Early Warning Systems through a gender lens: An institutional analysis conducted as part of a work-based placement at Practical Action
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### ACRONYMS

CDMC: Community Disaster Management Committees  
CRED: Centre for Research on the Epidemiology of Disasters  
DRR: Disaster Risk Reduction  
EWS: Early Warning Systems  
ICIMOD: International Centre for Integrated Mountain Development  
INGO: International Non-Governmental Organisation  
IPCC: International Panel on Climate Change  
NGO: Non-Governmental Organisation  
UNDP: United Nations Development Programme  
UNIFEM: United Nations Development Fund for Women  
UNISDR: The United Nations Office for Disaster Risk Reduction
**Introduction: Why study EWS through a gender lens?**

The increasing trend in extreme weather situations has placed great emphasis on the need for advanced technologies for their prediction. Indeed, as evidenced by recent reports, hydrological and meteorological events such as floods, storms and heatwaves have increased considerably in the last decade which triggered improvements in weather projection technologies (Thomas & LLpez 2015:v; Fakhruddin et al. 2015). In this context, Early Warning Systems (EWS) have emerged as a crucial tool for providing people with early risk information in order to improve disaster preparedness. In particular, EWS are essential for floods, “the most frequent natural disaster” that have detrimental impact on people and their livelihoods around the world and especially in the low-income countries (Perera et al. 2014:670; CRED and UNISDR 2015:11).

It is important to stress that the existence of EWS is not enough for reducing the severe consequences which are caused by flood-related disasters. For this reason, efficiency of flood EWS depend on the ways in which people perceive and process the risk information (Twigg, 2003:19). As Basher (2006) explains, technical performance of EWS is meaningful only if the system is focused on the people who are subject to such technologies. Therefore, without understanding the risk perception of communities and the factors affecting their decisions, it is not possible to expect EWS to operate efficiently. In this sense, a variety of factors ranging from gender and socio-economic status to cultural values can affect the ways in which EWS operate. One essential factor can be specified as the gender relations in the affected area, which entails “socially constructed stereotypes, roles, opportunities and relationships associated with being male or female” (Pincha 2008:3). Despite this, information relating to gender dimensions of EWS in flood prone areas is still scarce while a considerable amount of flood response projects of non-governmental organisations (NGOs) as well as governments lack an explicit gender analysis (Eklund & Tellier 2012). Furthermore, most of the existing research on EWS which can be found in the literature pertain to technical improvements of EWS. While research on technical improvements is indeed necessary, EWS well deserves careful analysis from a gender lens as several questions remain unanswered to understand why women are considered as the most vulnerable and why their leadership and capacities are crucial for the flood response.

EWS in low-income countries are complex as these systems may fail due to diverse “technological, social and political” problems (Basha & Rus 2007:1). It is true that the
technology capacity of the flood prone country is very important. However, if the “local institutional capacity” and the “participation of local communities” are neglected, EWS may fail to operate (Cools et al. 2016:121). In this sense, as this research will demonstrate, NGOs play a critical role in mediation between EWS and communities. Indeed, in cases where the local institutional capacity is low, NGOs and other local and international organisations play a key role in the EWS. Therefore, their understanding of gender is essential for the efficiency of EWS, and thus a gender inclusive flood response. Based on this point of view, this research aims to provide an institutional analysis of an INGO, Practical Action. Together with the head office in the UK, Practical Action has a consulting and a publishing wing as well as international offices in Africa, South Asia, and Latin America (Practical Action 2016a). This research will focus on the gender aspect of Practical Action’s flood early warning projects in two relatively close South Asian countries, Nepal and Bangladesh.

Next section will explain why Nepal and Bangladesh were chosen as the focus countries of this research. Having analysed the role of EWS as a part of the disaster risk reduction process, Chapter One will go on to provide a brief discussion on gender and flood EWS. Chapter Two will lay out the methodology used for the research as well as limitations as part of a work-based placement at Practical Action. Building on the necessary base for understanding EWS and gender debates around disasters, Chapter Three will present the findings drawing upon semi-structured interviews with Practical Action staff in UK, Nepal and Bangladesh country offices as well as relevant institutions and government officials. Finally, in Chapter Four, main challenges will be identified to provide a brief discussion in relation to the academic work on gender, development and disasters.
Chapter One

1.1 Focus countries

The significance of EWS is nowhere more evident than in Asia, a continent where 95% of the people who are affected by flood disasters lived in the last decade (CRED and UNISDR 2015). As Practical Action’s main flood EWS projects are concentrated in Nepal and Bangladesh, the present research focuses on these two relatively close flood prone South Asian countries. It is important to provide a brief overview for these regions respectively in order to better understand the motives of Practical Action to prioritise these countries for implementing EWS projects.

Identified by a “fragile geology, rugged terrain, and monsoon precipitation”, Nepal faces floods very frequently, especially during the monsoon season in which it receives about 80% of rainfall each year (Shrestha et al. 2014:2). According to the Nepal Government’s Department of Water Induced Disaster Prevention, “between 1983 and 2010, floods and landslides killed 7,809 people, accounting for more than 35% of deaths from all natural disasters in the country” (Shrestha et al. 2014:6). For this reason, Practical Action has prioritised disaster risk reduction in Nepal from 2012 to 2017 (Practical Action 2016b). The INGO states its role in the disaster risk reduction as “to save lives, livelihoods and properties of women and men residing in the vulnerable parts of the country by building their resilience (Ibid). For realising these goals, it aims at focusing on EWS for floods, scaling up the “community based EWS” and influencing government and other stakeholders for “strengthening resilience of livelihoods” (Ibid).

Second focus country of this research, Bangladesh “lies in the largest delta on earth jointly by three mighty rivers” (Hossain & Sakai 2008:1). Every year, people in Bangladesh witness floods as “almost all of Bangladesh's deltaic plain is submerged” during the monsoon season while it receives 85% of the rainfall between June and September (Zaman 1993:985, Islam 2001:783). In relation to this, Zaman (1993) explains that monsoon season floods are accepted as an “predictable, normal, annual event” (1993:986). On the other hand, the “high or abnormal floods” cause loss of life and great damage to livelihoods (Ibid). According to a recent research conducted by Verisk Maplecroft, a risk management firm, the population of Bangladesh is identified as the third in the world to face the “greatest exposure to natural hazards” (Verisk Maplecroft 2016). Similarly, World Resources Institute reported in 2015
that annually 3.48 millions of its population are affected by river flood risk, which makes the country second in the top 15 countries “with greatest population exposed to river flood risk” (Luo et al. 2015). In this context, Practical Action is implementing its programmes in Bangladesh to make use of technology to reduce the impact of natural disasters with the objective of “improving vulnerable communities' ability to prepare for, survive and rebuild their livelihoods after natural disaster” (Practical Action 2016d). These efforts will be elaborated further in Chapter Three, with a focus on Practical Action’s current EWS projects in Nepal and Bangladesh.

Despite many differences in the ways in which these countries are affected by floods, EWS in both countries have a great potential to save lives and reduce the impact of disasters. Therefore, as an INGO that “uses technology to challenge poverty in developing countries”, Practical Action has developed various projects concerning EWS in collaboration with the governments in Nepal and Bangladesh (Practical Action 2016f). In both countries, EWS programmes have achieved varied levels of success. However, since gender stood out as a gap in the organisation’s understanding of the impacts of their EWS projects, this research takes its purpose from this lack of understanding to investigate the reasons behind this phenomenon.

1.2 Research Questions

Much recently, Practical Action’s head office has made a number of attempts to make their EWS programmes gender-sensitive. For the reasons outlined in the previous section, there is a need for looking critically at these projects and activities to understand how Practical Action programmes are influenced by gender-sensitiveness in recent years.

As an institutional analysis, this research seeks to explore the degree to which gender approaches have integrated in EWS programmes in Nepal and Bangladesh. First of all, why did Practical Action considered a gender approach to EWS? Were they able to integrate this approach in their projects? If not, what were the obstacles preventing such a gendered approach?
1.3 Contextualizing EWS

In the following sections, the role of EWS in disaster risk reduction will be explained and gender dimension of EWS will be stressed in order to provide the context in which the research questions mentioned above are explored.

1.3.1 Understanding EWS in disaster risk reduction

In an effort to explain the increased unpredictability of weather and flood events, the International Panel on Climate Change (IPCC) reported that since 1880, there has been a “global mean temperature increase of almost 1°C” mainly due to human activities (Steininger et al. 2015:vii). Accordingly, researchers suggest that the increase in mean temperature, a situation which is referred as climate change, will “affect the hydrological cycle, which in turn will have an impact on rainfall and runoff patterns and the general availability of water” (Sugden et al. 2014:1). These predictions were reflected in United Nation’s Sustainable Development Goals as protective measures, among which one goal is dedicated to “take urgent action to combat climate change and its impacts” for the 2030 Agenda for Sustainable Development (UN 2015). Although the casual links between climate change and disasters have not been clarified yet, it is estimated that hydrological events such as floods “may be exacerbated by the effects of climate change” (Filho 2013:3). Furthermore, as Perera et al. (2014) argue, there has been a consensus in the literature that low-income countries are exposed to severe consequences of the climate change because of “the predominance of agriculture in their economies, scarcity of capital for adaptation measures and their warmer baseline climates” (2014:670). In this sense, EWS have an important potential to reduce the impact of climate change by contributing to an effective disaster management.

Last decade witnessed important advances in the EWS (Cools et al. 2016). As The United Nations Office for Disaster Risk Reduction UNISDR (2015) reports, progress in EWS ranges “from more accurate monitoring of weather events to vastly increased mobile phone access and real improvements in disaster preparedness and response” (2015:45). These advancements improved the time management of people during the emergency situations especially when evacuating to safer areas (Ibid.). In this context, case studies from both high-income and low-income countries indicate that EWS have a great potential to reduce mortality and devastation while strengthening the “resilience of a society” (Cools et al.
In parallel to these developments, recent literature suggests that there has been a “paradigm shift from disaster response to disaster risk reduction in different countries” as disasters have become more frequent and destructive for people and their livelihoods around the world (Shaw et al. 2013:3). This shift was supported by UNISDR with two conventions signed by 168 countries on natural disaster risk reduction: Hyogo Framework for International Action (HFA) for the years 2005-2015 and Sendai Framework for Disaster Risk Reduction for the next 15 years as a “successor instrument” (Enia 2013; United Nations 2005; UNISDR 2015). The objective of these conventions included strengthening disaster risk management and disaster preparedness as well as enhancing EWS. It is not the purpose of this study to explain all types of EWS related to disaster risk reduction, but rather to focus on specifically the flood related EWS.

Flood EWS can be briefly summarized under three approaches (Basha & Rus 2007). The first one is subject to a highly advanced technology with remarkable resource basis that can be seen in high-income countries such as the US (Ibid). It uses the “Emergency Alert System” which “provides communication of the alerts throughout the nation using television and radio channels by creating special technology and policies” while predictions are made by highly qualified hydrologists (Ibid:2). On the other hand, the second system, which is used in Central America, depends on volunteer work along with low technology. In this setting, volunteers read the “river level markings painted on bridges” and pass the information to government which has the authority to decide on an evacuation alert (Ibid:3). Finally, the third system can be seen in Bangladesh where “the satellite information and forecasts generated by the US” is used to provide flood predictions. This information is then distributed the information through the government and various media channels such as television, internet, e-mail and radio (Ibid:3).

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1 For detailed information, consult relevant UNISDR pages: [http://www.unisdr.org/we/coordinate/sendai-framework](http://www.unisdr.org/we/coordinate/sendai-framework), [https://www.unisdr.org/we/coordinate/hfa](https://www.unisdr.org/we/coordinate/hfa)
Independent from the context and the technology that is being used, there are four elements that make EWS effective. These are defined by UNISDR as “risk knowledge, monitoring and warning service, dissemination and communication and response capability” (UNISDR, 2006). Firstly, risk knowledge seeks to answer questions around the predictability of current hazards and vulnerabilities as well as the availability of risk maps and relevant information (Ibid.). Secondly, monitoring and warning service aims to “develop hazard monitoring and early warning services” (Ibid). Thirdly, dissemination and communication questions the availability and the interpretation of data received by different communities. Finally, response capability measures the reaction of people to warnings (Ibid).

**The Four Elements of Effective Early Warning Systems**

<table>
<thead>
<tr>
<th>Risk knowledge</th>
<th>Monitoring and warning service</th>
<th>Dissemination and communication</th>
<th>Response capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the hazards and the vulnerabilities well known? What are the patterns and trends in these factors? Are risk maps and data widely available?</td>
<td>Are the right parameters being monitored? Is there a sound scientific basis for making forecasts? Can accurate and timely warnings be generated?</td>
<td>Do warnings reach all of those at risk? Are the risks and the warnings understood? Is the warning information clear and useable?</td>
<td>Are response plans up to date and tested? Are local capacities and knowledge made use of? Are people prepared and ready to react to warnings?</td>
</tr>
</tbody>
</table>

Systematically collect data and undertake risk assessments

Develop hazard monitoring and early warning services

Communicate risk information and early warnings

Build national and community response capabilities

Figure 1 Types of different EWS. Table by author. Source: FEMA (2016); UNDP (2012); USAID (2015)

Figure 2 The Four Elements of EWS. Table by author. Source: UNISDR (2006)
Recent studies on flooding have shown the central role of risk communication in flood management which resulted in “a paradigm shift from engineering-based flood defence to a more integrated risk-based management” (Demeritt & Nobert 2014:313). This shift highlighted the importance of human perceptions and response while questioning the impact of “technocratic” and “top-down” approaches (Mustafa et al. 2015). As risk messages are perceived differently according to factors such as socio-economic level and gender, it is important to acknowledge the impact of these factors when interpreting the early warning information (Ibid).

1.4.2 Gendering flood EWS: Why women are considered as the most vulnerable?

Although sex-disaggregated data relating mortality in flood related disasters is still very scarce, women are considered as the most vulnerable during a disaster event by different disaster risk reduction authorities as well as scholars (Eklund & Tellier 2012). Vulnerability in this sense can be defined as “the state of susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt” (Adger 2006:268). However, it is important to note that vulnerabilities differ from one context to another and they can be defined very differently depending on the specific country context and gender relations in place. Mostly based on qualitative data, there are accounts that are showing women’s vulnerabilities are rising during a disaster event. In relation to this, Ikeda (1995) claims that women’s vulnerability cannot be explained by physiological factors but rather it is a result of gender and power relations in place. For instance, United Nations Development Fund for Women, UNIFEM (2010) reports that during the 2010 floods in Pakistan, there were women who refused to leave their houses for a number of reasons such as “disbelief of flood warning; concerns of theft or occupation of, or losing claim to property; reluctance to move to camps due to cultural norms, and hesitation about taking women and girls out of protected environment of homes exposing them to strangers” despite flood EWS in place (2010:4). Indeed, as evidenced by various scholars, floods increase “women’s domestic burden” as in most households women depend on their houses for sustaining their livelihoods (Williams 2016:159, Cannon 2002:48).
According to a recent report published by the International Centre for Integrated Mountain Development (ICIMOD)\(^2\) on gender and EWS, women’s vulnerability in Himalayan region during flood related disasters is a result of “lack of information, mobility, decision-making power, and access to resources and training, as well as gender-based social/cultural norms and barriers, conventional gender responsibilities, and high rates of male outmigration” (Shrestha et al. 2014:2). In contrast, although it is known that “making an early warning system gender inclusive is crucial to its success in saving lives”, the gender factor is often neglected when designing EWS projects (Ibid:3). Therefore, disaster risk reduction initiatives need to consider “gender inequalities” and “gendered power relations” in order to address the root causes of women’s vulnerability (Bradshaw 2015:54). Furthermore, a survey conducted by the UNISDR has shown that, only 13 per cent of the people who were working for disaster risk reduction suggested that “they had expertise” in gender while another 13 per cent of people stated that “it was an area that needs more expertise” (Ibid:56). This implies that, still, the majority of disaster risk reduction professionals are not convinced by the essentiality of analysing gender dimensions when designing, implementing and evaluating EWS projects (Ibid). For this reason, it can be said that it is very important to consider flood EWS in a gender framework, rather than define them as a technical process independent from the gender and power relations in a place.

\(^2\)“A regional intergovernmental learning and knowledge sharing centre serving the eight regional member countries of the Hindu Kush Himalayas” (ICIMOD 2016)
Chapter Two: Methodology

The present research was conducted as a part of a work-based placement at the Practical Action, as introduced in Chapter One. Since all technologies used for preparation and resilience for disasters are beyond the scope of this study, only EWS projects in Nepal and Bangladesh are considered throughout the research. Institutional dynamics of Practical Action were examined through a gender lens in order to understand gender-sensitiveness of EWS projects. The following sections seek to explain the research design and ethical considerations followed by limitations of the study.

2.1 Research Design

The research was conducted as a qualitative analysis of Practical Action through semi-structured interviews. Additional interviews were conducted with other local and international NGO staff as well as government officials with the intention of capturing a holistic perspective about EWS projects in Nepal and in Bangladesh. The study was supported with other secondary sources such as journals, websites and international reports published by different NGOs and government departments.

In the first step of the study, literature and relevant reports were examined to understand the dynamics between gender, EWS and NGOs. Following this examination, interview questions were designed, which were inspired from ICIMOD’s report on Flood EWS and gender which outlines latest developments in the field (ICIMOD 2014). These questions were then revised differently for each interviewee according to their institution and profession within their organisation. Simultaneously, interviewees were identified with the support of Colin McQuistan, Senior Policy and Practice Advisor for Climate Change and Disaster Risk Reduction at Practical Action. The list of the participants was then extended with additional people who were mentioned by the initial interviewees.

As Hanna (2012) suggests, recent studies on social science research methodologies have shown that using internet is “theoretically at least, a viable research medium for overcoming issues around access and distance” (2012:241). In this sense, as a low cost video call technology, Skype allows both the researcher and the interviewee to keep their personal space while remaining in a “safe location” (Ibid). In addition, recent communication technologies have led to a considerable increase in the “sampling pool” as it has become much easier to reach out geographically dispersed people when they have internet connection...
(Sullivan 2012:57). For the present research, in order to overcome the physical distance from the project sites in Nepal and Bangladesh, Skype was used to conduct most of the interviews with Practical Action and other NGO staff as well as government officials.

In total, 18 semi-structured interviews that lasted between 30-45 minutes were conducted with 2 government officials from the Department of Meteorology and Hydrology in Nepal and Department of Disaster Management in Bangladesh; 13 Practical Action employees from Nepal, Bangladesh and the head office in UK; 2 local NGOs in Nepal and Bangladesh; and 1 INGO, UNDP in Nepal. Interviewees were informed about the projects details beforehand by e-mail, together with a consent form stating their rights to protect the privacy of the participants. Results were recorded upon the confirmation of the interviewee and in some cases were written manually on paper or typed in the computer.

Following the completion of the interviews, Practical Action organised a feedback session with country teams in UK, Nepal and Bangladesh that has given the researcher the possibility to re-examine the findings, revise comments and include additional views as a product of the meeting. Moreover, the session was beneficial for allowing a self-reflection for the country teams, and for revealing differences of opinion in gender dimensions of EWS.

<table>
<thead>
<tr>
<th>PARTICIPANT</th>
<th>TOTAL (18 INTERVIEWS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Action UK</td>
<td>2</td>
</tr>
<tr>
<td>Practical Action Advisory</td>
<td>3</td>
</tr>
<tr>
<td>Practical Action Bangladesh</td>
<td>4</td>
</tr>
<tr>
<td>Practical Action Nepal</td>
<td>4</td>
</tr>
<tr>
<td>Nepal - Local NGO (ISET Nepal)</td>
<td>1</td>
</tr>
<tr>
<td>Bangladesh - Local NGO (COAST Trust)</td>
<td>1</td>
</tr>
<tr>
<td>INGO (UNDP)</td>
<td>1</td>
</tr>
<tr>
<td>Nepal Government (Department of Meteorology and Hydrology)</td>
<td>1</td>
</tr>
<tr>
<td>Bangladesh Government (Department of Disaster Management)</td>
<td>1</td>
</tr>
</tbody>
</table>

*Figure 3 Interview Participants. Table by author.*

### 2.2.1 Ethical Considerations
Prior to the interviews, participants were informed about their rights to make a decision to stop being part of the study. In order to facilitate open discussions, interviewees were informed that they were not obliged to respond any irrelevant questions. As participants also have been informed that the data collected will not contain any personal information except their duties in their institution, names are hidden to protect participant’s identity throughout the paper. In addition, professional titles were mentioned for specific quotes to add scope to the paper, upon written confirmation of the interviewee. Where this was not possible, “staff member” was used to inform the reader about the duties of the participant.

2.2.2 Limitations

The limitations of this research can be grouped as constraints that are inherent to the method that was used to conduct this research and other considerations that have potential to affect findings.

First, as mentioned above, the present study is conducted as a qualitative research which allowed the researcher to “stress socially constructed nature of reality, the intimate relationship between the researcher and what it is studied, and the situational constraints that shape inquiry” (Denzin & Lincoln 2005:10). In this regard, the research is not intended to explore “casual relationships between variables”, instead, as Denzin & Lincoln (2005) put it, it is designed to focus on “the question to understand how social experience is created and given meaning” (Ibid:11). With this objective, qualitative interviews were used as mediators as they allow the researcher to “understand experiences and reconstruct events in which you did not participate” (Rubin & Rubin 1995:1).

Second, when evaluating these interviews, it is important to take into account personal biases of the employees of Practical Action, as well as other relevant NGOs and government officials. Indeed, a number of interviewees were reluctant to give self-criticizing responses for their projects as well as for their institution. Further, in some cases, interviewees demanded to neutralise the tone of their responses. This could be seen as a measure to prevent tensions in their institutions. In terms of efficiency, some Skype interviews were problematic as a number of interviewees had very poor internet access, and in some cases the interview was disrupted for different reasons (e.g electric cuts in the country, busy schedules, traveling out of the region at the time of the research). Additionally, an attempt was made to reach out to the donor organisation for the flood EWS in Nepal and
Bangladesh, but this was not possible due to organisational changes in the company. Although the researcher attempted to keep the gender ratio equal, however as most of the employees were male in the focus countries, this was reflected in interviewees that included 4 women and 14 men. However, it is important to note that, this does not always affect responses to be more or less gender aware, as it depends on personal experiences and visions of the interviewees regardless of their gender.

Third, although it is beyond the scope of this study, the researcher acknowledges that communities’ perspective regarding gender issues of EWS is crucial. A fieldwork was not possible to the project sites of Practical Action in Nepal and Bangladesh, therefore, the study was planned as an institutional analysis in order to build on evidence based findings. This research will not attempt to describe or compare how communities are affected by gender relations within EWS programmes. Rather, it seeks to explore gender-sensitiveness of these programmes, focusing on Practical Action which is an institution that has direct impact on communities. For this reason, in order to acquire relevant responses, interviews were conducted with staff members of NGO and government officials as was detailed in previous sections above.

**Chapter Three: Findings and Analysis**

Chapter Three will present the outcome of the interviews with Practical Action and other local and international NGO staff members as well as government officials. As introduced in
previous chapters, the interview questions demanded a high level of self-reflection about the gender-sensitiveness of the EWS programmes. Therefore, it is important to consider that most of the responses were influenced by different perceptions of gender which can be a result of varying experiences and perspectives of staff members.

Building on Chapter One and Chapter Two, this chapter will start by describing the ways in which EWS programmes operate in Bangladesh and Nepal with a focus on Practical Action’s role. Following this, it will provide a brief overview of international context in order to understand how gender has become central to Practical Action’s disaster risk reduction projects. Then, this chapter will go on to explain Practical Action’s gender policy and minimum standards documents concerning gender issues as a result of international influence and the degree to which related procedures are being implemented as attempts to increase women’s participation in EWS mechanisms.

3.1 EWS Programmes of Practical Action

3.1.1 Bangladesh

In Bangladesh, Practical Action has four field offices in Gazipur, Faridpur, Rangpur and Satkhira in addition to their country office in Dhaka along with 131 staff working in 4 thematic areas (DRR and climate change; extreme poverty; food, agriculture and markets; urban water, sanitation and waste management services) (Practical Action 2016e).

Figure 4 Practical Action offices in Bangladesh. Source: (Practical Action 2016e)

In this operational area shown in Figure 4, Practical Action’s flood resilience efforts in Bangladesh concern activities such as “small-scale silage making in the flood prone areas to continue livestock rearing during disaster, community based vaccination and deworming for livestock protection from diseases and flood resilient rice cultivation” as well as EWS
activities that support the communities to reduce the impact of disasters (Practical Action 2016e:8)

Practical Action’s main EWS activities in Bangladesh are currently performed under a part of a five-year programme, the Zurich Flood Resilience Alliance that was launched in 2013. The programme’s objective is stated as to “save the lives and livelihoods of the poor by preventing floods from becoming disasters” (Practical Action 2016g). The Alliance brings together: Zurich Foundation, Practical Action, the International Federation of the Red Cross; International Institute for Applied Systems Analysis and the Wharton Risk Management and Decision Processes Center (Ibid). It is funded by the Zurich Foundation, a Switzerland based insurance company, with “an initial investment of USD 35.6 million” (Ibid).

Figure 5 Zurich Flood Resilience Alliance. Source: (Practical Action 2016g)

In this regard, it is important to note that the government has the authority on EWS, while Practical Action is tasked by facilitating the communication of EWS. Thus, in a three-layered system as shown by the Figure 6, Practical Action, uses local government’s platform to disseminate early warning information provided by Bangladesh Meteorological Department as part of a public and private partnership.
After receiving the national generic early warning information provided by the government. Thus, a generic early warning message published by the government does not always concern all the areas in the country while people need localized data to prepare themselves for upcoming floods. For this reason, Practical Action processes the data in specific locations in order to deliver localized early warning messages to the community through their mobile services. As a staff member of Practical Action Bangladesh explains their role of addressing the gaps, when asked about the functioning of EWS,

“in the government system there are some gaps and they do not have enough staff at the community level, therefore they cannot reach the last mile user. As the national generic information is not applicable for people living in remote areas, we are trying to minimize this gap to deliver early warning messages to these people”

As an innovative way of delivering early warning messages, Practical Action’s Bangladesh office recently introduced the voice message system. The advantages of this system is explained by their latest report: “Ensuring an organised and approved system, we send the warning to some certain points of contacts through voice SMS, which accordingly being spread in the community” (Practical Action 2016e:8). One opportunity of the use of voice messages is that it is a more efficient method than informing communities by text messages, as it can be said that literacy level in Bangladesh is relatively low according to the UNESCO Institute for Statistics (UIS 2015). In addition, as the Gender Focal Person at

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3 (Female, Skype interview, June 15, 2016)
4 Male (64.8%), Female (58%)
Practical Action’s Bangladesh office explains, people in Bangladesh tend to not read text messages as they receive a high number of texts every day for advertisement purposes from various companies. Another opportunity for the use of voice messages was presented as having a better outreach to women if they owned mobile phones.

Although this practice has been very successful, it has its limitations as only about 200 people, presented as community leaders are prioritised for receiving early warning messages. This was due to a claimed lack of budget component. As the Gender Focal Person at Bangladesh office states: “If we could send messages to 52000 households of that particular community, what would happen?”. On the other hand, another staff member at the same office mentioned that this method is useful and that it is more practical to provide the information to the community leaders as their means of communication are very strong. Without a detailed research at the community level, it is not possible to reflect on this difference of opinion, however, it can be expected that if the messages could be delivered to a higher level of household, the impact could also be stronger. For instance, as explained by a government official from Department of Disaster Management, in most cases men gain the early warning information before women—as they spend most of their time outside the house—which makes it difficult for women to prepare for the floods as they receive the information late. As this case exemplifies, one must take into consideration gender relations in place when prioritising the beneficiaries.

In addition to disseminating early warning information through voice messages, Practical Action also organises trainings at the community level for the aim of introducing people how they can make use of the early warning messages and reduce damages by engaging the local government. At the same time, Practical Action has implemented digital information boards which are explained in words of Chair of the Trustees of Practical Action, “Working with a Bangladeshi software developer we have created a mobile application. A volunteer reads the river gauge five times a day and sends the reading in real time via the mobile application to the flood preparedness centre in Dhaka. It is combined with other readings and weather data from the Bangladeshi Meteorology Office to create forecasts which are transmitted to Information Centres which Practical Action helped establish. These

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5 (Male, Skype interview, June 11, 2016)
6 (Male, Skype interview, June 15, 2016)
7 (Male, Skype interview, July 17, 2016)
forecasts are posted on a manual weather board or one of the newer digital screens” (Molyneux 2016)

Therefore, the key EWS activities of Practical Action in Bangladesh can be summarised as follows: the digital weather and early warning information boards, dissemination of voice messages and trainings at the community level. Next section will explain how Practical Action EWS operate in the Nepali context.

3.1.2 Nepal

Built on local practices, EWS in Nepal operates under the authority of the government, similar to Bangladesh. As explained by Natural Hazards and Resilience Analyst at Nepal office, “the concept has been introduced from outside and it builds upon Hyogo Framework of 2005 and indigenous knowledge to upscale the EWS, we bridge the gap with government level and national level, supporting the social aspect”. In this regard, including 65 staff members, Practical Action’s EWS programmes are operating under “Nepal Flood Resilience Project” which is a part of Zurich Flood Resilience Alliance that was introduced above. The project is designed to focus on two major river basins that are the Koshi River Basin and the Karnali River Basin with the objective of supporting community flood resilience (Practical Action 2013). The project intended to cover a time period of 5 years from 2013 to 2018 with a budget of CHF 1,500,000 in partnership with other NGOs, Department of Hydrology and Meteorology as well as other government departments that are involved in disaster risk reduction (Ibid).

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8 (Male, Skype interview, June 15, 2016)
9 Local currency (Swiss Francs) of the donor organization, Zurich Insurance.
As a government official explains, the Department of Meteorology and Hydrology monitors real-time rainfall data in their monitoring stations and issues a forecast if there is a likelihood of flooding. This information is then disseminated through government channels (Ministry of Home Affairs) as well as organisations such as Practical Action. As the government official states\(^{10}\), “From 2008 the department started working with Practical Action who initiated EWS and as well as with other organisations. In 8 years we have established very effective EWS in major river basins in Nepal”. Practical Action has other key activities in Nepal such as establishing task forces and training of volunteers at the community level to use coloured flags according to the level of the river (blue indicates that the river level is normal, yellow is the limit and flood warning is red). In addition, as expressed in a staff member’s words\(^{11}\), task force members work with the objective to improve flood response for people for whom early evacuation is essential: “task force members take account pregnant, disabled women and they divide responsibility to reach out this people to evacuate these people who need additional assessment.”

As mentioned in Chapter One, women in flood prone areas are accepted as the most vulnerable by different organisations as well as scholars. In this sense, Dhungel & Ojha (2012) argue that, in Nepal, this vulnerability is aggravated by women’s “livelihood activities and domestic work burden, gender discrimination that limits their opportunities to speak out, and social norms that restrict their access to outside agencies offering assistance” (2012:309). As a result, women’s participation in decision-making in flood response is limited while they

\(^{10}\) (Male, Skype interview, June 23, 2016)

\(^{11}\) (Male, Skype interview, June 20, 2016)
are affected by floods disproportionately mainly because most of their livelihood depends on natural resources (Ibid). Thus, this gendered vulnerability represents a challenge for the humanitarian organisations, such as Practical Action.

As exemplified and shown by reports and reflections above, Practical Action works to support government’s EWS by developing innovative and necessary measures at the community level in all stages of EWS to improve flood preparedness within the geographical coverage of their projects. Next section will look at the international framework to understand how gender has become a crucial issue for these programmes.

3.2 International framework: How gender has become a central issue for NGOs working in disaster risk reduction projects?

Interestingly, the literature on gender and disasters identify the impact of the 1991 cyclone of Bangladesh, one of the focus countries of this research, as a key point for gender to become a central issue for disaster risk reduction (ICIMOD 2014; Eklund & Tellier 2012). Indeed, Eklund & Tellier (2012) suggest that, being amongst the deadliest tropical cyclones in recent history, the Bangladesh cyclone was “an eye-opener for the humanitarian aid community” as reports from multiple sources have shown that the death toll for women was four times greater than that of men in the 20-44 age group (2012:590). Furthermore, it was claimed in a UNEP report that, the main reason of this difference was that women could not receive early warning signals (ICIMOD 2014). In this sense, Juran (2012) argues that these differences do not fully account for the disproportional mortality rates determined by sex” (2012:5). Instead, scholars argued that risks are greater for women who are surrounded by gender power relations and stereotypes in the affected areas (Ikeda 1995; Eklund & Tellier 2012).

In the years following the Bangladesh cyclone, the realisation that women and men have different vulnerabilities in face of disasters was reflected in literature as well as in international strategies and frameworks. Thus, recent international frameworks in conjunction with the different studies proving vulnerabilities of women during a disaster event have put pressure on NGOs, as well as governments to be more gender sensitive when designing their disaster risk reduction programmes.

This claim can be supported by several frameworks which are mentioned as milestones by scholars. In this regard, Palliyaguru et al. (2009) argue that in 1995, The Platform for Action
at the Fourth World Conference on Women has introduced “gender mainstreaming, the commitment to integrate gender perspective in all forms of development and political processes of governments” (2009:30). Further, the concept of gender mainstreaming is expanded by International Strategy for Disaster Reduction in 2002 as “a means of promoting the role of women in the field of development and integrating women’s values into development work” (Ibid). In relation to this framework, Eklund & Tellier (2012) argue that there has been a focus on the necessity of the collection of sex-disaggregated data for an evidence based approach to gender (Ibid).

Later in the 2000s, as was mentioned in Chapter One, both UNISDR’s Hyogo Framework for Action and the Sendai Framework for Disaster Risk Reduction had strong implications regarding disaster risk reduction projects, in terms of the gender dimension. For instance, the Hyogo Framework included the following acknowledgement of gender:

“gender perspective should be integrated into all disaster risk management policies, plans, and decision-making processes, including those related to risk assessment, early warning, information management, and education and training” (UNISDR UNDP and IUCN 2009:27).

In this regard, it can be assumed that gender has become a very popular concept concerning disaster risk reduction. However, several questions remain regarding its implementation in specific programmes. As Smith (2013) puts it:

“Gender continues to be a dominant policy concept in the international aid arena and, for most aid professionals, is a central ingredient for aid delivery and discourse. At the same time, it continues to be poorly articulated and inconsistently implemented” (2013:1).

Given these discussions in the literature, the next section will explore the impact of the international framework on Practical Action’s programmes and procedures.

3.2.1 Impact of international framework on Practical Action’s organisational procedures and policy documents: Gender Policy and Minimum Standards

In parallel to international context of gender mainstreaming, Practical Action head office initiated a number of steps for mainstreaming gender across its projects. Jonny Casey, Gender Equality & Innovation Policy Officer is named as the lead for “organisation’s efforts to mainstream gender across its work” (Practical Action 2016c). Under a section entitled
“Agenda for Change” on their website, Practical Action explains its commitment to ensuring gender equality as follows:

“We are working to ensure that all our project and programme monitoring and evaluations disaggregate indicators by gender and evaluate gender issues in all of our work. And we are working to greater understanding of the different technological needs of women and men through implementation of special projects and activities” (Ibid)

Accordingly, interviews with Practical Action staff members in Nepal and in particular Bangladesh have revealed that in recent years, gender aspect has become more evident in project design and that they have taken considerable action. This is explained by the Gender Focal Person at Practical Action’s Bangladesh office12,

“Three and half years back -when I started working with Practical Action-, there was no standard document for gender or any gender policy, thus there was a need for a separate gender policy. In late 2012, we conducted a gender-focused study -gender audit- in Bangladesh. Based on the recommendations of this research and priority identified by CEO, we formulated a gender policy for Practical Action group and Minimum Standard Documents for each of our thematic programmes such as disaster risk reduction. Recently, we also have formed -comprising Bangladesh, India and Nepal-, a regional gender group to share learning and sharing and help each other”.

The above-mentioned documents concerning gender issues can be named as the gender policy and minimum standards both of which will be explained respectively.

Gender policy document can be defined as Practical Action’s commitment to recognize men and women as heterogeneous groups while “ensuring equitable access to technological options for all women and men” (Practical Action 2014b) Under different sections such as programmes, policy and advocacy, communications, implementation and organisational development, there are guidelines for making each step gender-sensitive. For instance, the implementation stage refers to a “Gender Working Group” to be formed, that will “support implementation of the policy and be responsible for developing and overseeing a monitoring

12 (Male, Skype interview, June 15, 2016)
system to review the implementation process” (Ibid). In theory, these guidelines are designed for the whole EWS process to be gender-sensitive regarding disaster risk reduction projects, however in practice, this might not always be the case. For example, although “documenting the gender analysis and outcomes of Practical Action’s programmes and projects” is an article in the guidelines, Practical Action staff from Nepal and Bangladesh offices as well as staff from Practical Action Consultancy acknowledged the need for a more explicit gender analysis in all operations, which will be discussed further in this chapter.

The minimum standards document involves certain standards and indicators for the equitable participation in projects for both women and men to receive equal benefits. For the focus technology of this research, EWS, there exists a key standard which can be stated as “early warning systems work for all” (Practical Action 2014b). For monitoring this standard, indicators are ranged from equal targeting of warning messages, inclusion of women in the design and planning of the activities, to ensuring safety and security measures for women and reducing risk equitably (Ibid).

<table>
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<th>Material Wellbeing Standards and Indicators</th>
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<td>Early warning systems work for all.</td>
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<tr>
<td>➢ Warning messages target women and men, with attention to age, culture, literacy, information access and sociocultural context</td>
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<tr>
<td>➢ Inclusion of women and men in the design and planning of the warning and evacuation.</td>
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<tr>
<td>➢ Specific measures taken to ensure safety and security of women and girls in evacuation plans, for example improved shelters designed with needs of both men and women incorporated (such as separate and specific sanitation facilities)</td>
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<tr>
<td>➢ Evidence that EWS systems, when used, reduce risk equitably for women and men.</td>
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*Figure 8 Material Wellbeing Standards and Indicators. Source: (Practical Action 2014a)*

In addition to these documents, organisation’s Key Performance Indicators (KPI) were mentioned by a number of interviewees as a reliable indicator showing the gender inclusiveness of the project. As Gender Focal Person at Practical Action’s Bangladesh office explains,

“for every quarter, we need to mention the percentage of women/men participating in the activity. If women participation is less than 50% the rating will be red and this indicates that the program is not doing well”

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13 (Male, Skype interview, June 11, 2016)
From these examples it can be deduced that international frameworks have urged for gender sensitive approaches to disaster risk reduction projects, while Practical Action has taken a number of steps for the mainstreaming gender in their operations with the help of specific guidelines. However, it can be argued that there are conflicting views from Practical Action staff regarding the practicality of these guidelines in practice.

3.3 Attempts to increase women’s participation in EWS mechanisms

3.3.1 Bangladesh

Practical Action has been active in Bangladesh for the last two decades as part of the very large number of local and international NGOs working on the ground. Many scholars have referred to the so-called “fragile and fragmented formal political institutions” in Bangladesh, arguing that this institutional weakness has propagated the emergence of a large number of NGOs during the 1990s, along with an accumulation of international aid to the country (Mir & Bala 2015:1832). This increase can be illustrated by considering the statistics of the NGO Affairs Bureau of Bangladesh, in which there are 23000 approved NGO projects in 2016 compared to only 464 in 1991 (NGOAB 2016). When explaining the scope of these NGOs, Fernando (2011) suggests that an abundance of foreign funds diversified their activities in different areas of development. Since 1990, Practical Action is included among the NGOs mentioned above and it has undertaken a number of tasks such as disseminating early warning messages (NGOAB 2016).

Beyond their technical support to the government for the EWS such as weather forecasting as introduced in the beginning of this chapter, Practical Action’s Bangladesh office has made efforts to address gender issues in EWS, since it is tasked with communicating the early warning message to the last-mile user. As stated by Coordinator of Operations in Bangladesh office 14,

“when we select the beneficiary, at least 50% should be women. In terms of gender perspective, we try to reach most vulnerable people as we know that women are the most vulnerable and women-led households are the poorest 10% of the population.”

14 (Male, Skype interview, June 10, 2016)
This is in line with Cannon's (2002) statement, where he suggests that vulnerability of women in Bangladesh “correlates strongly with poverty” (2002:47). In this sense, he relates vulnerability during disasters to women’s “poorer nutritional status, domestic burden and, reduced ability to provide self-protection” (2002:48).

Despite obstacles to women’s participation, Practical Action acknowledges the crucial role of women regarding dissemination mechanisms during floods, “women are very suitable for dissemination of the information. They have access to houses and they can disseminate information quickly before men arrive during the evening”. Similarly, as another staff member from Practical Action’s Bangladesh office explains, Practical Action has attempted to increase women volunteers when providing livelihood supports/communicating early warning messages in order to reach a higher number of women in a gender segregated society. These reflections illustrate how analysing gender roles in Bangladesh has the potential to contribute to the efficiency of flood EWS projects.

As mentioned earlier in this chapter, EWS in Bangladesh consist of different layers which are under the government’s authority. For this reason, it is important to consider gender inclusiveness of the national strategies. When asked about the gender-sensitiveness of the national strategies of EWS, Practical Action staff had a number of concerns.

First, they perceived these strategies to be gender-sensitive in principle as in practice there have been inconsistencies between the implementation and the strategy of the government. As Ikeda (2009) puts it: “The policies applied at the national level tend to approach disaster and gender issues with overwhelming uniformity, utilizing universal concepts and procedures” (2009:76).

Secondly, they mentioned that almost all members of the main local implementing body, in the words of Hossain (2013:393), “the lowest tier of the rural local government system”, Union Parishad are male, “the representation of women is not there as most of them are dominated by men. That is why we formed community organisations and most of the members are represented by the women. This way we can establish some kind of balance”15.

Similarly, Hossain (2013) found that, despite administrative measures of government to

15 (Male, Skype interview, June 8, 2016)
secure seats for women in Union Parishad, “gender hierarchy in decision making” continues to represent a significant challenge where “men do not accept women as decision makers” (2013:408).

Above reflections has shown that Practical Action has attempts to increase women participation in EWS projects in Bangladesh by creating alternative community organisations to local government units which are represented mainly by male members.

3.1.2 Nepal

Similar to Bangladesh, limitations of the government in different stages of EWS projects were also present in the Nepali context. Therefore, once again Practical Action’s role in EWS was emphasized by different stakeholders around gender related issues, particularly at the community level. For instance, a representative from the main institution that is responsible for EWS and dissemination of information, Department of Hydrology and Meteorology has stated that they were not mandated with gender issues,

“we do not have any staff working at the community level, this is our limitation. At the community level most of the things are carried out with organisations like Practical Action. As far as my knowledge they are taking into account gender and social issues there”16

At the same time, the government official explained that their current projects considered gender and social inclusion issues more deeply in comparison to the past. Similarly, a staff member from a local NGO, Institute for Social and Environmental Transition (ISET) Nepal, explained that they did not have any gender oriented projects in present and pointed out the role of Practical Action, “we know that Practical Action is working on gender component, and that they are developing good practices with a focus on the gender”17. Thus, it can be argued that Practical Action has become quite a reference for gender issues in Nepal as both government and local NGOs referred to Practical Action when they were asked about gender specific activities concerning EWS.

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16 (Male, Skype interview, June 23, 2016)
17 (Female, Skype interview, June 27, 2016)
Whether from the government, or from INGOs or NGOs, almost all interviewees mentioned the male outmigration in Nepal to be a driver for increasing the number of women involved in EWS project implementation. However, the question remains as to whether or not male outmigration in Nepal has an effect on EWS projects to become more gender sensitive when it is known that only 19% of the staff in government and NGOs are women (Shrestha et al. 2014:ix). Furthermore, as International Climate Change Specialist of Practical Action states, “outward migration forces additional burden on women”\(^{18}\). This implies that, rather than seeing male outmigration in Nepal as a driver for increasing the number of women participating in EWS processes, it is also important to acknowledge that it has the potential to create additional responsibilities for women which prevents them from participating to different EWS project stages.

On the one hand, many interviewees in Nepal nuanced the importance of Community Disaster Management Committees (CDMC) where women’s participation is high, and in some settings women-led. This was confirmed by an interview with a staff member of UNDP Nepal, who has stated that there are EWS programmes for which almost 50% of the committees are women-led\(^{19}\). As explained by staff at Practical Action’s Nepal office, CDMC’s have identified the number of women/men, people with disabilities, lactating mother, expectant, elderly people and children who are in flood risk in order to address the most vulnerable group. On the other hand, they have not conducted a gender-focused analysis to collect more information about power and gender relations in specific areas for the flood response. Accordingly, ICIMOD’s report has shown that women’s participation in project design and evaluation stages is still very limited (Shrestha et al. 2014a). In the light of this fact, it can be argued that from a holistic perspective, increase in women participation to CDMC’s does not necessarily mean that EWS mechanisms are gender-sensitive.

Although it is not possible to come to a definite conclusion due to the limited sample size, the results indicate that women participation in EWS programmes of Practical Action in Nepal were higher when compared to Bangladesh, where EWS are managed mainly by Union Parishads consisting mainly of male members.

From above explanations it can be inferred that, in both Bangladesh and Nepal contexts government and NGOs expect Practical Action to perform their EWS projects while taking into consideration the gender dimension. This expectation, in concatenation with the

\(^{18}\) (Male, Skype interview, June 14, 2016)
\(^{19}\) (Male, Skype interview, June 29, 2016)
lack of a government structure to analyse and work on the gender aspects of EWS were important factors that have forced Practical Action to take gender specific activities into consideration, in an effort to reach out more women at the community level while disseminating early warning messages. Even though these factors have had significant improvements when the gender sensitivity of Practical Action’s EWS activities are considered, there are limitations that must also be accounted for. These limitations will be explained briefly in Chapter Four.

Chapter Four: Remaining Challenges and Discussion
This final chapter seeks to identify the challenges for Practical Action to make their programmes gender-sensitive while addressing the research questions presented in Chapter One in relation to the literature. In order to explore these challenges systematically, the chapter will start with questions related to terms such as gender analysis, gender sensitive and gender disaggregated. Finally, it will explain the key role played by donor organisations.

4.1 Perceiving gender-sensitiveness: variations among staff members of Practical Action

A prominent challenge that stood out from the interviews was a proliferation of different interpretations of the terms “gender sensitive”, “gender analysis” as well as “gender disaggregated” among the government, Practical Action country offices as well as other local and international NGOs. Conceptual clarity issues about gender are also a part of ongoing debates in the literature. For instance, Smith (2013) elaborates on how gender policy and practice is influenced by different contexts and people who “often have very different understandings from those espoused in global policy frameworks” (2013:1). Accordingly, it is crucial to understand different interpretations of gender in order to explore the gender-sensitiveness of Practical Action’s EWS and the reasons why most of EWS projects still lack an explicit gender dimension.

4.1.1 Responses related to gender analysis

In order to give clear definitions of the terms pertaining to gender that were mentioned above, there has been a number of publications putting gender at the focus of disaster management, such as “Gender Sensitive Disaster Management” that was published for another UK-based charity, Oxfam in 2008. Based on evidence from post-tsunami fieldwork sites in Tamil Nadu and West Bengal, this document explains how certain questions should be asked for making disaster risk reduction strategies gender-sensitive such as “Who has the power? Who makes the productive/reproductive/community decisions? Who does what and when?”(Pincha 2008). In the majority of the EWS projects, these questions were left unanswered by Practical Action assessments as they were concerned mainly of the number of women/men and in some cases, identification of the pregnant, elderly and disabled people in different households. Nevertheless, it is essential to disaggregate “homogenous categories of women and men” in order to further assess the vulnerabilities of the community which
requires knowing contribution to the household, any particular skills, needs as well as priorities (Ibid).

As mentioned above, conducting gender analysis is one of the most significant components in making early warning systems gender-sensitive. In relation to this, a study conducted by Eklund & Tellier (2012) found that sex disaggregated data is “rarely accompanied by a thorough gender analysis” and that this represents a “missed opportunity to use the data in an intelligible way to inform emergency response and planning” (2012:603). Further, their study concludes by suggesting that sex-disaggregated data needs to be taken into consideration within a gender framework with the support of qualitative data. Therefore, it can be argued that without combining quantitative with qualitative data, it is not easy to design or implement the projects while expecting both women and men to benefit from the technology equally.

Given this background, interviewees were asked if a gender analysis has been conducted and if this analysis was taken forward from just investigating the number of women in the community. In this regard, responses to whether an explicit gender analysis had been conducted were mostly negative. As the Programme Manager in Disaster Risk Reduction from Practical Action’s Bangladesh office puts it: “There is no separate study on this. When we prepare and plan our strategy we make sure that women are on board”20. In addition to this, another staff member from the same office explained how their experience on the field have started to affect their project design,

“our approach is dependent on community effort. Now we are trying to do this with clarifying and defining the role of women at the time of disaster management. These ideas should be included more specifically in our programmes. That is what we learned from last couple of years”.

Similarly, Global Programme Manager of Zurich Flood Resilience Alliance21 have stated that the activities that are addressing to women were still limited: “In my opinion we have not designed enough risk reduction activities in the project specifically in response to the findings of gendered analysis of vulnerability.”

20 (Female, Skype interview, June 14, 2016)
21 (Male, Skype interview, June 20, 2016)
4.1.2 Responses related to gender-sensitiveness

Different perceptions of gender-sensitiveness represent a more complicated matter in this regard. Based on interviews with different staff members of Practical Action, it can be said that there has been inconsistency between project implementation and policy levels of Practical Action in terms of gender-sensitiveness of the EWS projects. In relation to this, Enloe (2001) argued that, in aid policy and practice, gender can be seen as a “bureaucratically comfortable synonym for women” which drives the focus away from the social power relations (2001:111). In this regard, Bradshaw (2015) argues that, in relation to gender, institutions have adopted “an integrationist approach” rather than a transformative one as a result of an inefficient gender mainstreaming. In order to explain the ways in which gender could be effectively mainstreamed, Bradshaw (2015) refers to the analysis of Walby (2005) shown below (2015:65).

Among these, the gendered approach is the hardest to achieve as “it challenges the vested interests of men, who remain the majority of those working in and for development, especially in large and influential institutions” (Ibid). Indeed, when asked about gender-sensitiveness of the projects, a number of participants have assumed that projects that have women participation at any stage could be accepted as gender sensitive. On the other hand,
others were conscious about the challenges within the organisation, as expressed in the words of Practical Action’s International Climate Specialist22,

“We always talk about the number of women in projects, we need to go beyond numbers to see how many women are in leadership positions or decision making role for example. They talk of women and girls as most disadvantaged vulnerable group but they hardly go beyond needs or demands. What capacities do they now possess? How could their special expertise, knowledge and skills be put to good use in advancing climate compatible development? What are the pre-existing gender relations and biases?”

In parallel, a staff member at Practical Action’s Bangladesh office reflected on the need for further research on gender-sensitiveness,

“in terms of understanding, the marginalization of women, in economic and in disaster planning, we need more work. What does gender sensitiveness mean and how are we implementing it?”

To understand the institutional inconsistency related to gender understandings among Practical Action’s offices, it is beneficial to look at different levels of the organisation and how responses are changing among staff members. In this sense, it can be suggested that Practical Action Advisory was the level at which almost all interviewees agreed that the EWS projects were not as much gender-sensitive as they should be. Furthermore, they expanded EWS and claimed that disaster risk reduction projects in general lack an important gender dimension. As Practical Action’s International Climate Specialist23 states, “many of projects implemented in disaster risk reduction and climate adaptation globally are gender blind, some gender aware but nowhere near gender transformative”. Despite this reflection, analysis of the interviews with other staff members who worked in project implementation showed that some were able to justify the gender sensitiveness of EWS projects in terms of women participation in different stages of the EWS that were mentioned before.

In this regard, the example of flood shelters that are provided by Practical Action to communities might be useful to illustrate the problems related to the gender-sensitiveness of

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22 (Male, Skype interview, June 14, 2016)
23 (Male, Skype interview, June 14, 2016)
the flood response. Flood shelters, which are originally designed for 24 hours were problematic for women as their design was “not adequate for dignity” while in most cases people have to stay in shelters longer than it was predicted. As a staff member from Practical Action Consulting states:

“They should be doing a lot more to understand safety concerns of women both in normal times and in disaster times as these are magnified. It seems to be a general myopia sometimes, they claim that there are no problems, it is a big challenge”.

On the other hand, another Practical Action staff from Nepal claimed that the problems regarding flood shelters have been solved and that new designs are gender sensitive, “we have provided separate toilets and a changing room, it is more suitable. These gender-related concerns were taken into account”.

Findings of this research has shown that Practical Action have not yet been able to expand the same understanding about gender and its implications on EWS projects throughout the organisation and its country offices. In relation to this, the questioning of these understandings are essential as if staff members who are working at the project implementation in country offices start questioning their present practices, it has the potential reduce the problems regarding gender relations that are already persistent in both Bangladesh and Nepal. Hence, if they question their practices, it has the potential to influence their work in the field and communities positively, as argued by Stephen Biko, “change the way people think, and things will never be the same” (Biko, S. cited in Kilmartin & Allison 2007:175).

4.2 The role of donor organisations

The “agenda setting power” of donors is well known and studied by scholars in different country settings (Webb 2016). As Edwards & Hulme (1995) put it, “NGOs which are not dependent on aid for the majority of their budgets may be the exception rather than the rule” (1995:5). In the case of Practical Action, centrality of donors was again evident and common in both Bangladesh and Nepal as the early warning systems projects were funded by

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24 (Male, Skype interview, June 16, 2016)
the same donor organisation, a Swiss company, Zurich Insurance.

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<td>891</td>
<td>951</td>
<td>1,077</td>
</tr>
<tr>
<td>Other (donations under £250k)</td>
<td>12,844</td>
<td>2,168</td>
<td>15,012</td>
<td>16,109</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15,887</strong></td>
<td><strong>10,082</strong></td>
<td><strong>25,949</strong></td>
<td><strong>30,252</strong></td>
</tr>
</tbody>
</table>

*Figure 9 Sources of income. Source: (Practical Action 2015)*

As shown in Practical Action’s annual report, Zurich Foundation is the fourth biggest source of income in the year 2015, after DFID, European Community and UNDP.

On their website, Zurich Insurance explains the reason for their focus on floods as follows,

“we focus on floods because they affect more people globally than any other type of natural disaster and cause some of the largest economic, social and humanitarian losses. We can use our risk expertise as a global insurer to help customers and communities reduce the devastating impacts of flooding” (Zurich 2016)

Accordingly, a brief paper entitled “Beyond Response and Recovery: An introduction to the Zurich flood resilience program” includes an overview of global issues relating floods and how the project addresses them (Zurich Insurance Group 2015). However, one can easily realise that there is not a reference to gender or activities targeted specifically for women in the document. Therefore, this factor can be seen as a challenge for Practical Action’s Bangladesh and Nepal offices to keep their focus away from an explicit gender approach to their activities, as they have to work for specific goals that are set by the donor in order to justify the funding they are receiving. Thus, budgets are dependent on donors which have an
apparent influence in the case of the EWS projects of Practical Action. When asked about the
reasons why a gender analysis has not been conducted, lack of financial means is often
presented as a main obstacle by a number of staff members. This investigation has therefore
exemplified the centrality of donors in the organisations. As a staff member of Practical
Action at Bangladesh office states,

“You can take any community approach, we are not actually disaggregating anybody by
genre, by social or economic status. Everybody is vulnerable. On the other hand, we had a
project funded by another organisation in which we had every person’s details. This is the
individual household approach, but 50,000 household needs huge investment and that is why
we need budget to conduct such analysis”

This statement can be seen as an example of different approaches to EWS projects and how
different donors can influence projects differently.

Similarly, as Practical Action’s International Climate Specialist 25 states,

“Many international non-government organisations / charities depend substantially on
donors and donors can do a lot for integrating gender sensitiveness in projects. When donors
insist, all stages, design – implementation – evaluation become gender sensitive.”

Conclusion

Through qualitative research, the objective of this study was to explore how Practical
Action’s EWS projects were influenced by gender-sensitiveness and the degree to which
genre dimension are incorporated in their programmes. With the objective of increasing lead
time for people to prepare for the floods before the disaster happens, Practical Action’s EWS
projects and activities in Nepal and Bangladesh are contributing greatly to disaster risk
reduction. In both countries, employees of Practical Action are working in collaboration with
the government to prevent the loss of life and to minimise the damage to livelihoods in
fragile geographies.

As it is shown by different studies in the literature, women play a key role in disaster
risk reduction. For this reason, EWS projects of Practical Action are intended to be gender

25 (Male, Skype interview, June 14, 2016)
inclusive and this intention is outlined by procedural documents outlining the gender policy of the institution. With reference to the analysis of Walby (2005) about gender mainstreaming in institutions outlined in the final chapter, the study found that, in most of their EWS projects in Nepal and Bangladesh, Practical Action has made significant efforts for an inclusive (men and women are treated equally) and participatory approach (women are included in project design and implementation). However, a gendered approach (gender power relations are analysed) was not fully integrated in EWS programmes in neither of the focus countries due to the lack of a common understanding about gender in different levels of the organization as well as to institutional dynamics of the organization which focus on donor priorities. In relation to this, further research is needed to explore the ways in which EWS programmes could move beyond the current approach based on needs in order to adopt a gender approach.

Consequently, as shown by this research, it is essential for an NGO to have the same understanding of gender and gender-sensitive programme making among its staff members. If the views in this regard are different or opposed in an institution, procedural documents may not deliver their aims in the field. Instead, it could exacerbate the already existing gender power relations as gender roles amplify the burden on the already overburdened women during the time of the disasters.

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