Capacity development for disaster risk reduction: Eastern Visayas, Philippines

Thomas Austin Snowbarger

September 2016

Abstract

With disaster vulnerability on the rise, interest in developing the capacity of local actors as an effective response has increased. However despite this increase in interest and a small yet growing amount of literature on the subject, what capacity development for disaster risk reduction involves and how it is implemented is still an emerging practice. This research explores how the capacity of local actors—individuals, organisations and institutions that primarily operate at the community level—can be developed to manage disaster risk and strengthen resilience.

Capacity development is a locally driven process where people and organisations obtain, strengthen, maintain and adapt their capacities in order to achieve development objectives over time. Disaster risk reduction involves reducing disaster risk through efforts to reduce exposure to hazards, lessen vulnerability and improve preparedness. The resilience concept can be understood as the ability to anticipate, avoid, plan for, cope with, recover from and adapt to shocks and stresses. This dissertation first reviews the literature to explore the capacity development, disaster risk reduction and resilience concepts and their application.
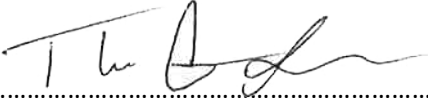
In order to better understand and critically evaluate how capacity development is done in practice, primary qualitative research was conducted in the Philippines with focus on the Eastern Visayas region, which was devastated by Typhoon Haiyan (locally known as Yolanda) in 2013. Typhoon Yolanda was a new kind of disaster event that resulted in unprecedented destruction. In this context of change and uncertainty, traditional ways of developing capacity and reducing disaster risk may not be sufficient. The research highlights the need to focus on strengthening resilience-oriented capacities that equip people to take advantage of change and adapt to it, while encouraging learning.

Based on the findings the following 10 recommendations are proposed for organisations and practitioners seeking to develop the capacity of local actors for disaster risk reduction:
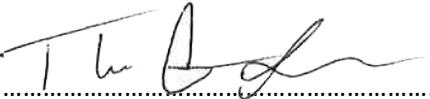
1. Invest in prevention and mitigation, not only response and preparedness
2. Strengthen technical and functional capacities
3. Improve absorptive capacity by investing in livelihood groups
4. Focus on adaptive capacity
5. Support the emergence of learning
6. Conduct capacity assessments early and use them to inform programme activities
7. Use a variety of activities to develop capacity
8. Plan ahead for capacity and knowledge retention
9. Ensure DRR plans consider long-term risks
10. Be humble

Statement of Originality

This thesis is the result of my own independent work/investigation, except where otherwise stated. Other sources are acknowledged by explicit references.

Signed .... (candidate)   Date 26/09/2016

I hereby give consent for my thesis, if accepted, to be available for photocopying and for inter-library loan, and for the title and summary to be made available to outside organisations.

Signed .... (candidate)   Date 26/09/2016

Statement of Ethics Review Approval

This dissertation involved human participants. A Form TDE E1 (and TDE E2 if applicable) for each group of participants, showing ethics review approval, has been attached to this dissertation in Appendix 4.

Contents

List of figures and tables

Acknowledgements

Acronyms

CBDRRM	Community-Based Disaster Risk Reduction and Management
CCA	Climate Change Adaptation
CD	Capacity Development
CDP	Center for Disaster Preparedness
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRRM	Disaster Risk Reduction and Management
FGD	Focus Group Discussion
FH	Food for the Hungry
HDI	Human Development Index
HFA	Hyogo Framework for Action
LGU	Local Government Unit
NGO	Non-Government Organisation
OECD	Organisation for Economic Co-operation and Development
PCMN	Philippines Children's Ministries Network
PHILRADS	Philippine Relief and Development Services
PWD	Persons With Disabilities
SFDRR	Sendai Framework for Disaster Risk Reduction
ToT	Training of Trainers
UNDP	United Nations Development Programme
UNISDR	United Nations International Strategy for Disaster Reduction
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
WBI	World Bank Institute

Key Terms

Adaptive capacity
"The ability of social systems to adapt to multiple, long-term and future climate change risks, and also to learn and adjust after a disaster (Bahadur *et al.,* 2015, p.13)"

Barangay
The smallest administrative division in the Philippines

Capacity
"The ability of people, organisations and society as a whole to manage their affairs successfully (OECD, 2006, p.12)"

Capacity development
"A locally driven change process through which individuals, organisations and institutions obtain, strengthen, maintain and adapt their capacities to set and achieve their own development objectives over time and learn from their efforts (Hagelsteen and Burke, 2016, p.44)"

Disaster risk reduction
"The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events (UNISDR, 2009, pp.10-11)"

Local Government Unit
Local government in the Philippines composed of Provinces, Cities, Municipalities, and Barangays (Few *et al.*, 2015b, p.13)

Municipality
A subsidiary of the Province that consists of a number of Barangays within its territorial boundaries (PSA, no date)

Resilience
"The ability to anticipate, avoid, plan for, cope with, recover from and adapt to (climate related) shocks and stresses (DFID, 2014, p.4)"

Vulnerability
"The characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of natural hazard (Wisner *et al.,* 2004, p.11)"

1   Introduction

Globally, the frequency of natural disasters and the human and economic costs that result are on the rise. According to the Centre for Research on the Epidemiology of Disasters (CRED, 2015) total disaster occurrences increased between 1994 and 2013, led by a sustained rise in climate-related events such as floods and storms. This has led to greater acknowledgement of the need to develop capacity for reducing and managing disaster risk (Scott *et al.*, 2014).

However despite this recognition, "knowledge about capacity development, what it involves and what works in practice is still an emerging practice (Hagelsteen and Burke, 2016, p.43)." This research seeks to contribute to this emerging practice by exploring how the capacity of local actors in particular can be developed to manage disaster risk and strengthen resilience. Local actors—individuals, organisations and institutions that primarily operate at the community level—are well placed to find solutions that reduce risk because of their understanding of context (IFRC, 2015b, p.8). They also often bear the brunt of disasters and therefore developing their capacity is essential.

In order to better understand how capacity development (CD) is done in practice, the Philippines was chosen as an area of focus with special attention on the Eastern Visayas region. The country experiences 20 typhoons a year on average (ADRC, no date) and according to the 2015 World Risk Report, ranks third globally in terms of disaster risk (Bündnis Entwicklung Hilft and UNU-EHS, 2016). The country is also recognised for its experience and capacity in managing disasters. In 2013 Typhoon Haiyan (locally known as Yolanda[1]) swept through the Central Philippines killing more than 6,000 people and affecting 14 million (OCHA, 2013). The typhoon made landfall in Eastern Visayas and coastal communities in this region were heavily affected. Capacity development has become an area of focus for some non-government organisations (NGOs) since Yolanda. For these reasons the Philippines is ideal for studying the application of CD and learning from local actors about their experiences and knowledge.

This research was facilitated and funded by Tearfund UK and Tear Netherlands who are faith based organisations that work through international and national partner organisations to implement a wide range of development and humanitarian programmes in the Philippines. Interviews and focus group discussions (FGD) were organised by four Tearfund and Tear partner organisations who were engaged in relief operations following Typhoon Yolanda and who since have implemented programmes with CD and DRR components in Eastern Visayas. The primary stakeholders targeted by these organisations for CD include children, youth, parents, local government officials, vulnerable people groups, community volunteers, and church workers.

The aim of this research is to explore how the capacity of local actors can be developed to manage disaster risk and strengthen resilience. Using primary and secondary research methods the following questions were examined in the context of Eastern Visayas, Philippines:

1. What approaches are currently being used to develop the capacity of local actors to manage disaster risk?
2. To what extent is disaster risk reduction (DRR) a priority for local actors and what components of the concept are most valued?
3. To what extent are investments in CD sustained and maintained over time and do these investments result in reduced risk?
4. What are the challenges of developing capacity for DRR at the local level?

---

[1] This paper will use Yolanda from here forward except when quoting a source or referring to literature that uses Haiyan.

5. What are the characteristics of effective CD interventions in the context of DRR?
6. What is the appropriate role for external actors engaging in DRR capacity development for local actors?

2 Research methodology

Primary and secondary research methods

Primary research was conducted in the Philippines with special focus on the region of Eastern Visayas, which includes the Provinces of Eastern Samar, Samar and Leyte. Three weeks were spent in the Philippines from mid-July to early August 2016; two weeks in Eastern Visayas (Figure 1) and one week in Manila. During this time 19 semi-structured interviews were conducted, 11 with local actors and eight with key informants. The local actors interviewed were involved in CD and DRR programmes implemented by Tearfund and Tear partners and included local government officials, livelihood and savings group members and Christian church leaders. The key informants were international and national NGO staff with specific knowledge about CD or DRR. All interviews took place in person except for one key informant interview conducted by telephone.

Figure 1: Map of Municipalities visited in Eastern Visayas
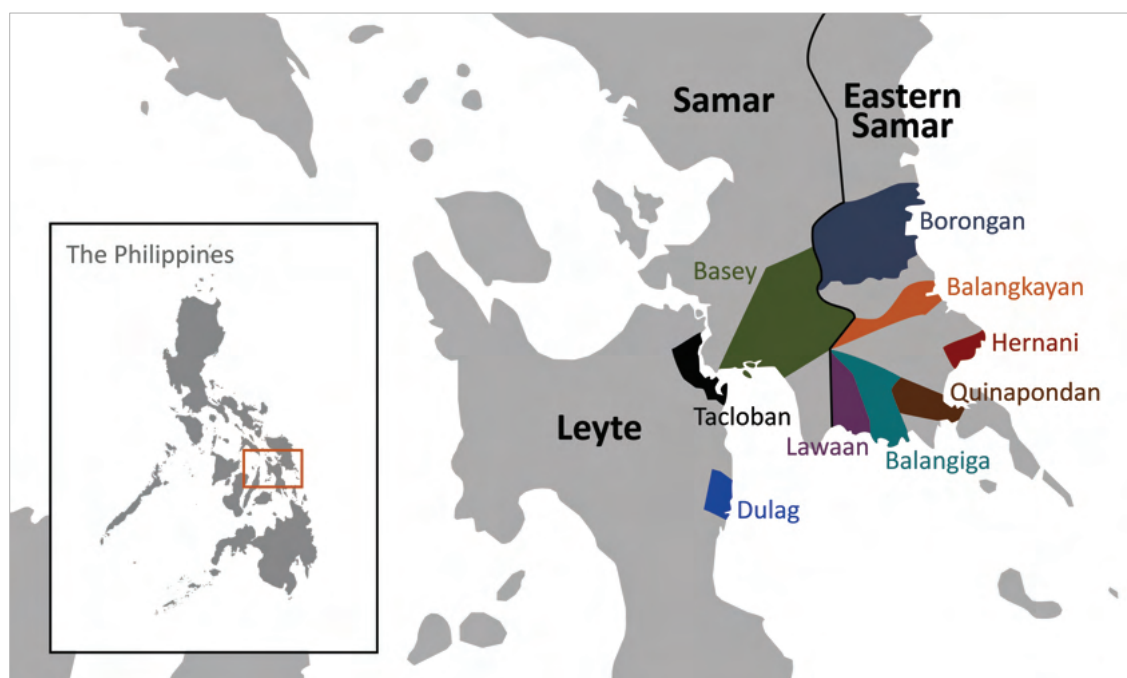
Additionally nine FGDs were held. Two were with church leaders who received training or were programme participants, one was with a community group working on DRR, two were with community volunteers, and four were with livelihood and savings groups. Between three and 11 people participated in each focus group. In total, 58 men and women participated in focus groups and of these one was also interviewed. Approximately equal numbers of women and men participated in each focus group. One group with livelihood and savings group leaders was entirely women.

For interviews and focus groups, topic guides were created beforehand and used to initiate and direct the discussion. However participants were encouraged and allowed to share more broadly about their experiences and knowledge. The topic guides can be found in Appendix 1 and 2.

Figure 2: Photo of author (seated, grey shirt) with participants of a focus group in Eastern Samar

A combination of hand written notes and digital audio recordings, with the permission of participants, were used to capture data and observations. All of the key informants interviews and some of the other interviews and focus groups were conducted in English. The rest of the interviews and focus groups were conducted in Waray-Waray, the most common language of Eastern Visayas, and translated into English by accompanying staff.

In addition to interviews and focus groups, a one-day DRR training was attended in the Municipality of Dulag. This training was carried out by staff and volunteers from Philippine Relief and Development Services (PHILRADS) and was attended by around 23 men and women who belong to PHILRADS' supported livelihood groups.

Secondary research involved a thorough review of academic literature in the form of books and online journals, grey literature from the UN, government agencies and non-government organisations (NGO), programme documentation provided by Tearfund, Tear and their partner organisations, and web content. This secondary research helped provide a theoretical background for the primary research and was used in writing the literature review.

Data analysis

Interviews and focus groups were audio recorded and transcribed where possible. Time limitations prevented all the recordings available from being transcribed. Transcription was done for one key informant interview, one local actor interview and one FGD. These were selected for transcription because they were representative of the participants as a whole—one with a church leader who serves as a DRR focal person for a local organisation and who received training, one with a livelihood and savings group, and one with the regional manager of an NGO active in CD and DRR programming. Handwritten field notes taken during interviews and focus groups were also typed.

A thematic coding approach was adopted where interviews and field notes were reviewed and codes given to sections or 'chunks' of data (Robson, 2011, pp.474-475). Coding in technical or conceptual terms was largely avoided in order to allow for "the possibility of being surprised by the complexities" of the data (Silverman, 2014, p.121). Codes from the three transcriptions were organised by similarity and grouped into preliminary categories. These categories were then modified, added to and expanded upon during analysis of the remaining field notes and recordings. An online mind map programme was used during this process of categorisation.

The next step involved developing the categories into themes. According to Rivas (2012, p.376), dominant categories may be used as themes but often "themes are abstract concepts shaped from two or several more literal categories." This was largely how the themes emerged. For example, the category describing capacities that deal with improving organisational development was placed within the more conceptual theme of 'functional capacity' as identified within the literature (see section 5.1.2).

In this way the research used a combination of inductive and deductive methods to develop the thematic findings. The literature helped provide a theoretical background and influenced the research questions and the topic guides. Then the primary field research produced data from which codes, categories and themes emerged. The literature was again helpful in identifying conceptual themes for the categories where the literal category was not chosen as a theme on its own.

Scope

According to Few *et al.* (2015a, p.23) CD occurs at various levels: individual, organisational, institutional, and societal levels. The research is primarily interested in the capacity of local actors and therefore focuses on the individual, organisational and institutional levels within communities.

There is no single definition of local actors. Local is a dynamic and highly contextual concept that can be applied to people and groups (Few *et al.*, 2015a). Examples of local actors include religious leaders or groups, civil society or community based organisations, neighbourhood or local government officials, community volunteers, and individuals who may occupy 'low' positions within society (e.g. religious minorities or women).

Limitations

The timing of the field research, more than two-and-a-half years after Typhoon Yolanda, meant that many activities seeking to strengthen DRR-related capacities have already taken place; however, some activities are still ongoing. So while an adequate amount of data was collected regarding how capacity is being developed, it is perhaps too soon to determine how these capacities are being used and if they will be sustained.

Although it was hoped that findings would emerge that could be applied to other contexts, it is recognised that the research focuses on one specific region of one country; therefore findings will be more relevant in some contexts than others. The natural hazards people live with, their level of vulnerability, existing capacities and the capacities that need to be developed are always specific to one's local environment.

The research used purposive sampling as locations and participants were identified due to their exposure to natural hazards and experience with CD and DRR programmes. Focus group participants were largely self-selected based on their availability and willingness to participate. This may have affected the representativeness of the data. However this is not expected to have negatively influenced the findings since a large enough sample of men and women from different walks of life and roles in society were able to participate in each location.

3   Literature review

3.1   Disaster risk reduction

Understanding disaster risk reduction

Globally, the frequency of natural disasters and the human and economic costs that result are on the rise. According to the Centre for Research on the Epidemiology of Disasters (CRED, 2015) total disaster occurrences increased between 1994 and 2013, led by a sustained rise in climate-related events such as floods and storms. In terms of human costs, death rates have increased since 2004 and show an upward trajectory even when major disasters, such as the 2004 Asian tsunami and the 2010 Haiti earthquake, are excluded from statistics (CRED, 2015, p.7). Each year economic losses from disasters average more than US$250 billion (UNISDR, 2015a). Additionally, climate change is increasingly putting people and ecosystems at risk, requiring effective management of both risk and an uncertain future (IPCC, 2014).

These statistics highlight the importance of understanding disasters and reducing disaster risk. However what is disaster risk reduction (DRR)? Hazard and disaster literature is full of technical terms that are often understood in different ways and there is debate around specific meanings.[2] Therefore it is important to communicate what is meant when using disaster-related terminology (Twigg, 2015). A well-established definition comes from the United Nations International Strategy for Disaster Reduction (UNISDR):

> The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events (UNISDR, 2009, pp.10-11).

The DRR concept began to emerge in the 1970s, growing out of emergency management. At this time the 'disaster cycle' was first introduced as a conceptual model describing activities to reduce risk and ensure preparedness, response and recovery (UNISDR, 2015a). This cycle has been modified over the years however each version has generally retained the same linear nature and follows a multi-phase cycle (see Figure 3 for a more recent version).

---

[2] The term disaster risk management (DRM) is often used in the same context as DRR and refers to a "systematic approach to identifying, assessing and reducing risks (Twigg, 2015, p.6)." DRM focuses more on the practical application of broader DRR goals although in practice they are used loosely (Twigg, 2015). This paper will use DRR except for when quoting a source or referring to literature that uses DRM.

Figure 3: The disaster cycle (Alexander, 2002, p.6)
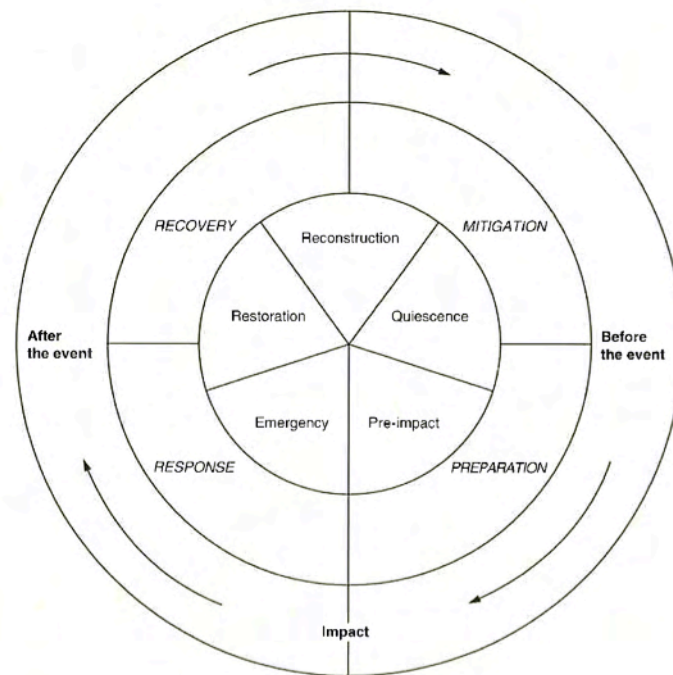
The disaster cycle can be effective for routine events, such as accidents, that do not exceed social expectations (O'Brien *et al.*, 2010). Whilst the cycle is easy to understand, its limitation is that it does not capture the complexity of disasters, which cannot be conveniently arranged in such a way (Twigg, 2015); nor is it sufficient for managing produced unknowns such as anthropogenic activities that drive climate change (O'Brien *et al.*, 2010).

Traditionally, learning within disaster management is often described in terms of doing it better rather than rethinking the problem and doing it differently (O'Brien *et al.*, 2010). O'Brien and O'Keefe (2014, p.180) observe that the conventional disaster cycle "tends to be locked into a process of single-loop learning where the emphasis is on institutional resilience and improved performance within given parameters." This process also lacks the richness of local knowledge necessary to effectively prepare for and respond to produced unknowns (O'Brien and O'Keefe, 2014, p.180).

O'Brien *et al.* (2010) argue that a double-loop learning approach that uses new learnings to build resilience is needed (Figure 4). The first loop reflects the importance of conventional disaster management approaches for routine emergencies. However the second loop is where "resilience building is approached by doing things differently (O'Brien *et al.*, 2010, p.504)." The resilience concept's added value to the DRR discussion is that learning is a key element, and it accepts uncertainty and change, which the disaster cycle lacks. Resilience is discussed in more detail below.

Figure 4: Re-conceptualising disaster management (O'Brien *et al.*, 2010, p.505)
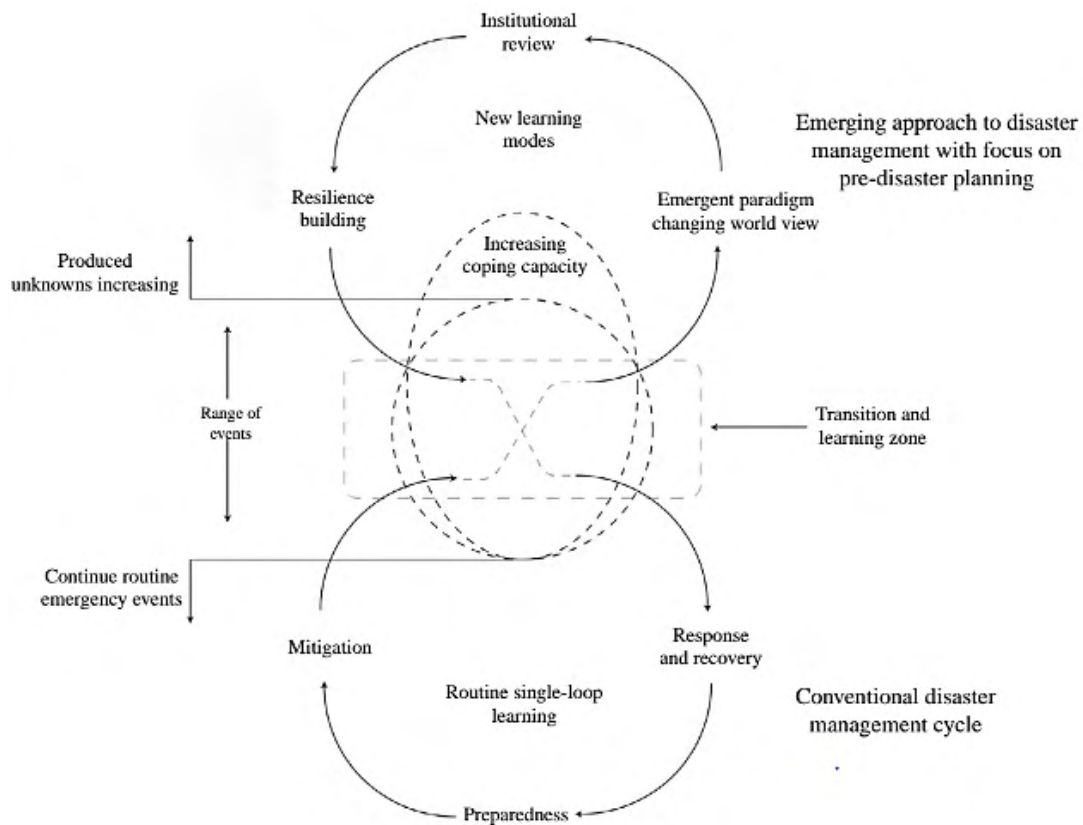
In unpacking this re-conceptualisation, O'Brien *et al.* (2010) importantly places emphasis on preparedness and risk reduction interventions that are built on local knowledge and enhance local coping strategies. This is similar language used by advocates of community-based DRR approaches. Such approaches aim to "reduce disaster impacts and risks through community participation (Luna, 2014, p.43)."

The traditional approach to managing disasters meant that authorities or experts held the knowledge, responsibility and capacity to reduce risk and deliver emergency management services; however research shows that a more inclusive and people-centred approach is advantageous where the public is seen as a resource (Scolobig *et al.,* 2015). Disaster risk is everyone's business and thus requires local people and professionals to work together, using a variety of approaches and interventions to reduce risk (Twigg, 2015).

In this context, calls have increased for 'integrated' and 'holistic' DRR approaches and frameworks (Wisner, Gaillard and Kelman, 2012; Lavell and Maskrey, 2014; UNISDR, 2015a). Wisner, Gaillard and Kelman (2012) have developed one such framework (Figure 5). While the terms integrated and holistic may mean different things to different people, they broadly refer to the bringing together of many disciplines, sectors and people around a shared vision of achieving sustainable and risk-sensitive development.

Figure 5: Integrated disaster risk reduction framework (Wisner, Gaillard and Kelman, 2012, p.2)
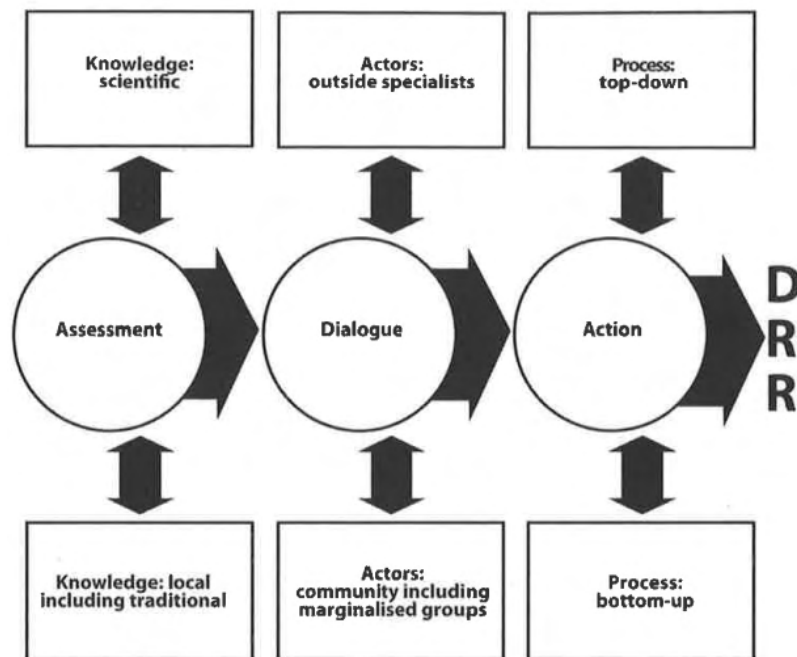
This understanding of DRR recognises that no single person or institution possesses the knowledge and skills to successfully implement DRR (Wisner, Gaillard and Kelman, 2012). As disaster impacts are wide and varied, it is important for DRR to be integrated with other sectors such as climate change adaptation and livelihoods (Twigg, 2015; UNISDR, 2015a; Alexander and Davis, 2012; Rivera, Tehler and Wamsler, 2015).

Regarding international frameworks, both the Hyogo Framework for Action (HFA) 2005-2015 and the Sendai Framework for Disaster Risk Reduction (SFDRR), prioritise DRR at national and local levels and call for the establishment of strong institutions to manage disaster risk (O'Brien and O'Keefe, 2014, p.84; UNISDR, 2005; UNISDR, 2015b).

Key concepts

Hazard and vulnerability are key concepts within DRR. The term 'hazard' generally refers to natural events that affect different places (e.g. coastlines) at different times (e.g. seasons) and have varying degrees of intensity and severity (Wisner *et al.*, 2004). Hazard is classified by a variety of causes including geophysical, meteorological, hydrological, climatological, and biological (Tiwari, 2015).

There are many definitions of the term 'vulnerability' that approach the concept from different points of view including social, economic, health, and climate change (Wisner, Gaillard and Kelman, 2012). An often cited definition of vulnerability comes from Wisner *et al.* (2004, p.11): "the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of natural hazard."

Wisner *et al.* (2004) describe disaster as the result of the interaction between both hazards and vulnerability. This interaction is helpfully visualised by Wisner and his colleagues in the following equation: risk (disaster) = hazard x vulnerability (Wisner *et al.*, 2004, p.49). While hazard is an external risk factor (Tiwari, 2015), vulnerability can be understood as an internal risk factor arising from the physical, economic, political or social realms within a community or system (Cardona, 2004).

Resilience

The resilience concept has multiple meanings but is understood here as the "ability to anticipate, avoid, plan for, cope with, recover from and adapt to (climate related) shocks and stresses (DFID, 2014, p.4)." Resilience is increasingly being used "within policies, programming and thinking around climate change adaptation (CCA) and DRR (Bahadur, Ibrahim and Tanner, 2010, p.4)." People are a part of the environment and their actions can interfere with it. According to O'Brien and O'Keefe (2014, p.119), "It is this realisation that human actions can both expose us to and generate new hazards that has driven the interest in resilience for disaster management."

While there is significant debate around resilience and its usefulness in practice (Twigg, 2015) there are two ways in which the concept adds value to the DRR and capacity development discussion: (a) it accepts uncertainty and change, and (b) it focuses on interrelated capacities with special emphasis on the capacity to adapt.

There is greater recognition recently that disasters can bring changes that were not expected (O'Brien and O'Keefe, 2014) and that future uncertainty is becoming a common feature of socio-ecological systems in which people live (Bahadur, Ibrahim and Tanner, 2010; Pasteur, 2011). O'Brien and O'Keefe (2014) suggest that disasters can be thought of broadly as either routine or surprise (Table 1). Routine disasters refer to events that we prepare for, whereas disaster surprises relate to human actions that have unforeseen consequences (O'Brien and O'Keefe, 2014). Climate change, globalisation and environmental degradation are examples of produced hazards that create new risks and uncertainties (O'Brien and O'Keefe, 2014; Pasteur, 2011).

Table 1: Routine and surprise disasters (adapted from O'Brien and O'Keefe, 2014, p.133)

Routine	Surprises
Common (high probability, low consequence) e.g. Road-traffic accidents Rare (low probability, high consequence) e.g. Chernobyl	Never envisaged Envisaged but regarded as highly unlikely Thought likely to occur but had not happened previously Thought unlikely to occur but mistakenly believed to have minor consequences Minimata, Exxon Valdez, challenger, DDT, ozone depletion, climate change

The resilience, vulnerability and capacity concepts are closely related and there is not consensus on their relationship (Galderisi, Ferrara and Ceudech, 2010). Despite the conceptual debates, Béné *et al.* (2012) suggest that keeping a 'from vulnerability to resilience' perspective is desirable and practicable. Also a resilience perspective places emphasis on what people can do for themselves and seeks to understand how to strengthen their capacities (Twigg, 2009).

Many definitions of resilience mention the capacity to persist, absorb, recover, bounce back, and withstand.[3] While these capacities are important, Manyena (2006) observes that resilience is about more than people's capacity to 'cope' as people often aspire to more than simply returning to their previous situation following a disaster. The resilience literature now frequently refers to the need to focus on strengthening people's adaptive capacity (Bahadur, Ibrahim and Tanner, 2010; DFID, 2011;

---

[3] For a thorough and wide-ranging list see O'Brien and O'Keefe (2014, pp.129-131)

Lovell *et al.*, 2016; O'Brien and O'Keefe, 2014; Pasteur, 2011). A difference between adaptive capacity and the capacity to cope or absorb is that the latter is reactive and usually used in the short-term, whereas the former is about "effectively responding to dynamic change over the long-term (Pasteur, 2011, p.45)."

The 3As resilience framework (Table 2) developed by Bahadur *et al.* (2015, p.7) views resilience outcomes as a set of interrelated resilience capacities, specifically "the capacity to adapt to, anticipate and absorb climate extremes and disasters (the 3As)." According to Bahadur *et al.* (2015, p.12), "A social system with these capacities is less likely to be undermined by shocks and stresses, so wellbeing can be ensured and human development can continue to progress in locations exposed to climate extremes and disasters." In summary, a resilience perspective moves beyond a focus on known hazards and risks to consider future uncertainties and places emphasis on the strengthening of interrelated capacities as an effective response.

Table 2: Understanding the 3As resilience framework (adapted from Bahadur *et al.*, 2015)

Capacity	Definition	Description and Outcomes
Adaptive	"the ability of social systems to adapt to multiple, long-term and future climate change risks, and also to learn and adjust after a disaster (p.13)"	Multiple, long-term risks Learning is key element Outcomes: assets, strong livelihoods, climate information
Anticipatory	"the ability of social systems to anticipate and reduce the impact of climate variability and extremes through preparedness and planning (p.23)"	Medium to short-term shocks and stresses Preparedness and planning Outcomes: coordination (self-organisation), changes in preparedness and planning
Absorptive	"the ability of social systems to absorb and cope with the impacts of climate variability and extremes (p.30)"	Exercised during a disturbance Maintains wellbeing Outcomes: savings and safety nets, substituting critical assets, access to support and advice (e.g. CBOs)

3.2 Capacity development

Background

The concept of CD, or capacity building, evolved in the post-war era as a way to increase technical capacity for the improvement of physical capital and was used for nation building. The concept's evolution continued in the 1970s and 1980s to focus on human resource development and training (Tiwari, 2015). Central to technocratic approaches to CD is the transfer of knowledge and best practice from developed countries to developing ones. This is based on the assumption that what works in one place will also work in other contexts (Tiwari, 2015).

A shift in understanding around capacity occurred in the 1980s and 1990s. Reflection on earlier development achievements, and increasing concern regarding neo-liberal economic policies and growing inequality led to the emergence of the idea of human or people-centred development (Eade,

1997). Where CD had historically adopted a top-down, technocratic approach, people-centred development advocated a bottom-up approach to CD that recognised local people's existing capacities and focused on putting them at the centre of the process.

More recently, of the 17 Sustainable Development Goals recently agreed upon, 11 refer to the importance of enhancing, strengthening or building capacity (UN, 2015). According to Ubels, Acquaye-Baddoo and Fowler (2010, p.3) it is almost "conventional wisdom" that capacity matters and is here to stay, and consequently capacity and its development cannot be ignored.

Definitions

Despite significant amounts of investment and interest in CD there is uncertainty around what capacity is and how CD should be defined (Hagelsteen and Becker, 2013; Lucas, 2013; Tiwari, 2015). While the lack of consensus around CD can create confusion, Ubels, Acquaye-Baddoo and Fowler (2010, p.3) view the diversity as valuable as understandings of CD are then up for discussion, helping mitigate the emergence of any one "monolithic truth."   Table 3 shows a sample of CD definitions.

Table 3: Definitions of capacity development

Author or Agency	Definition
UNDP	"The process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time" (UNDP, 2008, p.4)
OECD	"The process whereby people, organisations and society as a whole unleash, strengthen, create, adapt and maintain capacity over time" (OECD, 2006, p.12)
World Bank Institute (WBI)	"A locally driven process of learning by leaders, coalitions and other agents of change that brings about changes in sociopolitical, policy-related, and organizational factors to enhance local ownership for and the effectiveness and efficiency of efforts to achieve a development goal" (Otoo, Agapitova and Behrens, 2009, p.3)
Walker	"Efforts to strengthen the competencies and skills of a target organization, group or community so that the target could drive disaster risk reduction (DRR) efforts, or, in a broader-sense development, in a sustainable way in the future" (Walker, cited in Few *et al.*, 2015a, p.9)

This paper adopts the following definition of CD from Hagelsteen and Burke (2016, p.44), which was adapted from the UNDP and WBI definitions:

> a locally driven change process through which individuals, organisations and institutions obtain, strengthen, maintain and adapt their capacities to set and achieve their own development objectives over time and learn from their efforts.

This definition is chosen for the following reasons: (a) it places emphasis on change processes at the local level, which is the primary unit of analysis of this paper, (b) it includes the ability to adapt, and (c) it incorporates learning, which is an important element of resilience-oriented capacities (see Table 2). Capacity can be understood as "the ability of people, organisations and society as a whole

to manage their affairs successfully (OECD, 2006, p.12)." This definition of capacity is refreshingly simple and "avoids any judgement on the objectives that people choose to pursue (OECD, 2006, p.12)."

A discussion on the terms 'capacity building' and 'capacity development' is also necessary as they are sometimes used interchangeably while others have described them differently (Hagelsteen and Becker, 2013). Some authors have argued that the 'building' metaphor implies that capacity does not exist and therefore must be built from scratch (OECD, 2006; UNDP, 2008; Hagelsteen and Becker, 2013). Capacity development is preferred by some as it emphasises that "something must grow from inside and be based on existing capacities (Hagelsteen and Becker, 2013, p.5)." The two terms are closely related and the selection of one over the other may simply be based on an organisation's or individual's own approach or conviction. A review of the literature shows CD is used more widely and for this reason, in addition to being personally persuaded by Hagelsteen and Becker (2013) and others arguments, capacity development has been selected.

3.3 Capacity development for disaster risk reduction

According to Scott *et al.,* (2014) increasing disaster vulnerability has led to greater acknowledgement internationally of the need for CD for DRR. This is evidenced by the identification of CD for DRR as "one of the primary means of substantially reducing disaster losses" by all three of the World Conferences on DRR (Hagelsteen and Burke, 2016, p.43). Recent publications also point to the growing interest in CD for DRR and recognition of its importance. Few *et al.* (2015a) recently completed research into local capacity building for DRM and one of the outputs was six principles for effective DRM capacity building (Figure 6).

Despite the rhetoric and a small, yet growing amount of literature on CD for DRR, Hagelsteen and Burke (2016, p.43) argue, "knowledge about capacity development, what it involves and what works in practice is still an emerging practice." The aim of developing capacity for DRR is "to achieve outcomes and foster change that helps society to be resilient to risks from natural hazards (Hagelsteen and Burke, 2016, p.44)."

Figure 6: Key principles for effective DRM capacity building (Few *et al.,* 2015a, p.15)

Key principle	Definition
Flexibility and adaptability	The need to approach capacity-building interventions flexibly, so that the design of the programme is appropriate to context and responsive to needs (rather than applied as an externally-imposed 'blueprint'). It includes undertaking careful assessment of capacity needs, and working with and reinforcing existing skills, strategies, systems and capacities. It also includes understanding and accounting for the political and power dimensions that can undermine or strengthen capacity building.
Comprehensive planning	The need to carefully design interventions so that they can meet their objectives and are likely to be sustainable. It includes appropriate scheduling of interventions so that pressure to show visible results does not undermine capacity building. Also critical is planning for the long-term sustainability of capacity gains after the withdrawal of interventions. Comprehensive planning includes a robust system for monitoring and evaluation.
Ownership and partnership	The need to ensure that those targeted for capacity building have a clear and significant role in the design and implementation of initiatives (which will again help to ensure they are appropriate, effective and sustainable). Ownership is likely to rest on active participation, clear statements of responsibilities, engagement of leaders, and alignment with existing DRM and DRR strategies.
Attention to functional capacity	The need to focus on 'functional' capacity building. This means doing more than improving technical skills and resources. It means developing the ability of stakeholders and organizations to take effective decisions and actions on DRM. It includes aspects such as improving coordination, and developing policies and plans. It also includes creating an enabling environment for effective decisions and actions, such as developing incentives for good staff performance, and building support among stakeholders to see DRM as a priority issue.
Integration of actors and scales	The need to build capacity to coordinate across scales and to work with other stakeholders. Capacity building can act to bridge capacity and communication gaps that commonly exist between national and local levels. Initiatives can focus on building capacity of networks of stakeholders, and on building local people's capacity to interact with other stakeholders.
Contribution to disaster risk reduction	The need for a more holistic DRR-influenced approach to DRM capacity. This includes attention to: understanding and planning for long-term changes in risk; moving beyond a focus on short-term emergency management to capacity in disaster prevention, mitigation and long-term recovery; prioritizing the reduction of vulnerability; targeting the needs of vulnerable groups; and addressing gender inequalities in both vulnerability and capacity.

Local actors are increasingly recognised as important for improving humanitarian action (Ramalingam, Gray and Cerruti, 2013) and are seen as being well placed to reduce risk due to their understanding of context (IFRC, 2015b). Local people are often the main actors in DRR as local knowledge and coping strategies are constantly being used to deal with hazards, and in the aftermath of a disaster event they are often the first responders (Twigg, 2015, p.118). Therefore focusing on developing the capacity of local people and organisations is essential.

Key concepts

An understanding of the local context is considered one of the most important aspects in any CD initiative (Few *et al,* 2015a; Hagelsteen and Burke, 2016; Lucas, 2013; Pearson, 2011). Understanding the context is important during design and implementation to ensure that activities are relevant and culturally appropriate (Pearson, 2011). At the local level, linking DRR capacity development initiatives with people's everyday lives and livelihoods improves effectiveness as people are much more willing to engage in DRR when integrated with or relevant to their livelihoods (Few *et al.,*2015a).

One of the cornerstones of CD is ownership (Hagelsteen and Becker, 2013; OECD, 2006). According to Hagelsteen and Becker (2013, p.5) this suggests "the primary responsibility and ownership for capacity development rests with internal partners and that external partners have supportive roles." Ownership—the ability to make informed choices and decisions—is one of UNDP's basic principles

for CD (UNDP, 2008). At the local level, strong ownership is seen as a precondition for effective CD (Lucas, 2013).

Ownership is related to participation and other forms of engagement. Non-DRR specific CD literature highlights that active participation of those targeted by CD initiatives in the design and implementation process is crucial, not only to ensure relevance of the programme but to increase motivation to use and maintain levels of capacity. Within the DRR context, participation is especially important as the greatest knowledge of hazards and vulnerability usually lie with communities (Few *et al.,*2015a). In practice however, local ownership is often lacking because CD is still largely driven by outside priorities and objectives (Lucas, 2013; Hagelsteen and Becker, 2013).

Role of external actors

Ubels, Acquaye-Baddoo and Fowler (2010, p.298) argue that while CD is largely an "inside out" process, it can still have "outside in" dynamics. There is consensus in the literature that, although endogenous, CD is a multi-dimensional and multi-actor process that requires engagement from a variety of stakeholders including external actors (Lucas, 2013; Ubels, Acquaye-Baddoo and Fowler, 2010; Woodhill, 2010; Pearson, 2011; CADRI, 2011).

According to Hagelsteen and Becker (2013, p.9), "There does not seem to be a consensus or clarity on the roles that external partners can effectively play for capacity development for disaster risk reduction." However it often relates to providing support to communities to achieve their development or DRR goals. In the view of Ubels, Acquaye-Baddoo and Fowler (2010, p.300), the role of CD practitioners is "not to lead the change but rather help people build the capacities to do so."

As a multi-actor process that is very relational, CD is also political with power relations at play (Ubels, Acquaye-Baddoo and Fowler, 2010). Understanding and addressing power relations is essential in any CD initiative, and ignoring issues of power may undermine attempts at developing capacity (CADRI, 2011; Eide, 1997; Kenny and Clarke, 2010; OECD, 2006; Pearson, 2011). While ideally there should be equal roles between partners, a power imbalance between internal and external partners is common in CD projects (Hagelsteen and Becker, 2013).

Capacity development in practice

While the literature is wary of 'blueprints' describing how CD should work and is clear that any intervention should be approached flexibly to ensure that the programme is relevant to the context (Few *et al,* 2015), a step-by-step cycle can be helpful in understanding how CD is commonly undertaken. UNDP developed a five-step cycle to explain the CD process (Figure 7). This process is not to be viewed linearly and in practice the boundaries between each step are blurred, as they should be (UNDP, 2008).

Figure 7: The capacity development process (UNDP, 2008, p.8)
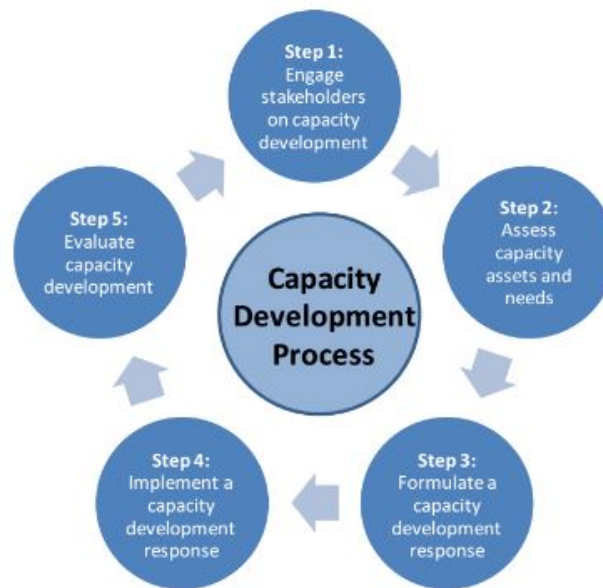
Pre-existing relationships within communities are important for engaging stakeholders early in the CD process. Following stakeholder engagement, a thorough assessment of existing capacities is crucial for the design of appropriate programmes (Few *et al.,* 2015a). This is an essential step in the process as CD is about the strengthening of existing capacities.

Capacity assessments are particularly important when it comes to reducing disaster risk as "Local people bring a wealth of resources, especially knowledge and skills, to help reduce risk (Twigg, 2015, p.115)." This step should focus on the analysis of risks that individuals and organisations face and the analysis of capacities available to manage them (Becker and Abrahamsson, 2012). Despite their importance, capacity assessments are not always carried out nor do they always inform programme design (Few *et al.,* 2015a).

When formulating or designing a CD programme, asking 'capacity for why?', 'capacity for whom?' and 'capacity for what?' can be helpful (UNDP, 2008, p.13). These questions consider context and existing capacities and importantly help identify what specific capacities need to be developed. The CD literature identifies two types of capacity: functional and technical capacities.

Functional capacities are cross-cutting and are not associated with a single sector (CADRI, 2011). They can be understood as "the management capacities needed to formulate, implement and review policies, strategies, programmes and projects (UNDP, 2008, p.12)." According to Few *et al.* (2015a, p.61), "At the community level functional capacity building can improve communities' abilities to plan, make decisions collectively, prioritise activities and manage pooled funds for the common purpose of DRM."

Technical capacities, on the other hand, are "those associated with particular areas of expertise and practice in specific sectors or themes (UNDP, 2008, p.12)." Gaps in capacity of this type have typically been addressed through trainings (Lucas, 2013). However there is now recognition in the literature that training has not always been effective; CD should use different approaches and focus on strengthening a variety of capacities, not only those that are technical in nature (Few *et al.*, 2015a; Hagelsteen and Becker, 2013; Lucas, 2013; Pearson, 2011; UNDP, 2008).

Literature on CD is critical of training, "arguing that it does not build functional capacity or sustainable change (Few *et al.*, 2015a, p.68)." According to Hagelsteen and Becker (2013, p.5) CD projects for DRR "focus frequently on training individuals without paying enough attention to organisational issues, structures, and how such organisations interact with each other." Other common criticisms of training include: (a) it is too short-term, (b) its impact is rarely evaluated, (c) it is a poor learning tool, and (d) it does not develop capacities that are sustained beyond the training (Few *et al.*, 2015a; Hagelsteen and Becker, 2013; Pearson, 2011). Despite concern in the literature around training, in practice CD for DRR projects largely focus on the provision of training and equipment or materials (Hagelsteen and Becker, 2013).

This does not mean that training should never be used, but it should not be used exclusively (Pearson, 2011). What is needed is for CD for DRR interventions to include a mix of short and long-term activities that use various contextually appropriate methods to strengthen functional and technical capacities and support the emergence of learning (Few *et al.*, 2015a; Hagelsteen and Becker, 2013). Few *et al.* (2015a) suggest that if training is chosen, adopting an interactive, mutual learning style is most effective. Methods such as secondments, on-the-job training and training of trainers (ToT) can also make trainings more participatory and effective (Few *et al.*, 2015a). Learning is an essential capability for sustaining CD, and it is also an ongoing, internal and complex process. Therefore external actors can ultimately only support its emergence (Pearson, 2011).

The need for a more holistic approach to managing disaster risk has been discussed in the literature for some time (Wisner *et al.*, 2004). This includes moving beyond a focus on preparedness and emergency management to "building capacity in disaster prevention, mitigation and long-term recovery (Few *et al..* 2015a, p.76)." In the programmes studied by Few *et al.* (2015a, p.35), most focused on present risks and "little attention was paid to developing capacities to recognize and adapt to long-term changes in hazards, exposure and social vulnerability."

DRR programmes are effective when they are community-based, meaning the intervention responds to local needs, utilises local knowledge and strengthens existing capacities (Twigg, 2015). Therefore working in partnership with local organisations is always encouraged, especially when developing capacity. Without capable local institutions, "there is little that external resources can do alone to tackle poverty, reduce disaster risk or to reduce country dependency on aid (CADRI, 2011, p.7)." Evidence suggests that capacity retention needs to be planned for and that CD programmes should include exit strategies to allow for efficient hand over following implementation (Few *et al.,* 2015a).

4 Context and background

4.1 The Philippines

The Philippines is a country of over 7,000 islands, located in Southeast Asia (CIA, no date). The country has experienced consistent economic growth and the Human Development Index (HDI) ranking has steadily improved between 1980 and 2014; however the rate of progress is slow when compared to other East Asian countries (Few *et al.,* 2015b). The Philippines' latest HDI ranking is 115 out of 188 countries, placing it in the upper half of the medium human development category (UNDP, 2015).

Due to its geographic location, the Philippines has high exposure to natural hazards. Despite steady yet slow improvements in its HDI, increasing vulnerability combined with high exposure means the country has a very high level of disaster risk. For this reason, the 2016 World Risk Report ranks the Philippines third out of 171 countries in terms of disaster risk (Bündnis Entwicklung Hilft and UNU-EHS, 2016). On average the country experiences 20 typhoons a year, five of which are destructive (ADRC, no date).

On November 8, 2013 'Super' Typhoon Haiyan (locally named Yolanda) swept through the Central Philippines killing more than 6,000 people and affecting 14 million. The number of people affected and economic damage caused were the worst the country had ever seen. Some experts estimate that it was the strongest storm to ever make landfall (OCHA, 2013). The path of the typhoon passed directly through the Eastern Visayas region, which includes the Provinces of Eastern Samar, Samar and Leyte. This region already had high rates of poverty thus contributing to people's vulnerability (see Figure 8).

Successive typhoons in the nearly three years since Typhoon Yolanda have slowed recovery. Typhoon Hagupit (locally named Ruby) made landfall in Eastern Samar in December 2014 (UNOCHA, 2014) and Typhoon Melor (locally named Nona) swept through Northern Samar in December 2015 (IFRC, 2015a). Although not as strong or devastating as Yolanda, these typhoons did affect a wide area and caused some damage.

The Philippines is one of few countries that has taken the opportunity to merge policy frameworks and budgets for DRR (UNISDR, 2015a, p.237). Following the adoption of the HFA, the government passed the Disaster Risk Reduction and Management (DRRM) Act in 2010, which institutionalised DRR in government policies and structures (Few *et al.,* 2015b). While this is a sign of political will and capacity for DRR at the national level, implementation of the law at the local level has been a challenge. One reason for this is the continued vulnerability of the poorest Municipalities who often have the least capacity, limited local resources and face recurring disasters (Kellet, Caravani and Pichon, 2014, pp.27-29).

Figure 8: Typhoon Yolanda path and poverty rates (REACH, 2013)
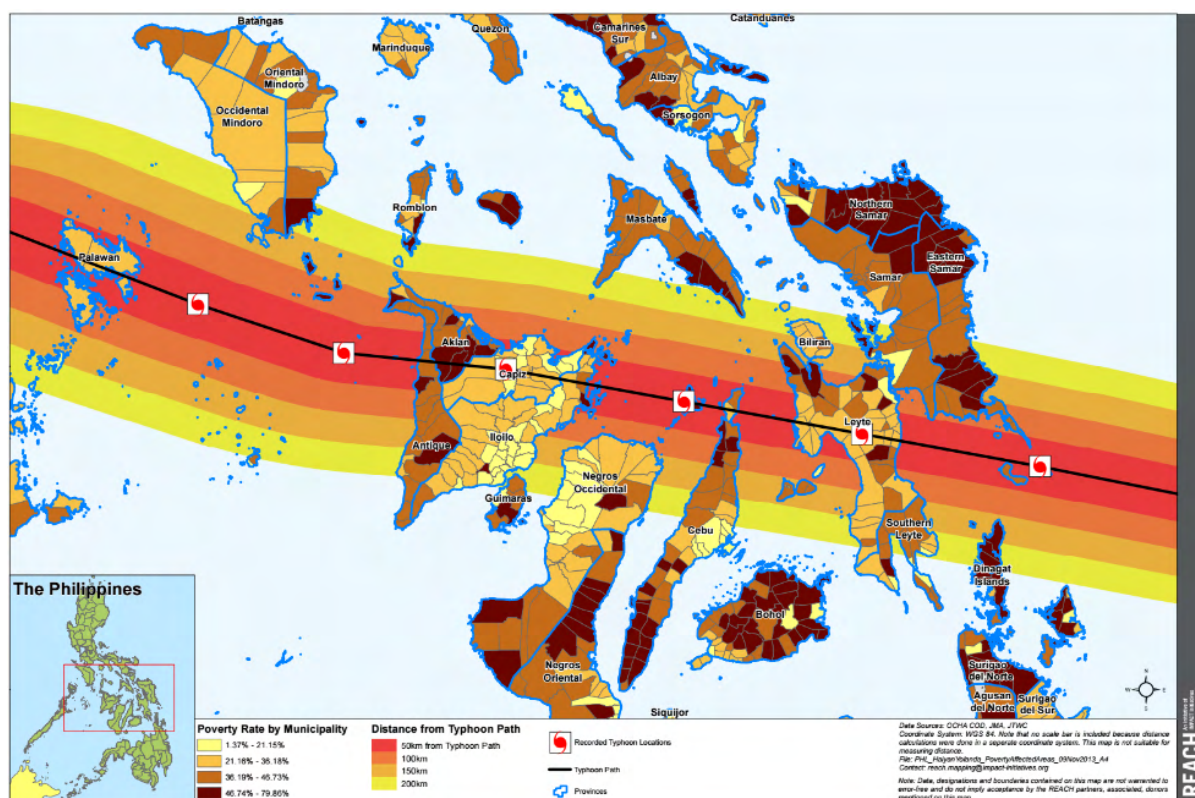
The Philippines has a strong civil society that is large and diverse, and includes community organisations, religious groups, local charities, and national NGOs. Many of these organisations, as a result of their development experience, have responded to disasters in the past and demonstrated capacity in this regard (Featherstone, 2014). However the strength and devastation of Typhoon Yolanda overwhelmed both government and civil society, highlighting the need for continued investment in CD, especially at the local level.

Featherstone (2014, p.viii) argues that Typhoon Yolanda has set a new disaster standard and should be seen as the new 'normal' rather than the exception. In light of this new context, it is recognised that more investment in disaster preparedness is needed (Featherstone, 2014). However as the Disasters Emergency Committee's Typhoon Haiyan Response Review states, "while the advocacy agenda of many NGOs concerning DRR has been listened to in part in the past, a stronger message regarding the addressing of underlying risks such as land ownership is now timely (DEC, 2014, p.16)."

4.2   Field research background

It is within this context that three weeks were spent in the Philippines from mid-July to early August 2016 in order to better understand and critically evaluate how CD is done in practice. Two faith based organisations, Tearfund UK and Tear Netherlands, facilitated and funded the research. Capacity development for DRR is a topic of interest for these organisations as they seek to learn more about the CD process and its application for reducing risk.

Tearfund and Tear work through international and national partner organisations to implement a wide range of development and humanitarian programmes in the Philippines. Interviews and focus group discussions (FGD) were organised by four Tearfund and Tear partner organisations who were

engaged in relief operations following Typhoon Yolanda and who since have implemented programmes with CD and DRR components in Eastern Visayas. Figure 9 introduces these organisations and shows the sectors their programmes have focused upon, where interviews and FGDs took place, and who participated in the FGDs organised by each organisation.

Figure 9: Details of Tearfund and Tear partner organisations who participated in the research and FGD participants

	Philippines Children's Ministries Network (PCMN)	Lingap Pangkabataan	Food for the Hungry (FH)	Philippine Relief and Development Services (PHILRADS)
Programme focus	Child protection	Livelihoods	Capacity development DRR Livelihoods	Capacity development DRR Livelihoods
Location by Municipality	● Balangkayan ● Borongan ● Hernani ● Lawaan ● Quinapondan	● Balangiga ● Lawaan ● Tacloban ● Quinapondan	● Basey ● Tacloban	● Dulag
FGDs and participants	1 with church leaders 1 with community volunteers	1 with church leaders 1 with community volunteers 4 with livelihood and savings groups: farmers fisher people group leaders pedicab drivers	1 with a community group working on DRR	N/A

Figure 10: Map of Municipalities visited in Eastern Visayas
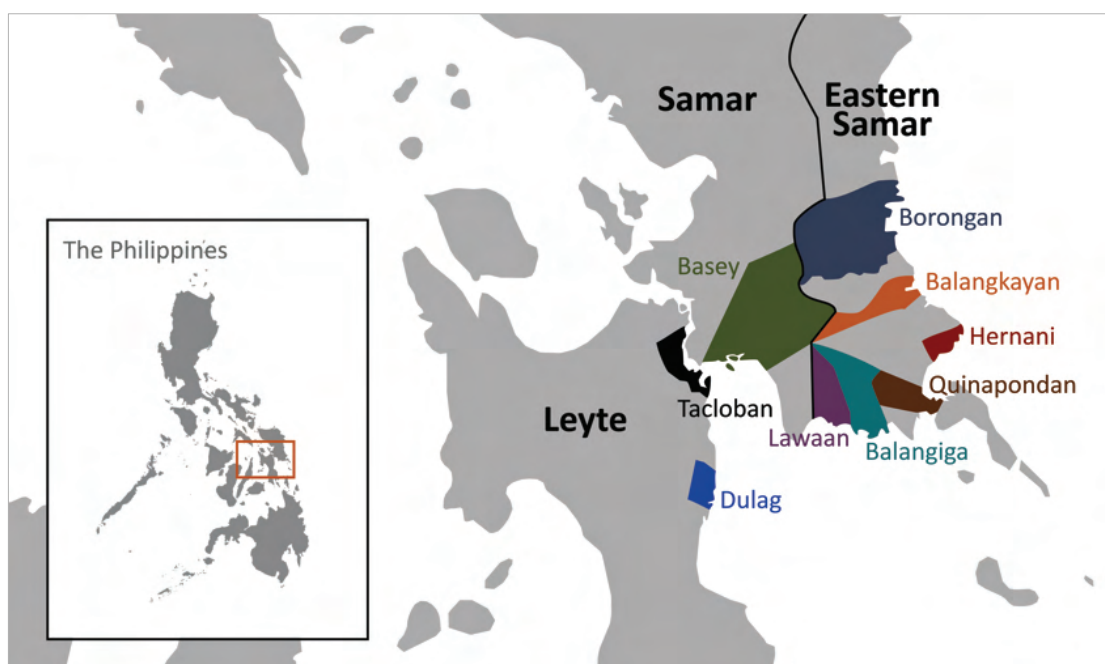
Between one and three days were spent with each organisation, speaking with staff and conducting interviews and FGDs with programme participants and other stakeholders. A one-day DRR training in the Municipality of Dulag was also attended. It was carried out by staff and volunteers from PHILRADS and attended by around 23 men and women who belong to PHILRADS' supported livelihood groups. The Center for Disaster Preparedness (CDP) is another national organisation who provided information on their CD and DRR programmes, and three staff kindly agreed to be interviewed as key informants. CDP is not a partner of Tearfund or Tear, however Tearfund provided the introduction.

4.3   Capacity development for whom?

These organisations targeted a wide-range of stakeholders for CD including children, youth, parents, local government officials, vulnerable people groups, community volunteers and church workers. Below is a description of these stakeholders, which will provide a deeper understanding of the context, and the individuals and groups whose capacities are being targeted for strengthening.

Children, youth and parents

The Philippines Children's Ministries Network (PCMN) created a child-centred DRR module that was widely shared. One DRR officer emphasised the importance of engaging with parents, not only children. This approach, it was said, fits the family culture in the Philippines well. There was an example of DRR trainings using games and stories where both children and their parents were in attendance and participated together.

Local government

Implementation of the DRRM law at the local level has been slow and Typhoon Yolanda exposed this. The regional manager of one NGO explained that at the time of Yolanda many of the affected Barangays did not have DRRM committees, as stipulated in the law; this affected their ability to respond effectively. After Yolanda, increased investments have been made in developing the capacity of Local Government Units (LGUs).

Vulnerable people groups

Vulnerable people groups may include women, elderly people, persons with disabilities (PWD) and young children. A mixture of programmes targeted both vulnerable people groups and the wider community. In addition to the targeting of children, which was described above, examples emerged of programmes consulting and targeting women and PWD. A programme implemented by Lingap Pangkabataan aimed to increase women's capacity to plan, manage and sustain livelihood activities. A CBDRRM programme implemented by the Center for Disaster Preparedness (CDP) in Eastern Samar specifically targeted PWD (see Figure 11).

Volunteers and church workers

Community volunteers play important roles in the implementation of CD programmes. When a training of trainers (ToT) approach is chosen by an implementing organisation, the volunteers who received training are often responsible for passing on information. People who serve on community disaster committees are also volunteers. Therefore developing volunteer capacity is an investment that organisations seem to consider important. The church is an important local institution in the Philippines and thus was also targeted for CD by several organisations. The church leaders and workers involved in implementation are also commonly volunteers.

5 Findings and analysis

The findings in this chapter are based on interviews, focus group discussions, attendance of a DRR training, and general observation. The themes emerged following thematic analysis (see chapter 2). Themes are grouped into sections answering the questions 'capacity development for what?' and 'how is capacity development done in practice?' Sections describing findings related to learning processes, the roles of external actors and challenges in developing capacity are also included.

5.1 Capacity development for what?

The literature on CD identifies two types of capacity: functional and technical capacities. These capacities are related and separating the two is not straightforward. Separate headings for technical and functional capacities, as well as resilience-oriented capacities, have been used for the sake of organisation; however overlap may occur.

5.1.1 Technical capacities

Community risk assessment and analysis

Following initial engagement and rapport building, CD programmes typically introduce participants to a variety of tools that are meant to strengthen their capacity to identify disaster risk in their community. Community risk assessments were identified by a number of NGO staff as a way they help communities understand and analyse risk. Most often these appear to be hazard focused, however there were examples of social and economic factors being considered as well.

FH has a 'Community Managed Disaster Risk Reduction and Management' (CMDRRM) curriculum that is used to educate communities about disasters and the hazards they face. The community is trained with this curriculum, which includes seven participatory tools such as a disaster timeline and hazard map. The curriculum culminates with the community preparing a DRRM plan.

Preparedness

After Typhoon Yolanda preparing communities for the next disaster took centre stage. This seemed to be the most common DRR component focused on by the CD programmes observed. Technical capacities that organisations commonly aim to strengthen at the community level include developing disaster management plans, making emergency or 'go' bags, learning when and where to evacuate, and being taught about hazards.

This reflects a tendency in CD for DRR programmes more broadly to focus on preparedness (Hagelsteen and Becker, 2013). There were very few examples of technical or functional capacities being developed for prevention and mitigation. A DRR programme FH is implementing in Samar has a climate change adaptation component that includes mangrove reforestation and erosion control. These activities are new for FH but were identified as priorities by their local partners. In Quinapondan, fisher people described the loss of mangroves in their area as significant and expressed a desire to see them restored. These examples suggest that there is a desire among communities to engage in areas beyond only preparedness. A more integrated and holistic approach is needed where capacities are also developed in disaster prevention and mitigation.

Legal frameworks

Introducing LGUs to the DRRM law and developing their capacity to implement key components, such as forming DRRM offices and writing local DRRM plans, was identified as a priority by some organisations. A capacity assessment carried out by CDP in some Municipalities in Eastern Samar revealed that they did not know how the DRRM law works nor did some of them have local DRRM offices. Several NGO staff recognised that working closely with local government and strengthening their capacity is particularly important for sustaining CD gains. Assisting LGUs in establishing DRRM offices and drafting local ordinances were specific examples provided of how CD gains can be sustained.

Developing the capacity of LGUs to understand and implement the DRRM law is an example of technical capacities overlapping functional capacities. Although there is a knowledge or awareness gap and the information being shared is sector-specific, the strengthened capacities can contribute to improved development and application of policies and strategies, which can be considered functional.

5.1.2   Functional capacities

Organisational development

Several NGO staff commented on the importance of working with local institutions and developing their capacity to organise themselves and manage their own affairs. According to one DRR officer, "We are organising them and teaching them how to do it; they will do the rest." This was reflected in some programme activities and in the capacities these programmes aimed to strengthen.

Figure 11: Closer look—developing the functional capacity of persons with disabilities (PWD)

The work of CDP in strengthening the organisational and management capacity of PWD people's organisations in Eastern Samar is an example of an organisation specifically targeting a vulnerable people group for functional capacity development. The selected activities were based on what the people themselves identified as gaps. This is an example of participants being given decision making authority, which can encourage ownership. After one year two people's organisations had elected officials. Usually only physical, not mental, disabilities are accounted for in local government statistics. The programme helped Barangays identify all PWD in their areas and according to the project officer, the Barangay officials were surprised to learn that there were more PWD than they thought. As the project officer explained, "The Barangay was open to doing more, they just lacked awareness." In some Barangays, PWD have been included in the Barangay DRRM Committee.

Training for local organisations on proposal development was a component of several programmes. This particular skill seemed to be valued and appreciated. In Basey, a community group submitted a proposal to FH after receiving training on this and received funding for the reconstruction of their

health clinic. The group later did the same when a similar opportunity arose with another NGO.
They used those funds to build a 'DRR centre' where equipment is stored and meetings are held.

Not only did these activities strengthen the capacity of local organisations in an area that is
identified in the literature as often neglected, but it also seemed to instil a sense of ownership and
achievement in the people who participated.

Financial management

Programmes that had a livelihood or group savings component often included training on managing
group funds. This was a functional capacity that was strengthened within local governments as well.
The DRRM law stipulates that at least five percent of local revenue should be spent on DRR; often
this does not occur, partly due to priorities but also due to a lack of awareness and capacity. One
DRR officer identified utilisation of funding mechanisms at the local level as "the number one
problem." Therefore some programmes aimed to increase LGUs awareness of this aspect of the DRR
law and teach them how to better manage and utilise these funds.

5.1.3 Resilience-oriented capacities

The resilience concept recognises that capacities are needed not only to deal with short-term shocks
and known risks but also to manage multiple long-term risks while learning and adapting. Technical
and functional categorisation of capacities may not always capture these aspects. The 3As resilience
framework (Table 2) is used to present these findings. The framework views resilience outcomes as
a set of interrelated resilience capacities—specifically absorptive, anticipatory and adaptive
capacities. These three capacities and the relevant findings for each are presented under separate
headings.

Absorptive capacities

Absorptive capacities are often deployed during a disaster. This type of capacity helps maintain
well-being and is important for coping with a disturbance. Bahadur *et al.* (2015) identify savings and
safety nets, substituting critical assets and access to support and advice as key outcomes.

Livelihood recovery and support was featured in some of the DRR programmes observed. One
programme was primarily focused on livelihoods but included DRR components such as
preparedness training. In addition to skill development and provision of livelihood assets (e.g.
livestock), each programme also had a group savings component.

Some people said they had personal savings when Typhoon Yolanda came but most did not. One
farmer in a focus group in Quinapondan said, "When Yolanda came we started back to zero."
Therefore livelihood activities and particularly the group savings components were well received.

Lingap Pangkabataan helped women form groups based on their chosen livelihood activity. Each
group member contributes a set amount weekly to the savings fund. A portion of these funds are
reserved for the individual and a portion is for the group to use in emergencies or reinvest in their
group and community. One group, whose livelihood activity was pig raising, had saved around 6,000
PHP (nearly £100 GBP) since their group had formed the previous year. A member said, "Now we
see the importance of savings." This was a common sentiment of many group members interviewed.

According to Twigg (2015, p.180), "Livelihood promotion must be supported by livelihood
protection." This is an essential aspect of an integrated approach to DRR programmes. Some groups

were actively taking steps to protect their livelihoods. The group raising pigs described how they built the pigs' shelter using quality materials and used techniques such as bracing to ensure the shelter can withstand strong winds. However more can be done to ensure livelihoods are protected; for example, by linking livelihood groups with government insurance schemes.

Another key outcome of absorptive capacity is access to support and advice, which includes access to social networks and support systems (Bahadur *et al,* 2015, p.36). Research has shown how these networks and support systems, known as social capital, are critical for disaster survival (Aldrich and Meyer, 2015).

Some members of livelihood groups identified social cohesion and a new support network as important and valued aspects of the group. One member said, "Before the group formed I only knew faces, not the people themselves." A member in a separate focus group shared, "When there is unity, it will be easier to organise activities during disaster."

This does not seem to be a planned programmatic outcome but rather an organic by-product of the group model. Planned or not, it appears to have contributed to the development of a valuable capacity. Organisations could recognise that this opportunity exists and create space or incentives for social networks to be developed and strengthened.

Anticipatory capacities

Anticipatory capacities engage well with short to medium term risks and focus on preparedness and planning before a disturbance. According to Bahadur *et al.* (2015), changes in preparedness and planning, and coordination and self-organisation are key outcomes.

As discussed within section 5.1.1, capacities aimed at improving preparedness and planning have been a primary focus for implementing organisations after Typhoon Yolanda. In interviews and FGDs people generally expressed feeling better prepared now, than before Yolanda, due to being more aware and informed. A church leader who had received training summed up this sentiment well by saying, "After Haiyan we were just staring at the sky and saying, 'Oh God, what are we going to do now,' because we knew nothing. But this time, even before the disaster will hit, we already know; we are prepared.   To gather people to take them to the safe place, to be sure they have their own bag. That is the capacity we have—we will not be nervous anymore, will not be panicking anymore, because we know what to do."

Another capacity targeted for strengthening was improving coordination between different stakeholders including local government, NGOs and local institutions such as people's organisations and churches. A regional NGO manager described how Yolanda highlighted the need for better coordination between the Municipality and Barangay because in some cases they were unaware of each other's activities or plans. According to this key informant, "That's why a lot of coordination at the LGU level has been done for this especially for DRR."

Adaptive capacities

Adaptive capacities are those that deal with multiple and long-term risks. Learning from successive shocks and stresses is a key element. Bahadur *et al.* (2015) identify assets and incomes, strong livelihoods and climate information as key outcomes.

The large scale devastation of coconut trees, fishing boats and other livelihood assets due to Typhoon Yolanda highlighted the need for stronger and more diversified livelihoods. There was evidence of programmes strengthening existing livelihoods while introducing new livelihoods to

some. In Balangiga, Lingap Pangkabataan helped pedicab drivers replace damaged pedicabs (a bicycle taxi) and formed them into a livelihood and savings group. People who previously were not pedicab drivers were also added to the group. For eight of the 11 participants in the FGD with pedicab drivers, this was a new livelihood; most were previously engaged in coconut production.

This livelihood support and diversification is a positive sign; however livelihood recovery overall has been slow. According to fisher people in a FGD in Quinapondan, their current income is not even 50 percent of what it was before Typhoon Yolanda nearly three years ago.

Although preparedness has become more of a priority for local actors after Yolanda and seems to be valued, meeting daily needs through a sustainable livelihood remains some people's primary concern. In the FGD with fisher people in Quinapondan, one man said, "We need to eat at least three times a day but now we only eat 1.5 times a day. But we would like to eat at least two times a day. That's why I say prioritise livelihood so that we can eat three times a day." This is a reminder that any attempt to strengthen local actor's capacity for DRR must be aligned with their priorities, and establishing a stronger livelihood is often a top priority.

Although primarily driven by outside organisations, people seem to have embraced these new livelihoods and seized opportunities to recover their assets and develop new skills. This suggests that small changes and adaptations are being made. An example of an adaptation driven by one's own experience was described by a church leader in Eastern Samar who said of fisher people in their community, "They have small houses on the coastal area, but they also have houses on the higher ground. It is for preparation." This provides them with a place to temporarily seek shelter during a disturbance. According to the interviewee, this was driven by their experience with floods in 2011 and subsequent typhoons.

This suggests that learning is taking place, which is important for improving adaptive capacity and doing things differently. Additional findings regarding learning emerged from the research and are presented in the next section.

5.2   Learning

The research revealed that people and organisations learn in a variety ways; through planned activities, such as trainings, but also in unplanned and informal ways. Learning is a complex process, and it was not always easy to distinguish between learnings derived purely from personal experience and those developed through observing other's experiences and formal activities. That said, the findings are presented using three categories that emerged during the analysis: internally driven learning, externally driven learning and social learning.

Internally driven learning

Internal learnings here largely refer to learning that comes from personal experience. The strength and devastation of Typhoon Yolanda had a significant impact on people's thinking. Often the typhoon was described as a new kind of disaster. According to fisher people in Quinapondan, "We used to experience typhoons but not like Yolanda. It was really unexpected. Some senior citizens tell us that it was the first time in their life they experienced this kind of typhoon."

Despite the devastation and tragic loss, the experience of Yolanda seemed to result in a shift regarding how disasters are thought about. One church leader shared, "Haiyan for us really taught people. It makes people prepared. When [Typhoon] Ruby comes the government doesn't need to push people to evacuate. People are volunteering." An example of learning emerged during a FGD

with livelihood group leaders in Lawaan who said, "We learned from Yolanda that we should prioritise planting of vegetables so if a storm comes you have something to eat."

Externally driven learning

There were also learnings that were developed from formal activities such as trainings or observing others' experiences. According to a group of farmers in Quinapondan, "We now know to pack things to bring with us when we evacuate. And seniors should be a priority when we do so." Another example came from a church leader in Eastern Samar who described using what they learned in training when Typhoon Ruby came. "Those trainings really strengthen us because when Ruby came, because of those trainings we were really aware and we inform the people that we must prepare the clothing and the food before the typhoon strikes."

Social learning

Social learning is learning that occurs in a social context. It considers that people learn from each other (O'Brien and O'Keefe, 2014). An interesting example came from a church leader from the northern part of Eastern Samar. His community was not heavily affected by Typhoon Yolanda but hearing about the devastation of the typhoon elsewhere in the region had an impact. "People have fear especially when Yolanda happens. It awakens the mind of people that this thing can also happen in our area just like what happened in Tacloban. That's why we're making small steps to make ready the Barangay."

Figure 12: Closer look—local knowledge and its utilisation

Disaster-related local knowledge was also observed. In one FGD with pedicab drivers, it emerged that people use a 'kulong' to protect themselves during a disaster. A 'kulong' is a hole dug in the ground that serves as temporary shelter during a disaster.   The group members described how it should be far from the sea or the rivers and also far from high trees. Not everyone in the FGD had used this before but those who had were advising others to use it as well.

FH discovered that people in Samar typically used a cave for shelter during a disaster. It was considered a good place by the community because it was well protected and water did not rush in. FH is now working with the local government to see if the cave can be designated as an official evacuation centre. This is an example of an outside organisation utilising local knowledge.

Learning can also take place within groups as new information and knowledge is shared, discussed and absorbed (O'Brien and O'Keefe, 2014, p.176). A livelihood group of fisher people in Quinapondan acknowledged the potential for this by sharing, "Our group is open for any suggestion from other members. We exchange ideas for the betterment of the organisation."

Livelihood groups were commonly formed around the livelihood activity chosen by the members. Some group members had experience with this activity but for many it was new, as people attempted to find new livelihoods after Yolanda. In one woman's livelihood group engaged in pig raising in Lawaan, most did not have experience with this; one woman did have experience and was

able to share with others her knowledge such as what to consider when building a shelter for the pigs.

The sharing of local knowledge in social contexts is another important way that knowledge can be transferred and learning can emerge. Organisations seeking to develop local capacity should first recognise that learning can occur in a variety of ways and settings, and then find ways to support the emergence of learning while utilising existing local knowledge.

5.3   How is capacity development done in practice?

Approaches

Community-based approaches are common in the DRR programmes observed. This finding is not surprising given the presence of a strong civil society in the country with a history of adopting community-based and participatory approaches in development work (Luna, 2014). Perhaps a focus on these approaches by national organisations has influenced the way CD is thought of by practitioners. In interviews with NGO staff, phrases such as "walking with", "with them" and "hand holding" were common. This perspective is important when engaging in a process that, by definition, is locally driven.

There was recognition by some NGO staff that local people need to have some form of ownership that goes beyond mere consultation or participation. There was an example of PCMN providing a local organisation with training and funds to directly implement a project themselves. Additionally, one NGO staff member said ownership is about "telling them it's their thing and allowing them to suggest interventions." However on the whole it seems there is room for growth in this area by outside organisations seeking to strengthen local capacity.

The importance of taking a relational approach to CD for DRR programmes, particularly early on in the process, was identified by key informants. A deputy director of a national NGO stressed more than once in an interview that rapport building was necessary and should be a first step. Tearfund found that their relief work after Typhoon Yolanda and the relationships cultivated during this phase of work provided a good foundation when they began to engage LGUs in CD activities later on.

Assessments

While assessments of some kind were commonly used by organisations interviewed to determine what capacities exist, it seems they were not always conducted before the programme was designed and not always used to inform programme activities. Conducting and using assessments ensures that the programme is relevant and appropriate. One national NGO discovered the value of this when they conducted a capacity assessment with a LGU before the programme activities were set in stone. According to one NGO staff member, "An assessment of their capacities found they were not oriented on how the DRR law works and some don't have an office on DRR; training and institutionalising DRR offices by the end of the project then became a goal."

Even if an NGO desires to let an assessment guide programme activities and objectives, they may be constrained by donor requirements. The deputy director of a national NGO expressed how appreciative they are for one donor that is "more flexible with funding cycles and requirements" but also acknowledged that this is an exception not the rule. While some donors may be more restrictive than others, implementing organisations should aim to conduct assessments as early as

possible to ensure that their programmes are relevant and appropriate to people's needs and situation.

Training and other activities

While CD includes activities other than trainings, the research found that trainings have dominated CD for DRR programmes post-Yolanda. This finding is consistent with other studies of CD for DRR programmes (Few *et al.,* 2015a; Hagelsteen and Becker, 2013).

An example of a non-training activity used by organisations is exposure visits. These involve taking individuals from a particular group or sector to visit others who are doing similar work in another region or country. The value of these visits is allowing participants to learn from others in a non-traditional learning environment. In their programme working with PWD, CDP facilitated an exposure visit where PWD people's organisations in Eastern Samar went to Manila to meet with similar organisations that have more experience.

In the training that was attended and based on discussions with people who had participated in trainings, trainings on the whole were very interactive and the context seems to have been considered. In a DRR training conducted by PHILRADS (Figure 13), a variety of games and dramas were used and the story was told of a community in a neighbouring island who had zero casualties during Typhoon Yolanda. PHILRADS adopted a training module designed by Tearfund but made some minor changes to make it contextually appropriate. According to the DRR officer, "We needed to localise it and use normal terms that the people we work with understand."

Figure 13: Photo of DRR training in Dulag

Another example of an interactive training came from PCMN who developed their own child-centred DRR module in response to the limited child focused resources available. The module is called 'Safe Child in Disaster' and is designed as a one day training activity. Four of the most common hazards experienced in the Philippines—fire, flood, earthquake, and typhoon—are taught to children using four different interactive stations that include stories and crafts.

The training of trainers (ToT) approach was commonly used by organisations to increase scope and reach. Often NGO staff train an initial group of participants who then are expected to pass on the training to people in their community or group (e.g. livelihood and savings group). The information is meant to 'cascade' from the initial trainer to other targeted individuals or groups at each level. Of the ToT approaches observed and discussed, one to three levels of cascading seems common.

This approach is identified in the literature as one way to make training more participatory as people at each level become actively involved in passing on the information. The ToT approach has the potential to be an effective and cost-efficient way of training large numbers of people. In practice, it appears to yield benefits in terms of reach and in contributing to the personal development of trainees. A young woman who had been trained by PCMN to conduct their child-focused DRR module described how before this experience she had trouble speaking in public; but now she said, "I have more confidence to speak and am not afraid of anything."

However the research revealed challenges of training activities that are consistent with criticisms identified in the literature. A challenge mentioned by multiple NGO staff that is specific to the ToT approach is that cascading does not always occur as designed. A DRR officer shared, "It is what happens after training that is a challenge; for example the LGU may not pass on to the community level." Another DRR officer described how the Department of Education in one province in Eastern Visayas has chosen not to use a cascading approach anymore because they have found that teachers lacked confidence in sharing the information with others in their schools. When asked how to respond to this challenge, the key informant said, "So you have to go down to the community level and work with teachers and also families." This suggests more individual attention may be needed following trainings.

A second challenge is the issue of knowledge retention. According to one NGO staff member, upon follow up with participants of a training conducted only three months prior, there were very low levels of retention. In interviews and FGDs, some people were able to recall the main themes of a training they participated in, particularly trainings focused on preparedness. However others had trouble recalling even general information; if they could recall what was covered, they could not share why it is important. For example in an interview with Barangay officials in Eastern Samar they shared about a training where they were introduced to vulnerability mapping, however they could not describe it, which showed limited understanding.

Following up or revisiting training topics were commonly mentioned by NGO staff when describing the CD process or when asked how to overcome these challenges. One NGO staff member advised not to rush into the next phase of the programme; instead, adopt a process of iteration where multiple meetings take place afterwards. Repetition is one way of improving knowledge transfer. Writing from the field of adult education, Foley and Kaiser (2013, pp.12-13) recommend "revisiting information from multiple aspects and different contexts to increase the likelihood of the learner making connections in his or her unique settings."

According to Few *et al.* (2015a) capacity retention needs to be planned for. Following a five day training for Municipal staff on risk assessment and contingency planning, a CDP programme planned to accompany trained staff as they gave the trainings to Barangay officials; then CDP staff provided feedback to the new trainers. However it seems most programmes are not planning ahead of time for capacity and knowledge retention, nor is follow-up a guarantee.

The examples of interactive and innovative trainings show that trainings have the potential to be an important activity in strengthening capacity; however the danger for practitioners is assuming that training is always best and that knowledge transfer will occur. Foley and Kaiser (2013, p.8) argue "…it is imperative to understand that simply taking part in a learning transaction does not guarantee

that the expectation of transfer will occur." One NGO staff member questioned the ability of trainings to contribute to learning by saying, "Learning is least likely to happen when you sit 20 or 30 people down in a mass training. I stopped using trainings as learning and instead use them as exposure."

Outputs

The most common output of CD activities is DRRM plans. One organisation worked with a community to prepare a DRRM plan as part of their DRR and CD programme. Participatory tools were taught to members of a community group who used the information these tools generated to form their plan. In a FGD with the group members, they admitted they were not prepared before Yolanda but felt they were more aware and informed now. The plan was detailed and identified who was responsible for certain activities during response, which is significant and suggests that capacities were strengthened, however it was not clear how the plan was being used to continually improve preparedness or reduce risk.

A DRR officer indicated that it was too early to tell how these plans will be used or applied. While the development of plans is a positive step, ensuring they are used is essential for sustaining this key output. Recognising this need, a regional manager of an NGO commented, "Even if they formulated the plan, but don't provide a budget or don't have activities that they do, it's useless."

There were examples of organisations developing plans with the communities or local government and "showing them how to do it," as one DRR officer said; but sometimes plans were introduced during a training and participants were expected to develop the plan afterwards. Several NGO staff identified that a collaborative approach to the development of plans is effective where NGOs help facilitate and guide the process. Working with the targeted group in a collaborative way and once again, following up after the initial training may increase the likelihood that plans are in fact made.

Most plans seem to be response and preparedness heavy. However a couple examples of more long-term risks being considered in planning did emerge. Both Tearfund, working with the city of Cadiz in Central Visayas, and CDP, in their work with Municipalities in Eastern Samar, are helping LGUs integrate CCA into their planning. There is national funding available for prevention and mitigation activities at the local level but some LGUs do not know this.[4] Helping local governments and communities think about long-term risks when planning, and linking them with available resources, are areas NGOs can focus on.

5.4   Role of external actors

Although an endogenous process, there is consensus in the literature that external actors or partners have a role to play in CD. The research revealed that *how* external actors provide support is as important as what kind of support is offered. The findings are grouped into thematic headings.

Organising and educating

There was consensus that external actors should be aware of relevant resources and educate local actors or partners on these resources. A NGO staff member said external actors need to "collect and connect" meaning collect data and resources and connect people to those resources.

---

[4] For example, the People's Survival Fund has an annual budget of 1 billion PHP (US $22.2 million) that local governments can access - http://www.lse.ac.uk/GranthamInstitute/law/the-peoples-survival-fund-act-ra-10171/

Organising and educating is connected to providing general support. One DRR officer commented that providing support at the community level by bringing science-based and hazard-specific information is important. A regional NGO manager said that we need to support communities through "introducing activities that would bring out their potential or maximise their skills."

Engaging stakeholders

Capacity development involves many stakeholders, and external actors were identified as being well placed to engage with and connect people in these different groups. One suggestion was that external actors can help communities get connected with local government. A similar example was provided by a DRR officer who described how they were acting as an intermediary between churches and the local government to help reconcile differences and improve collaboration. It was also acknowledged that NGOs need to coordinate amongst themselves to ensure there is no duplication.

Advocating

There was a sense that while it is important to build relationships with and engage with the government and other actors who have power, it is also important to hold them to account. As one DRR officer said, "Who are the duty bearers? Involve them, help them and also advocate them." Another key informant who has a senior position within a national NGO described how you need "grit" to do advocacy work.

CDP combines their community CD work with DRR advocacy at the national level. This was described as the "bibingka" approach, named after a Filipino rice cake that is traditionally cooked with heat from the top and bottom. This approach has been successful as CDP was one of the national organisations whose advocacy led to the passing of the DRRM Act.

Having a humble attitude

Being genuine, respecting the dignity of others and having humility were identified as important characteristics for external actors to have when engaging in CD. A church leader commented that people notice when you come and talk to people out of a sense of responsibility rather than out of genuine care for them. A regional NGO manager said, "We don't give all the answers. We also learn from them. And our program design and approaches has to be a result of a learning experience with the communities we work with."

5.5   Challenges of developing capacity at the local level

Differing priorities

DRR may not be a priority for all local actors. According to one DRR officer, people did not know about DRR before Yolanda; there is more interest after Yolanda, but it is only a priority for a minority. "They acknowledge its importance but for some it is still only an idea. Advocacy is needed because three years after Yolanda they still do not organise a DRR committee."

Also community volunteers, who often play an important role in DRR programmes at the local level, have other things they need to attend to. Since they are not paid, they need to provide for themselves in other ways, which may limit the time they can commit to the programme.

Political dynamics

As government agencies and staff are often targeted for advocacy or CD, practitioners sometimes encounter political dynamics that make DRR programming a challenge. The DRR structure in the Philippines was described by a DRR officer as "politically wired"; helping LGUs improve their DRR spending and getting plans approved is not always a straightforward process because of political dynamics. Interestingly, power relations between NGOs and communities were not mentioned, although a power imbalance often does exist in CD for DRR programmes (Hagelsteen and Becker, 2013).

Practical challenges

When engaging in CD for DRR there are a wide range of practical challenges practitioners encounter. A language barrier for non-native speakers was identified as one challenge. This is true for foreign staff who do not speak Filipino or another local language, but also true for Filipinos who are working in an area that speaks a language they do not know.

Limited scientific data on hazards and risks in the country was identified as a challenge when making plans and seeking to supplement local knowledge with scientific knowledge. However a DRR officer commented that this is slowly changing.[5]

High staff turnover is another challenge when developing capacity. A NGO staff member described introducing new tools and approaches to a new staff member from a partner organisation only to see the person leave after a few months. This meant the same process had to be repeated again once a replacement was hired. According to the key informant, this challenge highlights the need for good knowledge management to ensure that knowledge and experience gained by one individual can be accessed and shared with others if that person leaves the organisation.

Working with short funding cycles and donor demands is a challenge in some CD programmes. A NGO deputy director said, "It takes a lot of time when working with the community; if we do it rushed, then we're not proud of the result." Few *et al.* (2015a, p.52) found most CD for DRR programmes operate on two to three year timeframes, but to be effective, more time than that is needed.

---

[5] One example is the launch in 2012 of Project NOAH by the Department of Science and Technology, which is working to enhance geo-hazard vulnerability maps in the country - http://noah.dost.gov.ph/p/about

6 Conclusions

As the human and economic costs of disasters increase and the production of new risk results in rising vulnerability, developing the capacity of local actors for managing disaster risk is widely recognised as important. Despite recognition of such, "knowledge about capacity development, what it involves and what works in practice is still an emerging practice (Hagelsteen and Burke, 2016, p.43)." This research sought to contribute to this emerging practice by exploring how the capacity of local actors can be developed to manage disaster risk and strengthen resilience.

The application of capacity development for disaster risk reduction

Training is the most common activity used to develop capacity, and the research found that trainings are often interactive and contextualised, which is identified by the literature as important for increasing effectiveness. However training has its challenges and should not be used exclusively (Pearson, 2011). Knowledge transfer does not always occur and its retention needs to be planned for. Follow up and repetition can help ensure that the ideas introduced or skills taught in a training are actually understood and applied by participants.

The research revealed that CD investments have primarily focused upon improving people's ability to plan, prepare for and respond to disasters through strengthening a mixture of technical and functional capacities. Within the 3As resilience framework these capacities can largely be described as absorptive and anticipatory. These investments appear to have paid dividends as many local actors expressed feeling better prepared for future disasters.

However there is room for growth. Capacities that are aimed at prevention and mitigation are also essential yet were largely absent. While there were exceptions, the DRR concept seems to be often understood and applied in terms of preparedness and response. This is reflective of findings in the literature, and the fact that it emerged here as well suggests this is an area for growth across CD for DRR programmes.

Strengthening people's capacity to adapt is one way to shift from a focus on known, short-term risks to risks that are changing and long-term in nature. One possible outcome of adaptive capacity identified in the literature is strengthening livelihoods, and examples of this were observed. While the preparedness component of DRR has become better understood and valued since Yolanda, livelihoods remain a priority for local actors, so attempts to develop capacity for DRR can integrate livelihood support as a way to align CD with local actor's priorities.

A key element of adaptive capacity is learning, which the research revealed occurs in a variety of ways, both informally and through structured activities. Learning emerged as a more prominent theme than expected, which was a welcome surprise as it is important for both resilience and CD. Learning is essential for recovering from shocks and stresses in ways that reduce vulnerability, and is particularly important for developing new strategies or ways of doing things in the context of changing conditions and unknowns (Bahadur *et al.,* 2015; O'Brien *et al.*, 2010).

Doing things differently

The conventional disaster management and risk reduction paradigm, visualised in the disaster cycle, focuses on known risks and routine events. This is appropriate and arguably effective within such parameters. When we know *what* is coming and *when* it is coming, this paradigm works. However it

is not sufficient for managing known unknowns such as those that stem from anthropogenic activities that drive climate change (O'Brien *et al.*, 2010).

Typhoon Yolanda was a new kind of disaster event that resulted in unprecedented destruction. The interviews and focus groups confirmed that it was not expected or envisioned by the people who were most affected by its ferocity. In this context, doing things differently rather than better is needed (O'Brien *et al.*, 2010). This means traditional ways of developing capacity and managing risk may not be wholly sufficient on their own.

In relation to CD, a shift in *how* capacity is developed and *what* capacities are targeted for strengthening is required. The 'how' may mean not focusing exclusively on training and instead using a variety of activities such as exposure visits. Seeing CD as a continuous process of iteration and not only as a one-time activity is also important. A shift in 'what' capacities are developed may mean thinking about capacity not only in terms of technical and functional categorisation but also from a resilience perspective. Ask, "How are individuals' or organisations' capacities to absorb, anticipate and adapt to shocks and stresses being strengthened?"

Routine events still need to be planned for and managed, and capacities to do so should be strengthened, as they have been since Yolanda. However developing capacities that equip people to take advantage of change and adapt to it while encouraging learning is also needed.

Further research

The third research question sought to see if investments in CD are being sustained and maintained over time. While some examples of this were observed (e.g. using knowledge acquired in trainings to prepare for Typhoon Ruby, see section 5.2), the timing of the research, two-and-a-half years since Typhoon Yolanda, likely prevented this question from being explored fully as some activities are ongoing or have only recently finished. Further research could focus on this area. This research would help understand if the capacities targeted for strengthening were in fact developed and are being used.

6.1   Recommendations

Based on the findings from the research, recommendations can be made for organisations and practitioners seeking to develop the capacity of local actors for DRR. While specific to Eastern Visayas, these recommendations could be applied broadly as some of the findings are consistent with the literature on CD and DRR. However the local context should always be carefully considered and application may vary.

1.   Invest in prevention and mitigation, not only response and preparedness

     Structural improvements, restoring natural habitats or other small mitigation measures can be considered. Ensuring communities understand prevention and plan for it is another possible opportunity.

2.   Strengthen technical and functional capacities

     A mix of both capacities is often needed. Examples of functional capacity strengthening that emerged from the research include organisational development, proposal development and managing funds (see section 5.1.2). These types of capacities in particular are valued by

local actors especially when they are given the opportunity to put into practice what they have learned.

3. Improve absorptive capacity by investing in livelihood groups

   Livelihood groups offer the opportunity to encourage financial savings and may contribute to establishing stronger social networks—both of which are essential for absorbing shocks and stresses. Livelihood support should always be accompanied by livelihood protection such as linking people with government insurance schemes. Other community groups, such as disaster committees, may also present opportunities for strengthening social networks. Organisations can create space or incentives for this to take place.

4. Focus on adaptive capacity

   Strong and diversified livelihoods can improve adaptive capacity and are often a priority for local actors. See next recommendation on learning.

5. Support the emergence of learning

   Learning is a key element of adaptive capacity. First, understand the various ways learning occurs within a given context; then support its emergence. For example, the research revealed that people learn from each other in social contexts such as livelihood groups. Therefore that social context can be used as a vehicle for knowledge transfer and learning. Also, communities possess local knowledge that can be utilised and shared.

6. Conduct capacity assessments early and use them to inform programme activities

   Conducting capacity assessments before the programme is designed and using the findings to inform the design and subsequent activities helps ensure programmes are relevant and appropriate (see section 5.3, Assessments).

7. Use a variety of activities to develop capacity

   A mix of training and non-training activities is ideal. Exposure visits are an example of a non-training activity. Consider if trainings are the best form of activity. When chosen, trainings are most effective when interactive and contextualised. The research revealed several excellent examples of this including the use of stories, games and crafts (see section 5.3, Training and other activities).

8. Plan ahead for capacity and knowledge retention

   There seems to be a tendency by some organisations and practitioners to assume that knowledge or capacities will be retained, but this is not always the case. The research strongly suggested that knowledge transfer does not always occur following trainings. For example, when a training of trainers (ToT) approach is used, the information does not always 'cascade' from the initial trainer to others as designed. This needs to be acknowledged by organisations, and plans should be made beforehand to encourage retention after the training. Following up with participants and revisiting the information or topics covered in the training through a process of iteration are two ways of encouraging retention.

9. Ensure DRR plans consider long-term risks

    Most DRR plans seem to emphasise response and preparedness. There were a couple of examples of plans considering long-term risks, such as integrating CCA into planning, but more can be done in this area (see section 5.3, Outputs). Furthermore, it is important that organisations also follow up to ensure plans are used.

10. Be humble

    No one single person or organisation has all the answers for carrying out effective DRR work. Regarding the research question of the appropriate role of external actors, a humble attitude is especially important when seeking to develop capacity as CD is an internal process. How external actors provide support is as important as what kind of support is offered. Support can focus on organising, educating, engaging, and advocating.

References

ADRC (no date) *Information on Disaster Risk Reduction of the Member Countries: Philippines*. Available at: http://www.adrc.asia/nationinformation.php?NationCode=608 (Accessed: 29 August 2016). Asian Disaster Reduction Center (ADRC).

Aldrich, D.P. and Meyer, M.A. (2015) 'Social Capital and Community Resilience', *American Behavioral Scientist*, 59(2), pp.254-269.

Alexander, D. (2002) *Principles of emergency planning and management.* Harpenden: Terra.

Alexander, D. and Davis, I. (2012) 'Disaster Risk Reduction: An Alternative Viewpoint', *International Journal of Disaster Risk Reduction,* 2(2012), pp.1-5. doi:10.1016/j.ijdrr.2012.10.002

Bahadur, A.V., Ibrahim, M. and Tanner, T. (2010) *The resilience renaissance? Unpacking of resilience for tackling climate change and disasters.* Strengthening Climate Resilience Discussion Paper 1.

Bahadur, A.V., Peters, K., Wilkinson, E., Pichon, F., Gray, K. and Tanner, T. (2015) *The 3As: Tracking Resilience Across BRACED.* ODI Discussion Paper.

Becker, P. and Abrahamsson, M. (2012) *Designing Capacity Development for Disaster Risk Management: A Logical Framework Approach.* Swedish Civil Contingencies Agency (MSB).

Béné, C., Wood, R.G., Newsham, A. and Davies, M. (2012) 'Resilience: New Utopia or New Tyranny? Reflections about the potentials and limits of the concept of resilience in relation to vulnerability reduction programmes', *IDS Working Papers*, 2012(405), pp.1-61.

Bündnis Entwicklung Hilft and UNU-EHS (2016) *World Risk Report 2016*. Berlin: Bündnis Entwicklung Hilft (Alliance Development Works) and Bonn: United Nations University – Institute for Environment and Human Security (UNU-EHS).

CADRI (2011) *Basics of Capacity Development for Disaster Risk Reduction.* Available at: https://www.unisdr.org/we/inform/publications/18061 (Accessed: 4 June 2016).

Cardona, O.D. (2004) 'The Need for Rethinking the Concepts of Vulnerability and Risk from a Holistic Perspective: A Necessary Review and Criticism for Effective Risk Management', in Bankoff, G., Frerks, G. and Hilhorst, D. (eds) *Mapping Vulnerability: Disasters, Development and People.* Abingdon: Earthscan, pp.37-51.

CIA (no date) *The World Factbook: Philippines*. Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/rp.html (Accessed: 29 August 2016).

CRED (2015) *The Human Costs of Natural Disasters 2015: A Global Perspective*. Brussels: The Centre for Research on the Epidemiology of Disasters (CRED).

DEC (2014) *Philippines Typhoon Haiyan Response Review*. Disasters Emergency Committee (DEC).

DFID (2011) *Defining Disaster Resilience: A DFID Approach Paper*. Department for International Development (DFID).

DFID (2014). *KPI4 Guidance*. Department for International Development (DFID).

Eade, D. (1997) *Capacity-building: an approach to people-centred development.* Oxford: Oxfam.

Featherstone, A. (2014) *Missed Again: Making Space for Partnership in the Typhoon Haiyan Response.* Available at: http://www.alnap.org/resource/12911 (Accessed: 29 August 2016).

Few, R., Scott, Z., Wooster, K., Avila, M.F., Tarazona, M. and Thomson, A. (2015a) *Strategic Research into National and Local Capacity Building for DRM: Synthesis Report*. Geneva: International Federation of Red Cross and Red Crescent Societies (IFRC).

Few, R., Scott, Z., Wooster, K., Luna, E., Cadag, J.R. and Avila, M.F. (2015b) *Strategic Research into National and Local Capacity Building for DRM: Philippines Fieldwork Report*. Oxford: Oxford Policy Management (OPM).

Foley, J.M. and Kaiser, L.M.R. (2013) 'Learning Transfer and Its Intentionality in Adult and Continuing Education', *New Directions for Adult and Continuing Education*, 2013(137), pp.5-15. doi: 10.1002/ace.20040

Galderisi, A., Ferrara, F.F. and Ceudech, A. (2010) 'Resilience and/or vulnerability? Relationships and roles in risk mitigation strategies', in Ache, P. and Ilmonen, M. (eds) *Space is Luxury: Selected Proceedings of the 24th AESOP Annual Conference*. Finland: Aalto University, pp. 388-405.

Hagelsteen, M. and Becker, P. (2013) 'Challenging disparities in capacity development for disaster risk reduction', *International Journal of Disaster Risk Reduction,* 3(1), pp. 4-13.

Hagelsteen, M. and Burke, J. (2016) 'Practical aspects of capacity development in the context of disaster risk reduction', *International Journal of Disaster Risk Reduction,* 16(1), pp. 43-52.

IFRC (2015a) *Philippines Emergency Appeal No. MDRPH020*. Available at: http://reliefweb.int/report/philippines/philippines-typhoons-and-floods-emergency-appeal-n-mdrph020 (Accessed: 29 August 2016). International Federation of Red Cross and Red Crescent Societies (IFRC).

IFRC (2015b) *World Disasters Report 2015: Focus on local actors, the key to humanitarian effectiveness.* International Federation of Red Cross and Red Crescent Societies (IFRC).

IPCC (2014) *Climate Change 2014 Synthesis Report: Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. Geneva: Intergovernmental Panel on Climate Change (IPCC).

Kellet, J., Caravani, A. and Pichon, F. (2014) *Financing Disaster Risk Reduction: Towards a coherent and comprehensive approach.* London: Overseas Development Institute (ODI).

Kenny, S. and Clarke, M. (2010) *Challenging capacity building: comparative perspectives.* Basingstoke: Palgrave Macmillan. Rethinking international development series.

Lavell, A. and Maskrey, A. (2014) 'The Future of Disaster Risk Management', *Environmental Hazards,* 13(4), pp.267-280. doi: 10.1080/17477891.2014.935282

Lovell, E., Bahadur, A.V., Tanner, T. and Morsi, H. (2016) *Resilience – The Big Picture: Top themes and trends.* London: Overseas Development Institute (ODI).

Lucas, B. (2013) *Current Thinking on Capacity Development*. GSDRC Helpdesk Report. Available at: http://www.gsdrc.org/publications/current-thinking-on-capacity-development/ (Accessed: 9 June 2016).

Luna, E.M. (2014) 'Community-based disaster risk reduction and management', in López-Carressi, A., Fordham, M., Wisner, B., Kelman, I. and Gaillard, J.C. (eds.) *Disaster Management: International lessons in risk reduction, response and recovery.* Abingdon: Routledge, pp. 43-63.

Manyena, S. B. (2006) 'The concept of resilience revisited', *Disasters,* 30(4), pp. 434-450. doi: 10.1111/j.0361-3666.2006.00331.x.

O'Brien, G. and O'Keefe, P. (2014) *Managing adaptation to climate risk: beyond fragmented responses.* Abingdon: Routledge.

O'Brien, G., O'Keefe, P., Gadema, Z. and Swords, J. (2010) 'Approaching disaster management through social learning', *Disaster Prevention and Management*, 19(4), pp.498-508. doi: 10.1108/09653561011070402

OECD (2006) *The Challenge of Capacity Development: Working towards good practice*. Paris: Organisation for Economic Co-operation and Development (OECD).

Otoo, S., Agapitova, N., and Behrens, J. (2009) *The Capacity Development Results Framework: A Strategic and Results-oriented Approach to Learning for Capacity Development.* Washington: World Bank Institute (WBI).

Pasteur, K. (2011) *From Vulnerability to Resilience*. Warwickshire: Practical Action.

Pearson, J. (2011) *Training and Beyond: Seeking Better Practices for Capacity Development.* OECD Development Co-operation Working Papers, No. 1, OECD Publishing.

PSA (no date) *Concepts and Definitions*. Available at: http://www.nscb.gov.ph/activestats/psgc/articles/con_lgu.asp (Accessed: 7 September 2016). Philippine Statistics Authority (PSA).

Ramalingam, B., Gray, B. and Cerruti, G. (2013) *Missed Opportunities: The case for strengthening national and local partnership-based humanitarian responses.* Available at: http://www.alnap.org/resource/8890 (Accessed: 1 September 2016).

REACH (2013) *Philippines Typhoon Yolanda (Haiyan): Distance from Typhoon Path and Poverty Rate 09 November.* Available at: http://reliefweb.int/map/philippines/philippines-typhoon-yolanda-haiyan-distance-typhoon-path-and-poverty-rate-09 (Accessed: 30 August 2016).

Rivas, C. (2012) 'Coding and analysing qualitative data', in Seale, C. (ed) *Researching Society and Culture.* 3rd edn. London: Sage, pp.366-392.

Rivera, C., Tehler, H. and Wamsler, C. (2015) 'Fragmentation in disaster risk management systems', *International Journal of Disaster Risk Reduction,* 14(2015), pp.445-456. doi:10.1016/j.ijdrr.2015.09.009

Robson, C. (2011) *Real World Research*. 3rd edn. Chichester: John Wiley & Sons Ltd.

Scolobig, A., Prior, T., Schröter, D., Jörin, J. and Patt, A. (2015) 'Towards people-centred approaches for effective disaster risk management: Balancing rhetoric with reality', *International Journal of Disaster Risk Reduction,* 12(2015), pp.202-212. doi:10.1016/j.ijdrr.2015.01.006

Scott, Z., Few, R., Leavy, J., Tarazona, M., Wooster K. and Avila, M.F. (2015) *Strategic Research into National and Local Capacity Building for Disaster Risk Management: Literature Version 2.* Oxford: Oxford Policy Management (OPM).

Silverman, D. (2014) *Doing Qualitative Research*. 4th edn. London: Sage.

Tiwari, A. (2015) *The Capacity Crisis in Disaster Risk Management: Why disaster management capacity remains low in developing countries and what can be done.* Switzerland: Springer.

Twigg, J. (2009) *Characteristics of a Disaster Resilient Community*. A Guidance Note, Version 2.

Twigg, J. (2015) *Good Practice Review 9: Disaster Risk Reduction.* London: Overseas Development Institute (ODI).

Ubels, J., Acquaye-Baddoo, N.A. and Fowler, A. (2010) *Capacity development in practice.* London: Earthscan.

UN (2015) *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York: United Nations (UN).

UNDP (2008) *Capacity Development Practice Note.* New York: United Nations Development Programme (UNDP).

UNDP (2015) *Human Development Report 2015: Work for Human Development*. New York: United Nations Development Programme (UNDP).

UNISDR (2005) *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters.* Geneva: United Nations International Strategy for Disaster Reduction (UNISDR).

UNISDR (2009) *2009 UNISDR Terminology on Disaster Risk Reduction*. Geneva: United Nations International Strategy for Disaster Reduction (UNISDR).

UNISDR (2015a) *Making Development Sustainable: The Future of Disaster Risk Management. Global Assessment Report on Disaster Risk Reduction.* Geneva: United Nations International Strategy for Disaster Reduction (UNISDR).

UNISDR (2015b) *Sendai Framework for Disaster Risk Reduction 2015-2030.* Geneva: United Nations International Strategy for Disaster Reduction (UNISDR).

UNOCHA (2014) *Typhoon Hagupit Situation Report No. 5 (as of December 11 2014)*. Available at : http://reliefweb.int/report/philippines/philippines-typhoon-hagupit-situation-report-no-5-11-december-2014 (Accessed: 29 August 2016). United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).

Wisner, B., Blaikie, P., Cannon, T. and Davis, I. (2004) *At Risk: Natural hazards, people's vulnerability and disasters.* 2nd edn. London: Routledge.

Wisner, B., Gaillard, J.C. and Kelman, I. (2012) *The Routledge handbook of hazards and disaster risk reduction.* London: Routledge.

Woodhill, J. (2010) 'Capacity Lives Between Multiple Stakeholders', in Ubels, J., Acquaye-Baddoo, N.A. and Fowler, A. (eds) *Capacity development in practice.* London: Earthscan, pp.25-41.

Appendix 1: Topic guide for local actors

1. This is my first time here. Can you describe to me the community you live in?
2. What are the main hazards and risks you face in this area?
3. What are the main strengths and capacities that exist here (either individual or community)?
4. How did Typhoon Yolanda impact you and your family?
5. Who did you turn to for support following Yolanda?
6. Who in your community had the most problems when you faced this disaster? Who had the least? Why?
7. In what ways did you feel prepared or unprepared for Yolanda? Why?
8. What did this experience teach you?
9. At the moment would you say you are in a better, worse or same situation as before this experience? Why?
10. When was the last time you faced a disaster or crisis? [Repeat questions 6-10 if applicable]
11. Based on your experience what skills, knowledge or resources are important for people to have in order to deal with disaster?
12. Have you participated in any activities or projects related to disaster response, preparedness or risk reduction? If so, can you describe this activity? When did this take place?
13. What groups of people (e.g. young, old, men, women) participated in these activities?
14. What about this activity did you find most useful?
15. What was missing from this activity that should have been included?
16. Have you used the _____ (e.g. information, equipment, technology, skills) to which you were introduced? Can you give an example?
17. Do you feel that participating in this activity or project has improved your ability to prevent, respond to or recover from disasters? Why?
18. In what ways can people outside your community, such as organisations or the national government, best support you in being prepared for or preventing a disaster?
19. What advice would you give someone who is experiencing similar hazards as yourself?
20. Is there anything I have missed that you would like to add?

Appendix 2: Topic guide for key informants

1. What are the main hazards and risks people at the local level face?
2. What are people's short and long-term needs following a disaster?
3. What kinds of activities is your organisation involved in and who are the main participants?
4. How does your organisation help people manage and adapt to disasters?
5. In what ways does your organisation seek to strengthen local people's capacities?
6. What is the role of local people in this process and how do they participate?
7. Is your organisation working with any local groups or organisations? If so, which ones and how?
8. What kinds of capacities are important for people at the local level to have in order to deal with disaster?
9. To what extent are activities related to DRR a priority for people?
10. What aspects of DRR work are most valued by people at the local level?
11. What outcomes have you observed from DRR or capacity development activities?
12. How have the people who have participated in these activities used what they learned or practiced?
13. Have you observed continued learning on the part of individuals or a community after the completion of an activity or project? If so, can you provide an example?
14. What factors make a DRR activity or project at the local level a success?
15. What are the challenges of strengthening capacity for DRR at the local level?
16. In your opinion, what can local institutions do to support the development of capacity around DRR and help overcome these challenges?
17. What is the appropriate role for people outside a community, such as NGOs or the national government, in strengthening people's capacities and helping them manage disaster risk?
18. Is there anything I have missed that you would like to add?

Appendix 3: Summary of findings by section

Section	Findings
5.1 - Capacity development for what?	• Most technical capacities are preparedness focused – need to consider prevention and mitigation as well • Functional capacities are geared towards improving organisational capacity and managing funds • Absorptive capacity – livelihood groups offer opportunity to grow savings and improve social networks; need to ensure livelihoods are protected • Anticipatory capacity – heavy investments in preparedness and planning; coordination also important • Adaptive capacity – livelihood recovery is slow so continued strengthening needed, also livelihoods are a priority for local actors; evidence of learning
5.2 - Learning	• Learning can occur informally or through structured activities • Groups are contexts where social learning takes place • Need to support emergence of learning and utilise local knowledge to improve adaptive capacity
5.3 - How is capacity development done in practice?	• Participatory approaches common but more can be done to move beyond participation to include ownership • Assessments should be done as early as possible to ensure relevance of programmes • Trainings are most common activity and are often interactive and contextualised – also used to strengthen functional capacities • ToT is also common – has potential to reach lots of people but 'cascading' does not always occur • Knowledge transfer is not a guarantee – needs to be planned for and follow up can help • DRR plans are most common output and have preparedness and response emphasis – need to consider long-term risks and ensure plans are used
5.4 - Role of external actors	• External actors have supportive role to play – organising, educating, engaging, and advocating • A humble attitude is required – 'how' matters as much as 'what'
5.5 - Challenges of developing capacity at the local level	• DRR may not always be a priority for local actors • Political dynamics may affect the process • Practical challenges include language barriers, limited availability of scientific data, high turnover, and short funding cycles

Appendix 4: Ethics Review Form

OXFORD
BROOKES
UNIVERSITY

Faculty of Technology, Design and Environment

Ethics Review Form E1

This form should be completed by the Principal Investigator / Supervisor / Student undertaking a research project which involves human participants. The form will identify whether a more detailed E2 form needs to be submitted to the Faculty Research Ethics Officer.

Before completing this form, please refer to the University **Code of Practice for the Ethical Standards for Research Involving Human Participants**, available at http://www.brookes.ac.uk/Research/Research-ethics/ and to any guidelines provided by relevant academic or professional associations.

It is the Principal Investigator / Supervisor who is responsible for exercising appropriate professional judgement in this review. Note that all necessary forms should be fully completed and signed before fieldwork commences.

Project Title: _Capacity development for disaster risk reduction_

Principal Investigator / Supervisor: _Dr. SUPRIYA AKERKAR_

Student Investigator: _Thomas Austin Snowbarger_

		Yes	No
1.	Does the study involve participants who are unable to give informed consent? (e.g. children, people with learning disabilities, unconscious patients)	☐	☑
2.	If the study will involve participants who are unable to give informed consent (e.g. children under the age of 16, people with learning disabilities), will you be unable to obtain permission from their parents or guardians (as appropriate)?	☐	☑ N/A
3.	Will the study require the cooperation of a gatekeeper for initial access to groups or individuals to be recruited? (e.g. students, members of a self help group, employees of a company, residents of a nursing home)	☐	☑
4.	Are there any problems with the participants' right to remain anonymous, or to have the information they give not identifiable as theirs?	☐	☑
5.	Will it be necessary for the participants to take part in the study without their knowledge/consent at the time? (eg, covert observation of people in non-public places?)	☐	☑
6.	Will the study involve discussion of or responses to questions the participants might find sensitive? (e.g. own drug use, own traumatic experiences)	☐	☑

7.	Are drugs, placebos or other substances (e.g. food substances, vitamins) to be administered to the study participants?	☐	☑
8.	Will blood or tissue samples be obtained from participants?	☐	☑
9.	Is pain or more than mild discomfort likely to result from the study?	☐	☑
10.	Could the study induce psychological stress or anxiety?	☐	☑
11.	Will the study involve prolonged or repetitive testing of participants?	☐	☑
12.	Will financial inducements (other than reasonable expenses and compensation for time) be offered to participants?	☐	☑
13.	Will deception of participants be necessary during the study?	☐	☑
14.	Will the study involve NHS patients, staff, carers or premises?	☐	☑

If you have answered 'no' to all the above questions, send the completed form to your Module Leader and keep the original in case you need to submit it with your work.

If you have answered 'yes' to any of the above questions, you should complete the Form E2 available at:
http://www.brookes.ac.uk/Research/Research-ethics/Ethics-review-forms/
and together with this E1 Form, email it to the Faculty Research Ethics Officer, whose name can be found at
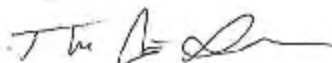http://www.brookes.ac.uk/Research/Research-ethics/Research-ethics-officers/

If you answered 'yes' to any of questions 1-13 and 'yes' to question 14, an application must be submitted to the appropriate NHS research ethics committee.

Signed: Principal Investigator
                                                                 /Supervisor

Signed: Student Investigator

Date: 8ᵗʰ JULY 2016