ High	□ Very high	
e)	Women's participation in their household income					
	(eg: Women's co	ontribution to t	heir family income	2)		
	□ Very low		□ Neither	□ High	□ Very high	
f)	decision making	structures (bo	ent in terms of equi th formal and infor ng their societies –	-	tation of women in ce in the	
	□ Very low		□ Neither	□ High	□ Very high	
g)	Women's partici	pation in hous	ehold decision mak	king		
	(eg: Taking decis	sions regarding	g purchasing or dis	posing of asse	ts)	
	□ Very low		□ Neither	□ High	□ Very high	
h)	Women's coping	capacity to he	ousehold shocks			
	(eg: Women's m	ental ability to	bear sudden death	s or losses)		
	□ Very low		□ Neither	□ High	□ Very high	
i)	Women's educat	ional attainme	ent (in terms of qua	lity and conter	t of education)	
	□ Very low		□ Neither	□ High	□ Very high	
j)	Development of	women's relev	vant knowledge and	d skills		
	(eg: Providing fa	cilities to imp	rove their education	n and developi	ng skills)	
	□ Very low		□ Neither	□ High	□ Very high	

k) Women's access to health and wellbeing in terms of access to sufficient nutrition, health care, reproductive facilities, etc.

	Very low	Low	Neither	High	Very high
1)	Provision of suita	ble working e	environment/condit	ions of work	
	Very low	Low	Neither	High	Very high
m)	Support to wome	n to mitigate t	he violence agains	t women –	
	Very low	Low	Neither	High	Very high
				_	. –

Policies

 If you are aware of any Policies/Act/Committees related women's empowerment/ development/ disaster management (please tick them) and have used them for any specific instances please state them below. –

Policies/Act/Committees	Are you aware? (Heard/ Read about them)	Any instances that you have used them
Tsunami (Special Provisions) Act		
Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)		
Declaration of Violence Against Women (DEVAW)		
Women's charter (1993)		
Tsunami Housing Policy		
Women's bureau		
National committee on Women		
Any other (please state them)		

2. Please tick the appropriate if you(as a women) have encountered or as a person known to a women (who has encountered) any of the following problems

Pre-construction phase

- □ Women's voices are less (in common workshops/meetings)
- □ Cultural barriers that have not been broken
- □ Equal opportunities are not given to women
- □ Tendency of ignoring female leadership/Instructions
- □ Stereotyping
- □ Any other (Please state them).....

Construction phase

- □ Although initiatives are taken, do not remain in practice -
- \Box Insensitive nature of institutions & people who work in the implementation –
- Attitudes of people in the political area towards women's issues -
- Success of the implementation of any legislation or policy on women's empowerment
- □ Any other (Please state them).....

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