# A Qualitative Study of Gendered Perspectives on Climate Change in Sri Lanka

Exploring local perspectives in relation to national and international discourses



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#### **Abstract**

**Background and research objectives:** Interlinking climate change and gender is a growing field within development studies and the agenda for sustainable development. This study explores local perspectives on gender in the context of climate change in Sri Lanka, in relation to national and international discourses on climate change and gender through the use of intersectionality and integral theory.

**Method:** The study applies a qualitative methodology, combining an explorative and a phenomenological approach. At local level a phenomenological approach with Focus Group Discussions as method is applied to explore the perspectives of gendered and impacts and responses to flood events from local farmers (both men and women) in the Matara district, Sri Lanka. An explorative approach is applied to understand the national and international discourses of interlinking climate change and gender, using individual interviews, document analysis and participatory observation as methods.

**Data collection and analysis:** At *local level* Focus Group Discussions (FGDs) with three farmers' communities were conducted with in total 25 participants: 8 women and 13 men. At *national level* one key informant interview with a Gender Justice Lawyer and two interviews with two national NGO leaders in the capital of Sri Lanka were interviewed, and a key governmental document from the Government of Sri Lanka was analysed. At *international level* document analysis of selected documents, reports and policy briefs was conducted together with participant observation at COP24. The data collected from all levels were analysed through the use of Thematic Network Analysis (TNA).

**Findings**: The study found that local farmers' concerns are more related to poverty than to specific gendered vulnerabilities. Despite this, the study enlightens different impacts of floods on women and men through insights into the farmers' perspectives on gendered roles and responsibilities. Women's vulnerabilities relate to their roles and responsibilities as being caregivers and in charge of the household, while men's vulnerabilities are related to social expectations around masculinity and their roles and responsibilities as 'breadwinners'. In addition the study found that the national discourse echoes the international political discourse and its focus on "women being the most vulnerable".

**Conclusion:** This study suggests incoherence between the local perspectives and the international and national political discourses of interlinking gender and climate change. This is due to a mismatch between the local experiences and the national and international political focus. Nevertheless, the study further suggests that the national NGOs act as "mediators"

between the local and the international level. In addition, the study suggests that the national and international discourses continue to generalize 'women as the most vulnerable'. Therefore the study calls for more qualitative contextualized studies that address gendered impacts intersectional, and emphasises the need for inclusion of men into the gendered climate change agenda.

**Key words:** Climate change, Gender, Gender equality, Sri Lanka, Floods, Integral theory, Intersectionality, Adaptation

# Acronyms and abbreviations

COP24 - The 24th meeting of the Cooperation of the Parties

EIGE – European Institute for Gender Equality

FGD - Focus Group Discussion

GGCA - Global Gender and Climate Alliance

**GM** - Gender Mainstreaming

GoSL – Government of Sri Lanka

GoI – Government of Ireland

GJL - Gender Justice Lawyer

IDI – Individual Interview

IPCC - Intergovernmental Panel on Climate Change

IUCN – International Union for Conservation of Nature

NGO - Non-Governmental organisation

NSD - Norwegian Centre for Data Research

SDGs – Sustainable Development Goals

TNA – Thematic Network Analysis

UN – United Nations

UNDP - United Nations Development Program

UNEP – United Nations Environment Program

UNFCCC - United Nations Framework Convention on Climate Change

USAID – United States Agency for International Development

# 1. Introduction

"Gender equality is more than a goal itself. It's a precondition for meeting challenges of reducing poverty, promoting sustainable development and building good governance" (Kofi Annan).

#### 1.1 Background

The Intergovernmental Panel on Climate Change (IPCC) and a great amount of research has recognized climate change as the most important development challenge of the twenty-first century (O'Brien and Hochachka, 2010; Alston, 2014;IPCC, 2014; Okereke and Massaquoi, 2017), due to its risk of reversing already achieved development within development issues like poverty, health and gender equality. Climate change in terms of shifting weather patterns like increased extreme weather (hurricanes, tsunamis, flood events), increased temperature and rise in sea level affects humans and their livelihood.

During the last decades research has addressed the 'social dimension' of climate change, rather than just focusing on the natural science of climate change. The 'social dimension' of climate change has highlighted that it affects humans and individuals differently, due to differentiated circumstances, rights and opportunities (Terry, 2009;MacGregor, 2010). It is therefore widely acknowledged that impacts of climate change are not 'gender neutral', meaning that climate change will affect men and women differently due to intersectional causes of vulnerability (Denton, 2002; Djoudi et al., 2016;Pearse, 2017).

Within the Sustainable Development agenda, there has been an increased acknowledgement of the importance of looking at the Sustainable Development Goals in relation to each other and to consider their interactions (Nilsson et al. 2016; Nilsson et al. 2018; UNEP and IUCN, 2018). Nilsson et al. (2018) explain this by referring to possible "trade-offs" or "co-benefits" as these interactions could cause both negative and positive impacts on each other. Research, and especially feminist research, has during the last decade increasingly highlighted the need for interlinking the agenda of climate change (SDG 13) with the agenda of gender equality (SDG 5) in order to achieve both development goals (Terry, 2009). If gender equality is not considered within the strategies of handling climate change and vice versa, both SDGs risk facing an aggravated situation. This study aims to further explore this gendered nexus of climate change within the context of Sri Lanka, exploring local farmers' experiences and perspectives on gendered impacts of climate change in relation to the national- and international discourses.

#### 1.2 Country context: Sri Lanka

Sri Lanka is a country highly affected by- and vulnerable to climate change, largely due to poverty and its dependence on agriculture (Menike and Arachchi, 2016). In recent years there has been an increase of natural disasters like floods, landslides and extreme drought in Sri Lanka (UN Sri Lanka, 2017, p.16). In a country where most of the population lives in rural areas and is highly dependent on agricultural resources, the increasing number of floods affects livelihoods of households and communities in terms of ruined income resources, lack of clean water, ruined infrastructure and sometimes even displacement (De Silva and Jayathilaka, 2014). One of the districts most vulnerable to floods in Sri Lanka is Matara district in the South region. This was one of the worst affected districts by the devastating flood in May 2017 (MDMSL, 2017, p.27).

#### 1.3 Problem statement

To my knowledge there are few qualitative studies addressing the intersectional gendered impacts of floods within local farmers' communities in Sri Lanka. There is therefore an existing gap of contextualized studies that explore the local perspectives on gendered impacts of climate change in Sri Lanka. At the same time there is an overall lack of studies that examine the gendered perspectives of climate change at multiple levels. Therefore, this study has two aims. Firstly, it aims to explore the gendered impacts of climate change through exploring local Sri Lankan farmers' experiences with - and perspectives on impacts and responses to floods. Secondly, it aims to explore the Sri Lankan national discourse and the international discourse on gender and climate change.

#### 1.4 Structure of thesis

The thesis is organized into eight chapters. After this introduction chapter, Chapter 2 gives a review of existing literature, relevant debates and topics in the field of interlinking gender equality and climate change. In Chapter 3 the two theoretical frameworks, namely intersectionality and integral theory, are presented. Chapter 4 presents the main objective and sub-objectives of the study, as well as delimitations. The study's methodology is presented in Chapter 5, followed by Chapter 6 where all the findings from the study are presented. Chapter 7 contains the discussion of the findings, and in the end Chapter 8 presents the conclusion of the study.

#### 2. Literature Review

A systematic search for literature was undertaken to identify articles, reports, books and research that address the interlinkage of gender and climate change. I used the databases of 'Oria' and 'Google Scholar' to search for publications by running several searches with key words like 'Gender', 'Climate change and gender', 'interlinking gender and climate change', 'The gendered dimension of climate change', 'Gender and climate change' Gender and floods'.

Throughout the last decades the importance of including a gendered perspective on climate change has been widely acknowledged, and that the effects of climate change are not 'gender neutral' (Kristjanson et. al., 2017; Djoudi et al., 2016, MacGregor, 2010). There has been an increasing number of studies, reports and articles addressing the topic and highlighting the need for an interdisciplinary approach to climate change where a gendered dimension is included as part of climate change analysis (Pearse, 2017).

Most of the early articles and reports concerning interlinking gender equality and climate change focused solely on women in the South as the group most vulnerable to climate change (Pearse, 2017; UN Women Watch, 2011; MacGregor, 2010; Denton, 2002). These studies argued that women in the South are disproportionately affected by the climate change because of their already marginalized gender roles and socio-economic status in the communities (Arora-Jonsson, 2011; Alston, 2014). Moreover, women's vulnerability to climate change is widely acknowledged to be related to their social role in the societies as the poorest, their role as providers of food and water, in taking care of the children and the household, but also as most vulnerable in terms of displacement (MacGregor, 2010; Alston 2014). Several studies also highlight and focus on the importance of increasing the number of women participating at policy level and in decision-making processes of climate change adaptation and mitigation (Denton, 2002; Kabeer, 2005), and the need for mainstreaming gender into the climate change policy agenda (Alston, 2014). This is due to women being important agents for change in terms of being more environmentally conscious and holding knowledge that could be crucial for adaptation and mitigation strategies. MacGregor (2010) and Arora-Jonsson (2011) critique and challenge earlier reports and articles that focus on gender and climate change for seeing only women, and especially women in the Global South, as vulnerable. MacGregor (2010) states that "(...) the small amount of work that has been done so far has focused almost exclusively on the impacts of climate change on women in the global south" and "it contributes to an unnecessarily narrow understanding of gender "(...) and also affirming

stereotypes" that generalize women in the Global South as "victims" (2010, p.223-227). Arora-Jonsson (2011) also critiques this generalization of women in the Global South by stating that "(...) the poor women in the South, reinforce North-South biases" and that "(...) women tend to be represented as a homogenous group" (2011, p.748). She also highlights the need of conducting more contextualized research concerning the gendered perspective of climate change, and that the contextualization will be more effective in enabling actions adjusted to local needs rather than reinforcing generalizations. MacGregor (2010) also critiques the small amount of research existing on the nexus of climate change and gender for being almost exclusively conducted by NGOs or the UN, or by feminist scholars working for the UN or UNDP, and therefore calls for more research conducted by other actors than policy makers (2010, p.224-225).

Lately there has been an increasing amount of articles, and a growing understanding of the need to consider both men and women in the gendered agenda of climate change. Kristjanson et al. (2017) underlines this by stating that since gender differences are evident "(...) in resources, assets, decision-making authority, and roles within the household and community, we would expect that men and women have different preferences, needs, and priorities for adaptation" towards climate change (2017, p.485). We should rather talk about differences between men and women's vulnerabilities and adaptation strategies, rather than excluding men from the gendered climate change agenda. Pearse (2017) also states that "(...) the patterns of gendered adaptations to climate change must be understood as multidimensional and reflective of gender relations in particular socio- economic and cultural contexts, not simply a matter of women's intrinsic vulnerability" (2017, p.1). There is a need to understand the agenda of gender and climate change interlinkages as something more than an agenda of gender as being equal to women and women's vulnerability (MacGregor, 2010). Recent literature also underlines a need for addressing gender as more than binary (men vs. women), but rather as multidimensional in terms of gendered relations being also relations among groups of women and groups of men, that are being affected by intersectional aspects like culture, context, religion, policies, laws, ethnicity and class (Djoudi et al., 2016; Kaijser and Kronsell, 2014; Carr and Thompson-Hall, 2014; Thompson-Hall et al. 2016).

When it comes to literature and research conducted in the context of Sri Lanka, some studies that focus on adaptation strategies towards climate change (Esham and Garforth, 2013; Menike and Arachchi, 2016; Eeswaran, 2018). In terms of studies looking into gendered aspects of climate change conducted in a Sri Lankan context, several studies that have focused on the post-tsunami context in 2004 (Rees et al., 2005; Overton, 2007). Few studies have

focused on the gendered aspects of floods, despite such events being the main climate related disaster event that affect most Sri Lankan families (Menike and Arachchi, 2016; De Silva and Jayathilaka, 2014). De Silva and Jayathilaka (2014) have conducted a study on the importance of a gender dimension towards flood disaster, and examined whether gender considerations were adequately addressed in a flood disaster reduction program in the Gampah District in Sri Lanka. Their study indicates that women are more most vulnerable to flood disaster than men, due to their employment situation, social expectations, their reproductive roles and physical conditions.

Despite the few studies conducted addressing the gendered impacts of floods in Sri Lanka, many studies have been conducted in other countries in South Asia on the topic (Cannon, 2002; Syazwani et al., 2016). Moreover, most of these studies tend to focus on women's vulnerabilities and applying a binary approach of gender rather than including a intersectional analysis of the vulnerabilities (Djoudi et al., 2016)

Within the existing literature and research conducted on the field I find an overall lack of studies looking at the gendered impacts of climate change addressing the topic from multiple levels.

#### 3. Theoretical Frameworks

In this chapter I present the two theories that are used to guide the study and the discussion, namely intersectionality and integral theory. I have used these two theoretical frameworks because there is a need for a more complex analysis when understanding the interlinkages between the two fields of climate change and gender equality. The two theories enable me to look at both individual and collective consciousness that affect human behaviour and systems, and the coherence between them (integral theory) (O'Brien and Hochachka, 2010), and at the same time taking into account the contextual matters and structural components like race, class, ethnicity, social gender relations, and power relations into the analysis (intersectionality). All these components affect gender equality and how men and women are being differently affected by climate change.

#### 3.1 Intersectionality

Intersectionality is a feminist theory and approach that "(...) can be used to better understand and address the complexity of inequities" (Hankivsky, 2014, p.19). The term intersectionality was coined by Kimberlè Crenshaw (1989) through her attempt to understand the intersecting social aspects of discrimination of coloured women in the United States

(Crenshaw, 1989). Although the concept of studying gender intersectionally has been employed in feminist research earlier, the development of the term 'intersectionality' in Crenshaw's research marked the rise of a theoretical paradigm and methodological tool for analysis within the feminist research when studying the social- and structural complexity of gendered inequalities. Hankivsky (2014) defines intersectionality as;

"(...) an understanding of human being as shaped by the interaction of different social locations (e.g. 'race'/ethnicity, indigeneity, gender, class, sexuality, geography, age, disability/ability, migration status, religion). These interactions occur within a context of connected systems and structures of power (e.g., laws, policies, state governments and other political and economic unions, religious institutions, media)." (Hankivsky, 2014, p.2).

According to this definition intersectional theory is both about looking at gender and gender relations in a more complex analysis rather than treating gender as binary, where men vs. women are homogenous groups, and linking the intersectional aspects of gender to socially determined structures. Contextualization is therefore essential for the intersectional approach.

When it comes to the field of interlinking gender and climate change, an intersectional approach can be employed as an analytical framework for understanding the complex dimensions of how climate change impacts individuals and groups differently. This due to individuals' and groups' situatedness within structures of power and social categorisations like ethnicity, gender, socio-economic status, health, age etc. (Kaijser and Kronsell, 2014). Intersectionality can therefore contribute to understand the complexity of gendered impacts of climate change, in terms of how men and women are impacted by floods (vulnerabilities) and respond to climate change (adaptation), by looking beyond the duality of gender and explore the gendered differences in terms of intersectional aspects and structures, as well as the relations between them.

According to Hankivsky (2014) and Djouidi et al. (2016) another important aspect of intersectional analysis is that it enables us to look at inequalities at multiple levels. Hankivsky (2014) underlines that a multilevel analysis enables us to understand "(...) the effects between and across various levels in society, including macro (global and national-level institutions and policies), meso or intermediate (provincial and regional-level institutions and policies), and micro levels (community-level, grassroots institutions and policies as well as the individual or 'self')" (Hankivsky, 2014, p.9). In this study I will look at the intersecting aspects of interlinking gender and climate change through addressing the field mainly from a

local farmers perspective (micro), but also addressing the national discourse and international discourse perspective (macro). This multi-level approach enables the study to consider intersectional aspects of gendered vulnerability related to national and international structures like laws and policies, in addition to other intersectional aspects like cultural norms, socioeconomic status and poverty situation.

# 3.2 Integral theory

Integral theory includes elements from various systems about human consciousness and behaviour into a comprehensive map or model that can be used as a cross-disciplinary framework in order to understand any case or situation (Wilber, 2005). Environmental issues or ecology is one discipline that recently started to use integral theory as a way of addressing climate change. This is because such a framework can help us to look at the complexity of how humans perceive themselves and the world, and therefore how they behave (O'Brien and Hochachka, 2010). This theoretical framework is relevant for the analysis of climate change and gender equality because in order to understand impacts (vulnerability) and responses (adaptation) to climate change and their relation, one needs to understand both the individual human behaviour, but also their perceptions of the collective, the systems and institutions.

Integral theory is based on five elements; quadrants, levels, lines, states and types (Wilber, 2005). Due to space limitations, I will only focus on the level of quadrants illustrated in The Integral Four-Quadrant Model as shown in Figure 1, as I regard these to be the aspects of the theory most relevant to the topic of my thesis.

The Integral Four-Quadrant Model consists of four dimensions; the interior and the exterior as well as the individual and collective dimensions of human behaviour. It is a simple recognition of the fact that every person has an inside (interior) and outside (exterior), and that both are singular (individual) and plural (collective) (Esbjörn-Hargens, 2010).

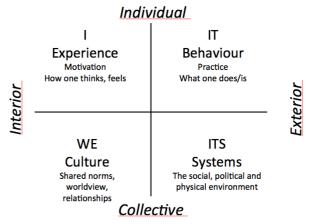


Figure 1: The Integral Four-Quadrant Model (Wilber, 2005)

The "I" quadrant represents the "individual interior" or humans' individual perspectives, values and feelings. Within the context of this study the "I" quadrant represents the individual perspectives of male and female farmers on gender divided roles and responsibilities and the

linkage to impacts of floods. The "IT" quadrant represents the "individual exterior" or human behaviour, actions or practice, whereas within the context of my study it is related to the farmers' responses or adaptation towards flood events. The "WE" quadrant represents the "collective exterior" or a group of humans' collective and shared norms, perspectives and values. Within the context of my study the "WE" quadrant represents the local farmers' collective shared norms and perspectives of gendered roles and responsibilities and impacts of flood events. The "ITS" quadrant represents the "collective exterior" such as structures, institutions, environment or systems. Within the framework of this study the "ITS" quadrant represents the national- and international discourses on gender and the linkage between climate change and gender.

Integral theory and the Integral Four Quadrant Model, together with intersectionality, will help me to analyse and discuss the complex picture of the gendered dimension of climate change, and guide the study in exploring the coherence between the local perspectives and the national and international discourses on interlinking gender equality and climate change.

# 4. Research Objectives

As mentioned in the problem statement (section 1.3) and the literature review (Chapter 2), there are few qualitative research exploring gender and climate change in Sri Lanka, as well as studies with an intersectional approach to gender including multiple levels. I therefore wanted to design a study that addressed the field in a people-centered manner, as well as addressing the field from multiple levels. The overall objective of the study is formulated as follows:

To explore local perspectives on gender and climate change in Sri Lanka, in relation to the national and international discourses on gender and climate change.

#### 4.1 Sub-objectives

The main objective addresses four aspects. It mainly focuses on 1) understanding local experiences of gender in relation to climate change in Sri Lanka. At the same time it focuses on 2) exploring the national discourse and 3) international discourse on gender and climate change, and 4) to see the national and international discourses in relation to the local perspectives. I have formulated four sub-objectives as follows;

- 1. Explore **local perspectives** on gender through men's and women's experiences (impact and response) of flooding.
- 2. Explore the Sri Lankan **national discourse** on gender, in particular gender in relation to climate change.
- 3. Explore the **international discourse** on gender and climate change.
- 4. Explore the coherence between national, international and local perspectives when it comes to gender and climate change.

#### 4.2 Definitions and delimitation of study

Climate change is a wide term and includes many factors. Within this thesis I have chosen to focus on floods as a natural disaster and its challenges caused by climate change-related factors such as temperature rise, increased extreme weather and unpredictable heavy rains and monsoon seasons. When talking of impacts and responses to floods, I refer to impacts as vulnerabilities the farmers or men and women face in times of floods, and responses as 'adaptation strategies', i.e. how the farmers' cope and act towards floods. I use the definition of vulnerability and adaptation from Pearse (2017), where vulnerability to climate change is referred to as "the likely risk of adverse impacts and difficulties coping with climate impacts", while adaptation refers to "action taken to cope with climate changes" (Pearse, 2017, p.2).

# 5. Methodology

In this chapter I will present the methodological approach chosen to address the research objective and sub-objectives presented in the previous chapter. I will firstly present the research design, and then give an overview of the research process in terms planning the study (study site, participants recruitment) and conducting the research (data collection), but also how I have managed and analysed the data. In the end I will also discuss the trustworthiness of the research and ethical considerations. Throughout the chapter I will reflect on the research process and the changes that were made in the process of collecting data, and how this has affected and shaped the study.

#### 5.1 Qualitative research design

This study has used a qualitative research approach. Qualitative research is characterized by Yilmaz (2013) as an "(...) emergent, inductive, interpretive, and naturalistic approach to the study of people, cases, phenomena, social situations and processes in their natural settings in order to reveal in descriptive terms the meanings that people attach to

their experiences of the world" (Yilmaz, 2013, p.312). Qualitative research is therefore a suitable method to use when you seek to understand local people's or communities' perceptions, knowledge or perspectives of a given issue or phenomenon in a contextual manner. Several data collection methods can be used to accumulate qualitative data, such as interviews, focus group discussions, observations and participatory methods (Skovdal and Cornish, 2015). Since the qualitative approach emphasizes the study of people in their natural setting "(...) qualitative researchers tend to collect data in the field at the site where participants' experience the issue or problem" (Creswell, 2007, p.37) with an intention of giving the participant a voice.

A qualitative research approach has been applied with both a phenomenological and exploratory design. A phenomenological approach has been applied when exploring the local experiences and perspectives, and an exploratory approach has been used to gain insights into the national- and international discourses.

# 5.2 Method, research site and participants

The method of this study is quite complex due to the aim of looking at gendered perspectives of climate change at multiple levels, including both local perspectives, national and international discourses, and the coherence between them. The methodology can be divided into three methodological stages of data collection, each stage related to an organizational level and where different approaches and methods have been used for data collection suited for each of the organizational levels studied. The complexity of the study's methodology is illustrated in Table 1 below. Table 1 is used as a framework for structuring the presentation of the methodology.

Table 1 Overview of research design, methods and participants at the different levels

| Level/Discourses        | Research design  | Methods                   | Participants          |
|-------------------------|------------------|---------------------------|-----------------------|
|                         |                  | Focus Group Discussion    | 20 farmers from three |
| Local farmers           | Phenomenological | Observation               | farmers' communities  |
| communities             |                  | Field notes               | (8 women and 14 men)  |
|                         |                  | Individual interviews     | 1.Gender Justice      |
| National discourse      | Explorative      | Document analysis         | Lawyer (GJL)          |
| (NGOs, GJL and GoSL)    |                  | Observation               | 2. NGO1               |
|                         |                  | Field notes               | 3. NGO2               |
|                         |                  | Document analysis         |                       |
| International discourse | Explorative      | Participatory observation |                       |
|                         |                  | at COP24                  |                       |

The study was conducted in two periods during the autumn of 2018. The main part of the data collection of the study, namely the local perspectives and the national discourse was conducted during one month of fieldwork in Sri Lanka in August 2018. The second part of this study was conducted through two weeks of participatory observation at the UNFCCC's international conference (COP24) in Katowice, Poland in December 2018. Firstly, the methodology for the local perspective and national discourse from the fieldwork in Sri Lanka is presented (section 5.2.1), and secondly the methodology for the international discourse (section 5.2.2)

#### 5.2.1 Local perspectives and national discourse – study site, method, participants

# 1. Study site: Sri Lanka – the Matara district (local level) and Colombo (national level)

During the four weeks of field work in Sri Lanka, I spent three weeks in the Matara district where I collected the data on the local community perspectives, and one week in the capital Colombo conducting interviews with informants from three national level NGOs.

The main part of the data collection during the fieldwork was conducted within the Matara district. Matara is one of the most vulnerable districts when it comes to flood events, and is affected by such events almost yearly. The rural areas of the Matara district consist of many farmers' communities that have their livelihood from the agricultural sector, mainly with cultivation and production of paddy fields and vegetables. In this study I visited three farmers' communities, namely 1) Godagama, 2) Palatuwa and 3) Thihagoda. All three have been affected by floods almost yearly, and were affected by the latest devastating flood-event in May 2017.

Colombo is the capital city and administrative centre of Sri Lanka. The Government of Sri Lanka as well as international organizations and NGOs have their main offices in Colombo, and I spent one week in the capital to conduct meetings and interviews on the national discourse. During this week I had meetings with two national NGO-leaders and a Gender Justice Lawyer (GJL) from a third national NGO. See Appendix 1 for maps of Sri Lanka and the location of Colombo and the Matara district; and of the three farmers communities in Matara.

#### 2. Methods of data collection at local and national level

# Local community level: Focus Group Discussions

The main method of data collection at local community level was conducting Focus Group Discussions (FGDs) in the three above-mentioned farmers' communities. The aim of the FGDs was to gain knowledge about local farmers' perspectives on gender, concerning roles and responsibilities in the community and household, and both male and female farmers' experiences on gendered impacts and responses to floods.

I started all FGDs by explaining the aim of the study and going through the informed consent orally to get participants' acceptance of taking part in the study and make them familiar with their rights. I also got permission to record all three FGDs. The FGDs were conducted in a conversational style. The flow of the conversation was guided by what the farmers wanted to tell me. However, I had also prepared a semi-structured interview guide that I used when it suited the conversation. In all three FGDs I used a local contact person as a translator due to my lack of skills in the local language, and the lack of English skills among most of the rural farmers. In all three FGDs both men and women attended the conversation. Some male participants tended to dominate the conversations in the different FGDs, but the women also contributed. See Appendix 2 for the interview guide for the FGDs of the farmers' communities.

# Reflections on adjustments in methods at local level

As mentioned above, Yilmaz (2013) points out that qualitative research is 'emergent' and 'people centred'. One thing I experienced during this study is that qualitative research is a continuously emerging process that can change and take a different path than planned for or expected, depending on the people one meets and the context. Skovdal and Cornish (2015) note that "(...) you cannot plan all aspects of qualitative research" (2015, p. 29) especially when you study in a cross-cultural context and interact with humans in their local context "(...) there will be elements of surprise and there will be times when you have to abandon your plan and improvise " and you will have to "(...) accept that unpredictable events will occur " (Skovdal and Cornish, 2015, p.29). In this study I can relate to these statements since I experienced that the method for the farmers' communities took a different path than I had planned. The need to adjust methods along the way brought the research into new directions that affected the research design I ended up using, and thus also the findings.

Before visiting the farmers' communities I had prepared for conducting a photovoice assignment with individual interviews. However, contextual considerations while visiting the local farmers made me decide to change the method to FGDs. This change in methodological approach happened spontaneously when I arrived at the first local farmers' community (Godagama), as there were more people present than I had been told. I was met by a crowd of people already sitting in a circle and having established a conversation. The groups consisted

of whole households like husband, wife, their children, grandparents, as well as neighbours. I then decided in the research setting to rather conduct FGDs to include them all. It would have been inconvenient to ask people to leave and it appeared more natural to conduct the conversation in a collective setting where everyone could attend and listen. Interestingly, the exact same situation happened when I arrived in the two other local farmers' communities, and I therefore ended up with three FGDs. Whether this was due to misunderstandings with my local contacts or caused by a more collectivistic culture at the study site is uncertain. The main drawback of moving from individual interviews to FGDs was the lost opportunity in this setting to ask questions to women and men separately to get better access to their individual perspectives. However, I will argue that the change in method also enlightened the study with unique findings that I would not have obtained had I kept the original plan. I will return to limitations of the methodology in section 5.6.

#### National discourse: Individual interviews and document analysis

Exploring the Sri Lankan national discourse on gender and Climate change, I have used an explorative approach including both interviews and document analysis. I conducted individual interviews (IDIs) with three representatives from three different NGOs; one female key informant that worked as a Gender Justice Lawyer (GJL) in a national NGO, and two male leaders of two different national NGOs. The GJL is used as a 'key informant' to the NGO perspective of the national discourse due to a much longer and more informative interview. She had a broad competence and knowledge of the gender equality situation in Sri Lanka, and long experience from working with gender justice.

The two interviews with the national NGO leaders are used to supplement information from the key informant (GJL). All three interviews were conducted at the NGOs' offices, with only the informant and myself present in the room. This made the interview setting comfortable for both parties with the opportunity to speak undisturbed and freely. I started the interviews by introducing myself, the purpose of the study and going through the informed consent orally. All interviews at this level were conducted in English and lasted between 45 and 60 minutes. They were all structured in a conversational way, where I had prepared interview guides as a framework for the conversations, but with ample opportunity for the conversation to go in different directions based on what the participants told me (semi-structured interviews) (See Appendix 3 for interview guide). The interview with the GJL was recorded, but the NGO leaders did not agree to being recorded, so I took notes.

The aim of these interviews with all three national NGOs was to get information on their

perspectives on both the gender context in Sri Lanka, and on their perspectives and knowledge of the linkages between gender and climate change. Their perspectives would then be compared to the local farmers' perspectives and the international discourse.

In addition to the interviews with the national NGOs I have included the perspectives of the Government of Sri Lanka (GoSL) as part of the analysis of the national discourse. In order to explore the GoSL perspectives I have analysed the most recent governmental document on gender and climate change entitled "Submission by the Government of Sri Lanka on supporting the implementation of gender-related decisions and mandates under the UNFCCC process" (GoSL, 2017). This document is used as a key document representing the GoSL perspectives on the gendered context and the interlinkage of climate change and gender.

#### Observation and field notes

Throughout the whole stay in Sri Lanka, I conducted observations written down as field notes. These observations and reflections are used as supplementary data throughout the thesis for discussing the findings.

#### 3. Participants at local- and national level

The recruitment of the participants, both farmers (local level) and the key informant (GJL) and two additional NGO representatives (national level), was conducted using a purposive sampling method through local contact persons or so called 'gatekeepers'. I had some local contacts through an NGO that I had been in touch with through email correspondence from Norway before traveling to Sri Lanka that helped me arrange the meetings with the NGOs, and arrange a local translator when I got there. The usage of local 'gatekeepers' to get in touch with both the national NGO participants and the local farmers was very useful for saving time during the fieldwork period, and also since it was my first time in Sri Lanka.

At national level I had three participants, two male NGO leaders and the GJL, and at local level I had a total of 22 'active participants' from the three farmers' communities; 14 men and 8 women. By 'active participants' I mean participants who contributed to the conversation and the interviews. There were also people passively attending or spectating the conversation without contributing actively. I have chosen to count only the participants that actively contributed to the conversation.

In terms of inviting participants from the local farmers communities to attend the study I had pre-formulated some inclusion criteria. The criteria were explained to the local contacts,

and used as guidance for inviting local farmers to attend the study. All inclusion criteria were fulfilled except the criterion of including an equal number of women and male participants, due to changes in method. See Appendix 4 for the inclusion criteria. Table 2 below gives an overview of the 25 participants in the study.

Table 2 Overview participants' local farmers' communities and national discourse

|                 | Local       | National discourse |              |                   |
|-----------------|-------------|--------------------|--------------|-------------------|
|                 | 1. Godagama | 2. Palatuwa        | 3. Thihagoda | NGOs              |
| Number of women | 1. W1A      | 1. W2A             | 1. W3A       | 1. Gender Justice |
| (W)             | 2. W1B      | 2. W2B             | 2. W3B       | Lawyer (GJL)      |
|                 |             | 3. W2C             | 3. W3C       |                   |
| Number of men   | 1. M1A      | 1. M2A             | 1. M3A       | 2. NGO1           |
| (M)             | 2. M1B      | 2. M2B             | 2. M3B       | 3. NGO2           |
|                 | 3. M1C      | 3. M2C             | 3. M3C       |                   |
|                 | 4. M1D      | 4. M2D             | 4. M3D       |                   |
|                 | 5. M1E      |                    |              |                   |
|                 | 6. M1F      |                    |              |                   |
| Religion        | Buddhism    | Christian          | Buddhism     |                   |
| Total number:   |             |                    |              | 25                |

To ensure anonymity of all participants in the study the participants have been given pseudonyms. Table 2 illustrates these given pseudonyms that are constructed and will be used further in the thesis. The letter 'W' or 'M' indicates the sex of the participant, a number '1', '2 or '3' indicates which of the farmers community the participant belongs to, and a letter 'A', 'B' or 'C'etc. indicates the given identity of the participant. An example of a farmer participant's pseudonym would be "M2B" indicating that it is a "man" from the Palatuwa farmers' community and the letter B as a given identity. The participants from the national NGO level are given pseudonyms "GJL" and "NGO1" and "NGO2". The GJL is given the pseudonym showing the profession due to the interview's relevance and credibility, but also since it is considered a "key informant interview".

# 5.2.2 International discourse – observation and document analysis

To explore the international discourse of climate change and gender I have used an exploratory approach through conducting both a thematic analysis of documents and participatory observations.

During two weeks in December 2018 I attended the yearly UNFCCC international Conference of the Parties (COP24) in Katowice, Poland as an observing youth delegate. Throughout the conference I followed the negotiations on gender and climate change. The

experiences from this conference are used as supportive data for the international discourse findings.

In addition, I analysed documents to further explore the international discourse. The analysis consists of a total number of 14 documents, and is divided into different organisational levels. The selected documents were found through systematic search at 'Google' and 'Google Scholar' by running several searches with key words like 'Climate change and gender', 'interlinking gender and climate change', 'The gendered dimension of climate change', 'Gender and climate change'. The documents retrieved consist of reports, policy briefs, press releases and handbooks etc. See Appendix 5 for an overview and short summary of the selected documents.

#### 5.3 Data management and analysis

Interviews with the three local farmers' communities and the key informant (GJL) were audio recorded using a digital voice recorder (Zoom H1n). The participants gave oral approval of the interviews being recorded. The interviews were transcribed using the data software IngScribe. All personal details, like the names of the participants, were excluded in the transcripts. The interview with the key informant was transcribed by myself since this interview was conducted in English. The transcription of the interviews from the three local farmers' communities was done in two steps. Firstly, I did the 'raw' transcription myself. I listened through all the recordings and wrote down what was said and by whom. Since I do not speak or understand the local language (Sinhalese), I focused on translating all the statements said in English by the translator and myself. When it comes to what was said in the local language in these interviews, I focused on marking when the different persons spoke, distinguishing between sex, and wrote 'Sinhalese' marking that the conversation took place in the local language. Secondly, when I had finished the English part of the transcripts, the recordings were shared with a local contact person from Sri Lanka through WhatsApp. This was ethically assessed in consultation with my supervisor, since messages through WhatsApp are encrypted and are therefore not possible for others to obtain. The local contact listened through the recordings and filled in what had been said by the different farmers during the conversation in Sinhalese translated to English. When he had finished all three transcripts, he sent it back to me through WhatsApp and deleted all the files from his computer. Using a local contact that was not the translator enabled me to double check if the translations during the interviews had been correct, or if he had left anything out from what the local farmers said. It also enabled me to double check which participant and what by sex (male or female

farmer) had said what. This confirmed that what the translator had interpreted was in alignment with what the farmers had actually said.

In addition to the recordings from the three FGDs and the IDI with the key informant (GJL), notes were taken from the two IDIs with the male leaders of the NGOs. The notes were taken in a personal notebook and later written in a Word Document to get it digitalized. All personal details were excluded, and the notes from the IDIs were kept safely with the recordings and the transcripts in a folder on both my password-protected computer and a separate hard disk. Throughout the research only my supervisor Marguerite Daniel, a local contact person from Sri Lanka and I had access to the recordings and the transcripts. The transcripts and recordings will be kept safely until the thesis is submitted the 6th of June 2019, and be deleted shortly after the commission has completed its evaluation of the thesis.

#### **Thematic Network Analysis**

To analyse the collected data I used Attride-Stirling's (2001) Thematic Network Analysis method (TNA). According to Braun and Clarke (2006) thematic analysis is "(...) a method for identifying, analyzing, and reporting patterns or themes within data" (Braun and Clarke, 2006, p. 6). Using the TNA method of Attride-Stirling (2001), I coded the texts from the transcripts of the FGDs, the IDIs and the key documents into initial 'codes', then 'basic themes' and 'organizational themes'. I used the Nvivo software as a support for analysing the data and to structure the TNA tables. I found Nvivo very appropriate to use since I have multiple forms of data in this research, which made it easier for me to conduct the different parts of the analysis and to see the findings in relation to each other. Since the method of this research is complex and includes multiple levels, I decided to divide the analysis of the data into three TNA processes, 1) Local community perspectives, 2) National discourse and 3) International discourse.

Firstly, I started the analysis process of the local farmers perspectives by uploading the transcripts from the three FGDs into an Nvivo project, and then read through the transcripts to familiarize myself with the data. Further I went through the text and started to make initial 'codes' of what had been said by the farmers in the interviews, highlighting information that gave relevant or meaningful information for the study (Braun and Clarke, 2006, p.18). After going through all the interviews from the FGDs and completed the first coding, I started to look for relationships or connections between the codes for establishing 'basic themes'. After arranging the codes into 'basic themes' I chose to structure the basic themes according to the sub-objectives as 'organizing themes' of the analysis. Due to the small amount of data

collected, I ended up with a TNA without 'global themes'. According to this outlined analysis process the community level is analysed with a hybrid of inductive and deductive approach, but mostly inductive. See Appendix 6 for the thematic network table of the findings from the community level.

Secondly, in order to explore the Sri Lankan national discourse both from a governmental and NGO-perspective, I analysed the data collected from the interviews with the key informant (GJL) and the two male NGO representatives together in one Nvivo project, and then the key document from the GoSL in a separate Nvivo project. This was to easily separate the NGOs perspective and the GoSL perspective to be able to see the alignments and differences within the two aspects of the national discourse. The TNA of the two was conducted through the same coding procedure as the local farmers' FGDs interviews. I started by coding what was said in the interviews and the key document, followed by structuring the 'codes' into 'basic themes' and then into 'organizing themes'. The analysis was done inductively. See Appendix 7 for the TNA table of the Sri Lankan national discourse.

Thirdly, to explore the international discourse of interlinking gender and climate change I started out reading through all the selected documents and made a document overview and a summary of the main aspects in these documents (See Appendix 5). Further on I searched the documents for keywords like 'gender', 'gender equality', 'gender mainstreaming', 'Women', 'Women and men', 'Girls', 'disaggregated data', 'lack of data', 'intersectionality' etc. Based on this I coded and structured the quotes or data found into a TNA by using 'codes' then 'basic themes' and in the end 'organizational themes'. See Appendix 8 for the TNA table of the international discourse. The analysis of the international level was conducted in a deductive way (top-down).

According to the above-described three processes of TNA, the total analysis process was a mixture of 'inductive' (bottom-up) and 'deductive' (top-down) approaches. When it comes to quality assurance of the analytical process, I consulted the analysis process with my supervisor throughout the whole process. I also used post-it notes to code manually next to Nvivo. This helped me to more clearly see the connections between the codes, and to structure them into 'basic themes'. I also got a fellow student to give her perspectives on the coding and analysis, and a family member (who is a researcher) to discuss the analysis tables.

# 5.4 Trustworthiness of the research

In any research, qualitative or quantitative, it is important to establish trustworthiness of the research. Trustworthiness refers to ensuring the legitimacy of your research process and

results (Skovdal and Cornish, 2015). A common way to ensure the trustworthiness of qualitative research is to consider its *credibility*, *dependability* and *transferability*, as well as showing reflexivity around the researchers role.

Credibility refers to whether "the participants involved in the study find the results of the study true or credible" (Yilmaz, 2013, p.9), and to what extent the reader finds the study credible. In other words whether the reader believes in the research methods and analysis. To ensure credibility the researcher can provide thick descriptions of the research process and choices made, and use a triangulation of methods. Triangulation is "when you use different data sources and methods to shed light on an issue" (Skovdal and Cornish, 2015, p.6).

Triangulation can contribute to overcome biases in the study and to strengthen the trustworthiness of the data collected in a research. Throughout the study I have described the process and choices taken, and also used triangulation of methods. In this study the triangulation of methods consists of FGDs with the local farmers, IDIs with NGOs and key informant interview together with participant observations and document analysis. As an example the observation will help me to crosscheck whether the impression and stories told through the FGDs align with what I observed.

Dependability can be ensured, according to Yilmaz (2013) as "(...) if the process of selecting, justifying and applying research strategies, procedures and methods is clearly explained". In other words if your method of collecting data can be ensured through giving sufficient descriptions of the research method in terms of selection of participants, the activities done, interactions, and research settings. All this can give the reader an understanding of how the study occurred. In this study I have ensured dependability through detailed information and reflexivity around the research process, both concerning decisions made and challenges met in the research process. I have also given thorough information about the purpose of the study, the research design and the methods of data collection, management and analysis. In addition being able to record the FGDs with the farmers, and cocoding the TNA together with other persons will also all together ensure the dependability of the study.

*Transferability* refers to whether the findings can be employed or transferred to other similar settings (Yilmaz, 2013), or how the research can be situated or relate to the already existing literature in the field. Since this is a small piece of research, both in terms of scope and the amount of interviews conducted, one cannot be certain that the findings would be transferable into another context. However, the methods used and the model of seeing impacts and responses to flood events with gender as the base, would most likely be applicable also in

other contexts. The transferability of the research will be discussed further in Chapter 7 section 7.6.

Since the *researchers role* in qualitative studies is very instrumental in the sense that the researcher is participating actively as a tool in both collecting and accumulating the data, it is very important to reflect carefully about the researcher's role and the potential biases that could have affected the research process and the results. Throughout the chapter I have showed reflexivity towards the research process and choices I made during the fieldwork, as well as how I have analysed the data. In addition I want to highlight some reflections on how my perspectives and background could have affected the study. As a foreign, higher educated, young female student from Norway, I was an outsider to the culture and the participants, and this could affect how they perceive me and what information they chose to share with me. However, I did my utmost to make the research setting as comfortable and in the most natural as possible for the participants. I strived to approach the participants open-mindedly with a focus on them teaching me, since they were the ones knowing the culture and having the knowledge and experiences of floods.

#### **5.5 Ethical Considerations**

In any research it is important to both adhere to ethical guidelines and to discuss ethical considerations, to both ensure the security of the participants involved, and the trustworthiness of the research process and the findings. For this research, the research topic itself was not considered a sensitive one, as sensitive personal data were not collected. Nevertheless confidentiality of personal information of the participants has been ensured by not including any personal details in the transcripts of the recordings, it only includes a notification of sex. In addition, all quotations from the interviews used throughout the thesis have been ensured anonymity through the use of pseudonyms. The reader will therefore not be able to identify any of the participants in the research.

Approval for ethical clearance was obtained from the Norwegian Centre for Data Research (NSD) (see Appendix 9). As mentioned I had to do some changes in the method of data collection during the field trip to Sri Lanka. Appendix 10 shows the e-mail correspondence and approval of the changes from photovoice to IDIs/FGDs by the NSD. The local gatekeepers from the NGOs guided the ethical practice in Sri Lanka.

According to ethical protection of the participants' rights, and for ensuring transparency of the study, all participants in the research should give their informed consent.

According to Skovdal and Cornish (2015) informed consent could be given orally, but should

ideally be given in writing (Skovdal and Cornish, 2015, p.46). Informed consent implies that the participants have agreed to be a part of the study, and are informed about the purpose of the study and how the information given to the researcher will be used. All participants in this study were informed about my background and the purpose of the study, and agreed upon being a part of the study before the FGDs or IDIs started. My intention was to obtain a written informed consent, but during the fieldwork I did an active choice of rather going through the informed consent letter orally. Due to the changes in method I used the informed consent paper prepared for the photovoice method (see Appendix 11). Bringing out a formal paper for the participants in the FGDs, as well as the IDIs with the national NGO representatives to sign, would turn the situation into a more formal setting than I wanted. This could make the farmers and the national NGO representatives more sceptical towards me and the research, and could affect the access to information.

#### 5.6 Limitations of methodology

Before presenting the findings from this study in the following chapter, I want to acknowledge some methodological limitations of the study that could have affected the findings;

- *Men and women in the same FGDs* Due to the research setting I ended up having men and women attending the FGDs together. This will most likely have affected the data collected and may have limited the study by not being able to compare the gendered perspectives systematically. It is hard to say how the presence of both men and women has affected the answers, but the experience is that the men dominated the conversation. It is therefore likely that if the study had been able to get either IDIs or FGDs with women and men separately it would have given a broader and more nuanced picture of the gendered situation.
- Orally given informed consent I made an active choice in the research setting of going through the informed consent orally rather than written. If I had been better prepared, I would have had the informed consent translated into the mother tongue of the farmers' so I could get it signed in paper.
- *Usage of translator* The translator as a 'mediator' may have affected the findings both due to lack of accuracy of the interpretation, and by creating a certain distance to the interviewees. Despite this, the use of a second person knowing the local language to listen

- through the interview recordings, enabled to double check the translation and reduced the likelihood of language misunderstandings.
- Lack of recordings of NGOs interviews The findings for the NGO informants would have been more reliable if I had been able to record all three of the NGO interviews, since it enables the researcher to double check what was said afterwards. Notes are less accurate than recordings since it is hard to write down everything that is being said in a conversation.

While these arguably are the main *methodological* limitations, I will come back to discussing other limitations of the study in the discussion chapter 7, section 7.5.

# 6. Findings

The findings of this study reflect both local perspectives as well as national and international discourses on interlinking gender and climate change, with the main focus on the local perspectives from farmers in Sri Lanka. The chapter is divided into three sections structured by the organisational level of the findings, starting with the local level in section 6.1, then national level in section 6.2, and the international level in section 6.3. Quotes are used throughout the chapter to illustrate key findings, see table 2 in section 5.2.1 for overview of the participants and explanation of pseudonyms.

#### 6.1 Local farmers perspectives on gender the interlink to climate change

The findings from the local farmers perspective are from the three conducted FGDs, and are accumulated through a Thematic Network Analysis (TNA) (see Appendix 6). The following section is structured after the three "organizing themes" from the TNA, namely local perspectives on 'gender roles and responsibilities', 'impacts of flood events' and 'responses to flood events'. Each organizing theme consists of three to five basic themes.

#### 6.1.1 Local perspectives on 'Gender roles and responsibilities'

Initially, during the FGDs I was interested in the farmers' perspectives and reflections of gender roles and responsibilities (gender norms) in their community and household, to better be able to understand gendered impacts or vulnerabilities to flood events.

During all three FGDs I started the conversation by asking the farmers "What are the different gender roles and responsibilities in the household or community?" Interestingly, in all three FGDs I met a denial of the existence of different gender roles and gender inequality in the local community and in Sri Lanka in general. A participant expressed that "*There's no* 

such thing as gender inequality, we are working together." (W2C). Another participant highlighted that there is gender equality in Sri Lanka, and that men and women share the responsibility and collaborate with the work that must be done in their everyday lives.

"In here in Sri Lanka, actually here is gender equality. I mean we share our responsibilities, share and doing work together. Not like other countries. That is traditional way."  $(M3D)^{l}$ 

Another participant highlighted that "During risk events there's no difference in roles" (M1F), meaning that during risk events like floods, or other natural disasters caused by climate change, gender roles and responsibilities do not matter. The participants highlighted that during floods "(...) we go together and help each other to build it up. There is no division." (W3B). What matters is to help each other out in terms of survival during the flood events but also in terms of building up what has been broken by the floods during the recovery period after a flood event. A participant underlines this by stating "(...) people are working together and helping each other to repair the houses, and to do the necessary things, not like different roles. There's nothing like that." (M1A). However, a participant stated that within the local community there is a strong collectivistic thought of being equal and the norm is that everybody in the local community helps each other out during difficult times.

When I out of curiosity changed the way I asked the question on gendered roles and responsibilities, so that it did not contain the word 'gender', but rather reformulated it as "What are men's roles and responsibilities, and what are women's roles and responsibilities in the local community and household? ", the answers changed. While the farmers earlier had stated that "(...) there's no such responsibility or roles specified for gender" (M2A) they now confirmed clear gender roles. For example, a male farmer from the Palatuwa community expressed his thoughts around men and women's responsibilities as women in charge of the household, whereas men hold a breadwinner role with the main responsibility of the paddy fields and the income to the household.

"In normal days women have the household work and things like that, and men are going to the field and ploughing and earn money by going to work in town or in the capital, Colombo." (M2A)

The farmers in Godagama and Thihagoda also outlined the same gender divided roles, but a male participant added children as one of the main responsibilities of women.

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<sup>&</sup>lt;sup>1</sup> In this and the following quotations I have kept the exact language by the interpreter without changing grammar or style.

"(...) Usually the men are going to work and earn money and all that, and woman are doing all the household work, and looking after the children, washing and all that.

That is the usual way."(M1C)

A female participant pointed out another responsibility of women, "(...) I go myself to the market nearby to sell and buy vegetables." (W2A).

Furthermore, several female participants pointed out that they also contribute with the paddy fields by helping their husbands with the cultivation and harvesting. The men are in charge of it, but the women always help out:

"(...) all the hard work is done by men, but at the same time we help them to do the other work. For example when you do like paddyfields with rice it could come other plants as well, so we help with going through the fields and take out all the other plants that should not be there. So mainly woman help. When they make the plow, we come and help with the plow and help with the harvest. The harvesting is the woman's work. It is to help our husbands and family, and it is a hard work as well." (W3B)

# 6.1.2 Local farmers experience of 'impacts of flood events' on their livelihood

The biggest concern of the participants' from the three local farmers communities, was how flood events impact their livelihood. They expressed concerns about how the frequently recurring flood events affect their livelihood and how these events cause economic-, health-, infrastructural- and structural challenges.

Economic impacts and challenges was one of the aspects described by the participants of how the flood events affect their lives, both in terms of economic loss caused by floods but also in terms of economic struggle in the period after flood events. All participants described loss of economic capital and ruined income resources as a huge economic burden for their livelihood and for the long recovery period after a flood, due to ruined paddy field, loss of vegetable gardens, loss of animals, ruined houses, loss of personal belongings etc. A participant described, "Everything is destroyed, trees, food, paddy fields, animals, vegetable gardens. All the income resources were destroyed" (M1C). Another female participant expressed:

"Before the flood event I was earning good and had good income from the vegetables, but after the flood event everything was destroyed and I had to start from the grassroots level again." (W1A).

One male participant underlined the burden of one season of income resources from paddy fields being destroyed by stating, "One season was destroyed, it took long time to be normal

again, and everything was destroyed. During the recovery months of the paddy fields we face difficulties. It is very difficult." (M2B).

Loss of animals and lack of food for the animals during the recovering period is another economic burden the farmers face. A farmer shared his frustration for not having access to food for his buffaloes: "Income and a lots of things are destroyed. We have a lot of buffaloes. They don't have any food, nothing to eat." (M3D). Another farmer told of an experience of losing his chickens in the floods: "The whole chicken farm flooded away. When the flood come all the chickens flooded away. Chickens were found dead" (M3D).

Another economic concern is how the lack of income causes limited money for covering a family's need for food. Especially when they usually sustain themselves mostly on their self-grown vegetables and rice, but due to destroyed paddy fields and vegetable garden it causes limited money to spend. A participant stated, "Normally we can spend money at market, but during this period it is very limited" (W1D). When I then asked the farmers how they coped economically during the hard period of recovery, they stated that "(...) we live by aid we get during the 6 months, very difficult" (W2B) or "We took loans, and you know that's how we cope" (M2E).

When I asked how the loans affect their economic situation, one of the FGDs discussed that they had heard of and experienced that "(...) those who took more loan were not able to pay back"(M2D). This was due to ruined paddy fields after the flood that ruined expected income from the paddy fields for the season. This made the farmers not capable of paying the increased amount of loans. A participant told about how increased flood events have caused unexpected economic burden on families because of need of increased loans, and how this has lead into a bad circle of economical struggle that have made farmers commit suicide:

"(...) farmers don't have money to repay loans, they don't have money for food or things to eat. It leads family to have problems, so then some commits suicide. There have been people who have been committing suicide in this area." (M2B)

Another vulnerability from being affected by floods is facing health impacts and challenges, like increased probability of injury, being sick or infected by diseases. A participant stated "Sometimes the main problem is diseases after the flood, mainly like rat-fever. That's the problem. Actually people have died because of that." (MIA).

In addition to sickness caused by flood events, the participants described challenges regarding limited access and availability of health services and medical help due to infrastructural challenges. A participant highlighted this by saying "When someone in the

house needs transportation to a doctor so you know this is difficult because of the roads are not usable" (W2C).

The participants also discussed the psychological stress due to being affected by flood events and all the damages and risks to the daily life that follows, but also the long and hard recovery period after such risk events. Several participants in the FGDs expressed that "I feel so scared." (W2C) when flood events occur, and that "(...) its very difficult to get through the situation" (W1B). Especially the economic stressors after a flood event affect the farmers' psychological health, and were highlighted by especially male farmers as a burden that has lead to some farmers committing suicide.

When flood events occur the water blocks roads and cut the access to electricity. This causes several infrastructural impacts and challenges for the farmer's daily lives and livelihood. During the last flood event (May 2017) the farmers experienced that "(...) the electricity were gone for one month" (W3C). The lack of electricity causes challenges especially for cooking and washing, and gives extra challenges when the dark comes.

During flood events transportation is a huge infrastructural challenge as damaged roads cause difficulties for the farmers to get their daily needs and tasks done as they often are being isolated at their homes being prevented from going to work, the children going to school, but also limit the farmers ability to go to the market or getting access to medical help

"The major problem is transportation. You are isolated in the same area, and you can't go anywhere, to the town or to market. You are limited to your house." (M2D).

Another crucial infrastructural challenge is the access to clean water due to flooded water-wells. A participant stated, "We had a big problem of not having water and clean drinking water." (W3C). The limited access to clean drinking water makes the farmers dependant of water supplies brought by not-flooded neighbour communities, NGOs or the Army.

During the FGDs the participants also expressed some structural challenges. By structural challenges I mean the overall systems like policies, laws, economic structures in the country or local community ruled by the government, which cause challenges for the local farmers when flood events occur. One thing all farmers highlighted was their dissatisfaction with the lack of financial support from the government, and a feeling of being left to oneself in terms of coping with the re-constructions and re-building after the flood.

#### 6.1.3 Local farmers' experience of 'responses to flood events'

During the FGDs participants were asked to share how they respond to flood events, meaning how they are coping with the situation both during the floods but also in the aftermath of floods, as well as how the farmers perceive the GoSL and NGOs responses to floods.

When it comes to the community responses to floods all three farmers communities described flood events as something they have long experience with: "We have been facing the floods since childhood, so we have long experience" (M3A). The problem is the increased frequency of flood-events and the unpredictable weather changes that cause challenges for the local farmers in terms of being prepared. When the farmers talked about how they coped with all the damages and re-building after a flood event had occurred, they described that the community collaborate in "joint work" to restore the damages.

"We get together, and ladies and gentlemen are donating their labour. If someone in the community has for instance the roof have fallen down we gather up and fix it together. That's free of charge, that's the way here." (M1E).

They also highlighted that "(...) not affected areas bring stuff by boat to each other" (W2C). From how the participants talked of how they handle the flood events, they have described a very collectivistic thought of community behaviour and mind-set in terms of everybody helping each other out with rebuilding and recovering from the damages caused by flood events. From spending time with the farmers and through the FGDs, I was surprised by their positive and collectivistic attitude towards such risk events considering that such events occur on a regular basis, and recently at shorter intervals causing severe damages and difficulties for individuals, families and local communities.

The participants described both national and international NGO's responses as important providers of emergency aid and long-term supplies in the recovery period after a flood event. During the first period of the floods they described that NGOs were bringing food packets and water bottles once a day. A participant described this by saying, "As an immediate aid we got a food packet with a bottle of water just one time each day. That's all what we got until the water went down." (W3A). After the water has retreated the farmers get long-term supplies by the NGOs that are crucial for the farmers in covering their need of food, water, clothes etc. A participant described,

"(...) after three weeks the volunteering organisations they are bringing stuff and distribute. We are getting supplied, different like food, water, clothing and all that. And that's how we manage" (M1D).

When it comes to Governmental responses and support to the affected farmers, all the farmers pointed out the governmental help provided by the army. Even though the army gives emergency help, most of the participants expressed dissatisfaction with the help they get from the government, as briefly mentioned above. A participant expressed his dissatisfaction of the support from the government by stating, "We got nothing from the government" (M2E). The farmers request more financial support and supplies like seed, food, equipment, but also governmental support in terms of finding long term solutions and programs for the frequently affected areas of flood events.

"Actually as a village we are unable to do anything. The government has to help out and support, and has to think little bit big and find out programs." (M1E).

When it comes to the farmers' dissatisfaction with the lack of financial support from the government after flood events, the farmers expressed a frustration at the differentiation of economical support by the government, "(...) even when our crops are flooded and destroyed, we are not considered. There's difference between people, some people are being favoured by the government." (M3B).

#### 6.2 National discourse on gender and climate change in Sri Lanka

The national discourse consists of perspectives from both NGOs and The Government of Sri Lanka (GoSL). This section are structured according to the two organizational themes in the TNA of the national discourse, namely 'Gender norms and gender equality' (section 6.2.1) and 'Interlinking gender and climate change' (section 6.2.2). Within each organizational theme there are three and four basic themes. See Appendix 7 for the TNA table.

# 6.2.1 Gender norms and gender equality

To be able to understand the connection between gender and climate change, it is important to understand the context of gender. I have identified three "basic themes" that structure the findings presented in this section: "Gender roles and responsibilities", "Opportunities for gender equality' and 'Barriers for gender equality'.

Due to the existence of a strong patriarchal culture and hierarchical structures within the Sri Lankan culture, the GJL pointed out that there is very prevalent stereotyped thinking about gender norms regarding *gendered roles and responsibilities* within the family, household and within the labour market. When it comes to the norms of the men's role and responsibilities, the GJL points out men as socially expected breadwinners and possessing masculine qualities.

"I would say that due to the patriarchal culture, men feel that they have an extra burden of providing for their families, and also the expectation from the society is that men have to be strong and that they cannot cry. They have to be strong men. You know, it's always these masculine ideal attached to the behaviour of men" (GJL).

Women on the other hand are expected by the society to be in charge of household work and the children.

"It is women who have children you know. It's society expected that It's her duty to do everything, look after the kids and do all the household work, so in that case women are the once who bear the burden of all" (GJL)

The GJL expresses concern about the socially expected roles and how the multiple roles and responsibilities women obtain are a limitation for their own self-realization in terms of education and job possibilities.

"These women play multiple roles, and these multiple roles really restrict them from achieving education, getting a good job, or getting their higher education or anything like that, because they are very much restricted. It's stereotypical you know, the roles, as I told you earlier" (GJL).

When it comes to opportunities for women in Sri Lanka and the existence of gender equality, the GoSL underlines that women and men obtain gender equality constituted in the general law: "Women are equal to men under the general law" (GoSL, 2017) and it is the Governments' obligation to ensure women's rights and gender equality. Further the GoSL highlights that the Sri Lankan constitution ensures gender equality through insurance of (...) fundamental rights and non-discrimination on ground of sex." (GoSL, 2017), and through no legal barriers due to gender;

"There is also provision for special measures to ensure women's right to equality and there are no legal barriers to women working outside the home, engaging in financial transactions, or obtaining credit" (GoSL, 2017).

The GoSL highlights the existence of gender equality in political areas like access to education, political participation (voting rights) and health services. In the key document the GoSL states that "there is gender equality in access to education" (GoSL, 2017, p.3) and that; "Sri Lanka is proud of its free education policy, and women in Sri Lanka have benefited from the implementation of nearly 8 decades of free state education irrespective of sex and socioeconomic circumstances" (GoSL, 2017, p.3)

When it comes to political participation in Sri Lanka the GoSL proudly highlights that "Sri Lanka has a long history of women leadership" (GoSL, 2017) and Sri Lanka had "(...) the

world's first woman Prime Minister in 1960" and "(...) an elected woman Executive President from 1994-2002" (GoSL, 2017). In addition the GoSL highlights their early practice of women's right to vote and bring forward that their initiative for increased gender equality in politics by implementing 25% women's quota at local political level and providing training for women for increased political knowledge for women.

The NGOs and the GJL highlighted the existing patriarchal culture as one of the barriers to gender equality in Sri Lanka, due to an existing gender gap between men and women that is reflected through the stereotyped gendered roles and responsibilities.

"(...) we have a huge gender gap when it comes to certain areas." (GJL)

The aforementioned social and cultural expectations of women being in charge of the household and caregiving is according to the GJL a barrier for women's potential.

"Women get restricted. Because of the patriarchal culture we have different expectations from the society also from women. That really affects the potential of women." (GJL)

Even though women have equal access to education by law, women get restricted by the wellestablished social and cultural expectations of that makes women drop out of for example
education. This restricts their possibilities in terms of completing higher education and
decreases their job opportunities:

"Even though women also have the same right to education as men, there is a problem that women stop at a certain point, when they become mothers or you know when they have to play different roles in their family. Mainly women get restricted. So women don't have many opportunities or options as men." (GJL)

In contrast to the GoSL's positive angle of the opportunities of political participation for women in Sri Lanka, the GJL on the other hand gave a different picture of the gender equality situation concerning politics and women's participation. Firstly the GJL refer to the positive development with increased possibility of participation for women in politics and decision-making due to the implementation of a 25 % quota-system, as the GoSL also highlighted:

"One progressive thing is that after about two decades of advocacy by women activists, now we have 25 % quota for women at local government level. So now there is a tendency for women also to get to participate" (GJL)

Further, the GJL informs that the quota system looks good on paper but in real life they experience that it is not easy for women to get into politics. The GJL also describes a tendency of misusing the quota-system by electing women who become the voice of men, and that the lack of women's participation in politics is still highly prevalent and a difficult issue.

Another barrier to gender equality highlighted by the GJL is the lack of implementation

skills by the Government, such as lack of ability to implement laws and initiatives at the local level; "We see the problem is implementing and the way they implement and how the information flows down to the grassroots level" (GJL). She further argues it is not enough to have the laws and rights on paper if they are not implemented down to grassroot level and established as a common practice:

"(...) you can advocate for policy and you can pass laws, but it all matters to the implementation. Implementation of any of these mechanism are very problematic, so that is why on the books you see you have made everything possible to make every sector gender equal but in practice its not there. So this is a huge challenge we have." (GJL).

During the conversation with NGO2, the leader highlighted an intersectional barrier for

During the conversation with NGO2, the leader highlighted an intersectional barrier for women's equality, namely women's lack of right to landownership in Sri Lanka:

"Women do not have land rights. If you are a farmer the land ownership is not there for you if you are a woman" (NGO2)

Further the NGO2 leader highlighted the problem of no land rights for women in times when families experience the loss of their husband.

"If they loose their husband, what happens then?" (NGO2)

#### 6.2.2 Interlinking gender and climate change

I have identified four "basic themes" concerning the national discourse of interlinking gender equality and climate change in a Sri Lankan context; 'Women are disproportionately affected by climate change', 'Men's vulnerabilities towards climate change', 'Lack of representation' and 'Gender Mainstreaming needed'.

The NGO leaders, GJL and the GoSL express that women, especially rural women, are disproportionally affected or most vulnerable to natural disasters like flood events, due to intersectional aspects like social-, socioeconomic- and political inequality. In the key document the GoSL states "Women and girls are disproportionally affected by the impacts of climate change" (GoSL, 2017) due to the fact that "In many developing contexts, women's livelihoods are dependent on climate-sensitive sectors such as agriculture, forestry, water" (GoSL, 2017) and that women are being "(...) impacted from multiple socio economic vulnerabilities, on whom the impacts of climate change would be harsher due to their increased vulnerabilities" (GoSL, 2017). According to the GJL difference in gendered vulnerabilities to environmental disasters, and the cause of women being most vulnerable, is due to the aforementioned cultural- and social expectation of gender roles and responsibilities together with intersectional inequalities.

"Due to the social and political, and also the environmental situation - especially regard to natural disasters and so on, it is always usual that women are the most vulnerable and get the most affected." (GJL)

The GJL gave an example of increased vulnerability for women referring to women being in charge of household tasks like for example fetch clean water.

"So for example if it is due to a natural disaster or to an environmental situation, again it is women who have to walk miles and miles to fetch water" (GJL)

Further, the GJL also highlighted other intersectional aspects like lack of economic power and independence, as well as land rights as aspects that make women, more vulnerable than men to environmental disasters:

"In rural areas women are more and more marginalized. Because due to their lack of economical power and land rights and things like that. You could see that in rural areas women are much more vulnerable" (GJL)

Lack of swimming abilities among women and children was also highlighted by both NGOs as a barrier that put women in a more vulnerable situation when natural disasters like floods occur. It event put their lives at risk:

"Women and children are most affected because of drowning. The biggest problem is that they don't know how to swim" (NGO2)

The NGO2 confirms the view of women and children being most vulnerable due to lack of swimming abilities, and informs about their newly started swimming training program for women and children. This aims to increase women and children's swimming abilities, and their resilience towards natural disasters like flood events.

When I asked about men's vulnerabilities to climate change and especially flood events, NGO1 and the GJL highlighted the highly prevalent number of suicides among men, especially in the agricultural sector, due to increased economic burden caused by climate change events like floods:

"There have been many incidents of suicide among men. Especially among farmers in the agricultural sector, and even whole families." (NGO1)

When I asked the NGO leaders and the GJL about their views on reasons for such high suicide numbers among men, pointed at social and cultural expectations of men as breadwinners and expectations around their 'masculine' role towards the family and household due to the existing patriarchal culture:

"(...) it create a pressure on men to be smart, and to provide for the families, to have a permanent job and so on. If you look at the statistics of committing suicide it's more

men who commit suicide than women. This is an adverse affect of the patriarchal culture that people don't see" (GJL)

As briefly mentioned the political representation and participation of women are limited in Sri Lanka. This also concerns women's representation and influence on climate change policies and strategies. Even though the GoSL argued for prevalent gender equality in terms of access to political participation through voting rights and increased women's quotas, the GoSL also highlighted the need for more women to be included in environmental political processes and decision-making due to women's knowledge and being important 'agents of change.':

"(...) women and girls who experience the consequences of climate change are often leaders in developing effective coping strategies and building resilience" (GoSL, 2017)

Women obtain an important role that will benefit Climate Action and strategies at all levels, and "(...) inclusive policy processes will allow women to become agents of change which will benefit climate "(GoSL, 2017).

In the key document from the GoSL (2017) Gender Mainstreaming (GM) is referred to as a main strategy the GoSL has taken to ensure a gender sensitive approach towards all national policies and plans:

"The government in its initiatives has taken gender mainstreaming as a key component with Cabinet approval being granted to create gender mainstreaming units in every government ministry to ensure national planning is gender sensitive, and policies are gender mainstreamed" (GoSL, 2017)

The GoSL highlights the importance and need for using GM actively to ensure gender equality.

#### 6.3 The international discourse of interlinking gender and climate change

As mentioned in the introduction of the thesis, the field of interlinking gender and climate change has been a growing field the last couple of decades, and especially at international policy level. To explore the international discourse I have analysed selected reports, documents, research articles as well as policy briefs (see Appendix 5). In addition to the document analysis, the participant observations from attending COP24 are included as a part of the international discourse findings. One organizing theme 'Interlinking gender and climate change' was identified with four 'basic themes'. See Appendix 8 for TNA table.

A statement that is echoed throughout the international discourse is the statement of "women being the most vulnerable" to or "disproportionately affected" by climate change.

"Women are disproportionately vulnerable to the effects of natural disasters and climate change where their rights and socio-economic status are not equal to those of men" (World Bank, 2011, p.2)

The foremost acknowledged reasons for women being more vulnerable towards climate change are the intersecting inequalities women face as socio-economic, political and legal disadvantages, as well as less rights and access to resources:

"(...) women still have lesser economic, political and legal clout and are hence less able to cope with—and are more exposed to—the adverse effects of the changing climate." (UNDP and GGCA, 2016, p.1)

In addition to intersectional causes and structures, some of the documents also highlight differences in gendered roles and responsibilities between women and men, as one of the causes why women are being more vulnerable than men:

"Gender-differentiated roles and responsibilities in families and households, as well as gender-segregated labor markets and income gaps, cause differentiated vulnerabilities of women and men to the effects of climate change." (EIGE, 2012, p.19). Many of the documents underline the importance of addressing the gendered issues of climate change due to sustainable development and for the achievement of the Sustainable Development Goals (SDGs).

"Understanding the gender-environment nexus is not only key to understanding social and environmental inequities and barriers to sustainable development, but to unlocking options for transformative action, as well. "(UNEP and IUCN, 2018, p.XIV)

If gendered relations and issues due to climate change are not addressed or included in the strategies towards climate change, there is a possible risk of further amplifying women's vulnerability:

"The gender-differentiated impacts of climate change and disasters and the unequal position of many women may increase their vulnerability to these events, particularly as climate change intensifies them." (UNEP and IUCN, 2018, p.34)

One of the main issues related to the international discourse on gender and climate change, reflected in the international environmental political and policy agenda, is the lack of participation of women in policy- and decision-making, which limits their access to influence climate solutions:

"(...) women face huge challenges in accessing all levels of policy- and decision-making processes. This renders them less able to influence policies, programmes and decisions that impact their lives". (UNDP and GGCA, 2013, p.3)

I found that there is a strong call for including more women into the decision-making processes and fora within all the documents included in this study.

"Stronger participation and women's voice at climate-related decision-making fora should influence the direction of climate action to address specific vulnerabilities of women and girls" (GoI, 2018, p.3)

The strong call for more gender balance within environmental decision-making processes, is based on the view of "women being important agents of change" and the importance of including their skills, knowledge and experience that can contribute to good and effective climate solutions:

"Women are vital agents of change on climate action. Their unique knowledge, skillsets and perspectives borne out of how they interact with food systems, technology and institutions can improve the effectiveness of climate action" (GoI, 2018, p.3)

A policy brief by the Government of Ireland highlights the importance and need of unlocking the potential of women to achieve the SDGs:

"(...) unlock the potential of women as agents of change, in the implementation of the Paris Agreement and achievement of the SDGs" (GoI, 2018, p.3)

At the international conference of the parties (COP24) there was a strong focus on gender balance, and on advocating for increased women's, and other vulnerable groups' participation. The main idea is the right of women to equally to men, but also the need of women and other vulnerable and disproportionally affected groups, like indigenous groups, to bring knowledge and skills that can achieve better climate solutions with considerations to all groups of people.

Another policy aspect highly prevalent and focused on within the international discourse is the use of Gender Mainstreaming (GM) as a strategy for promoting gender equality within international and national programs and policy processes:

"(...) identify gender as a cross-cutting policy priority, or commit to integrating or mainstreaming gender into all climate change actions, strategies and policies." (USAID, 2016 in UNDP and GGCA, 2016, p.4)

During the international conference of the parties (COP24) in Katowice, Poland I experienced GM as the main focus of the women activists and working groups on the field of gender and climate change. The aim was to mainstream the term 'gender' and other crosscutting issues and rights within the rulebook of the Paris Agreement, to ensure that gender considerations and the rights of vulnerable groups are considered and safeguarded in all climate policies and programs for mitigation and adaptation.

Some of the most recent reports analysed in the study highlight an existing gap of gender disaggregated data in the field

"While the global policy framework connecting gender- environment issues has progressed, especially in more recent years, with numerous gender- responsive strategies at multiple levels transforming development outcomes across sectors, a persistent gap still exists: data." (UNEP and IUCN, 2018, p.3)

There is a call for closing the data gap to improve policies and programs that are well informed with reliable data:

"Data gaps at this nexus, however, are persistent. Limited collection, dissemination and application of gender-environment statistics, including at national level, affects decision makers' and practitioners' knowledge and capacity to develop and adopt well-informed and effective policies and programming at all levels (UN Environment, 2016)." (UNEP and IUCN, 2018, p. XIV).

#### 7. Discussion

The overall aim of this study is to explore local perspectives on gender in the context of climate change in Sri Lanka, in relation to the national- and international discourses through the use of both intersectionality and integral theory. The findings presented in the previous chapter show the complexity to be understood when including different theoretical and methodological approaches to such a study, as well as including multiple levels. Due to limitations of the thesis I have chosen to highlight some key findings that will be discussed in this chapter.

I will further discuss the findings according to the two theoretical frameworks, integral theory and intersectionality (see Chapter 3). The discussion is structured according to the sub-objectives for the study (see section 4.1). Sub-objectives 1-3 will be discussed with an intersectional approach, and the fourth sub-objective will be discussed by using The Integral Four-Quadrant Model (Figure 2). This model will guide the discussion of the coherence between the local perspectives and the national- and international discourses. The discussion will be structured in the opposite order from the Findings chapter, meaning starting with discussing the findings in relation to the international discourse (sub-objective 3), followed by the national discourse (sub-objective 2) and then the local perspectives (sub-objective 1). This is done with the intention of having the international and national discourses in mind when discussing the local perspectives, for providing a better starting point for discussing the coherence and link between the three levels in section 7.4. In the end of this chapter I will

discuss limitations and strengths of the study (section 7.5) and argue for the transferability of the study (section 7.6).

#### 7.1 The international discourse of gender and climate change – a political discourse?

The third sub-objective of my study aims to explore the international discourse of gender and climate change. Through the findings presented in chapter 6 the study finds the international discourse being mostly concerned with the political aspects of including gender into the climate change agenda. The main focus points that are continuously brought up in the documents are 1) Women being the most vulnerable due to intersectional inequalities, 2) the need for increased participation of women in climate politics due to being important 'agents of change', and 3) the use of 'Gender Mainstreaming' as a strategy for promoting gender equality and gender considerations into climate policies and programs. Due to space limits of the thesis I choose to focus on further discussing the international discourse's echo of 1) Women being the most vulnerable due to intersectional inequalities.

#### Women most vulnerable – a continued generalization of women?

Within the reports and documents used in this study the findings show that the notion of 'women being most vulnerable' or 'disproportionately affected' to climate change is being echoed within the international discourse of gender and climate change. MacGregor (2010) and Arora-Jonsson (2011) have already highlighted and critiqued existing generalization of women in the Global South as vulnerable and have called for more contextualized research. According to the findings of this study, this is still highly prevalent within the international discourse on gender and climate change. Despite the continued generalized statement of women being most vulnerable, the findings also shows that there is a prevalent understanding of intersectional causes to women being the most vulnerable, such as lack of economic power, lack of access to resources as well as limited legal rights etc. However, to my knowledge there are still few studies that go beyond the notion of 'women are being the most vulnerable' and actually study gendered vulnerabilities towards climate change at local level through an intersectional framework at local level, and focuses on both men and women's vulnerabilities (Djoudi et al., 2016, p.249). As my findings also show, some of the latest international reports have started to call for filling an existing gendered data gap within the field (UNEP and IUCN, 2018). The findings of this study support such an existing gender gap. One can therefore question the database for such a generalized notion that "women are the most vulnerable". The study therefore suggest a need for more contextualized qualitative studies

that look at gender beyond a binary approach, and that studies gendered vulnerabilities to climate change in a intersectional manner through accessing intersectional gender-disaggregated data (Djoudi et al., 2016; Dover, 2014).

#### 'Men' being left out of the international agenda of climate change and gender?

The international discourse focus on only women as gender and on 'women as the most vulnerable' could possibly overlook important knowledge of men's vulnerabilities and exclude an important piece of understanding the complex picture of gendered vulnerabilities to climate change. This could lead to a pitfall of leaving men behind or overlook men's vulnerabilities (Wanner and Wadham, 2015). Working towards gender equality, both men and women need to be included. The study therefore will argue for the need for intersectional studies of the gendered perspectives and impacts to climate change that includes a focus on men's vulnerabilities in a as well as women's. To support this argument I will later come back to findings exploring men's vulnerabilities in section 7.2 (national discourse on gender norms), section 7.3 (local perspectives on gender norms), as well as in section 7.4.4 when discussing the coherence between the local perspective and the national and international discourse using The Four-Quadrant model.

#### 7.2 The Sri Lankan national discourse - an echo of the international discourse

My second sub-objective aims to explore the Sri Lankan national discourse on gendered norms and the linkage between gender and climate change, including both a national NGO perspective and a Governmental perspective. Two findings within the national discourse that will be discussed in this section, is the divergent views of the national NGOs and the GoSL when it comes to the gendered context in Sri Lanka, as well as their alignment or echo of the international discourse when it comes to their perspectives of the linkage between gender and climate change.

#### 7.2.1 Gender norms and gender equality – divergent perspectives

To be able to understand the connection between gender and climate change, it is important to understand the context of gender. It was therefore important for the study to get insight into the national NGOs' and GoSL's views on the gendered context in Sri Lanka, to be able to see if they are in alignment, but also if their views are in coherence with local perspectives.

#### Divergent perspectives of the Sri Lankan gender context – lack of implementation skills?

In the key document (GoSL, 2017) the GoSL proudly highlights the existence of gender equality within both national laws and policies. Despite this, the national NGOs gave a contrary perspective that challenges the GoSL positive view of the gendered context and gender equality in Sri Lanka. According to the findings (see section 6.2.1) the national NGOs highlight that despite equal rights by national laws and policies, there are cultural, political and social barriers for gender equality when looking beyond the written laws and policies. An example of such findings reveal that men and women have equal rights when it comes to education, but women tend to drop out of school due to expectations about their responsibility for the children and the household (section 6.2.1). Another important aspect is the increased quota of women's participation in politics at local level. According to the GJL this looks good on paper but is not easily put into practice when you look beyond the approved policy.

These divergent perspectives of the gender context within the national discourse indicate the political focus of the GoSL and its alignment with the international discourse. The national NGOs on the contrary, appear to see a different gendered picture and are perhaps more in alignment with the local perspective. In this way they act like mediators between national policies and local practice. I will discuss this further in section 7.4. The divergent perspectives also indicate a shortcoming of the GoSL. When looking at cultural and social aspects that create inequality even when written laws and approved policies promote gender equality. According to the key informant (GJL) there is an existing lack of implementation skills by the GoSL that could be a barrier for a true change of behaviour and norms towards gender equality at local community level (see section 6.3.1).

# Traditional gendered roles and responsibilities

The key document from the GoSL does not address the gender context in terms of gendered roles and responsibilities. However, through the interviews with the national NGOs and the GJL gave insight into how the national NGOs perceive the situation around gendered roles and responsibilities. The GJL highlights a prevalent patriarchal culture with very stereotyped or traditional grounded gendered roles and responsibilities within the Sri Lankan household (De Silva and Jayathilaka, 2014). Men obtain a breadwinner role with the responsibility of providing for their families, and women are being expected to be in charge of the household and the children.

#### 7.2.2 Gender and climate change - echoing the international discourse?

The findings within the national discourse bring out almost the same aspects as the international discourse. For instance both national NGOs and the GoSL highlight the need for increasing women's political participation as they are acknowledged as important agents of change. The GoSL highlights the usage of Gender Mainstreaming as a strategy for increasing gender equality within policies and programs. In addition to echoing the international discourse on these political aspects, both the national NGOs and the GoSL are stating 'women as the most vulnerable to climate change'. The GoSL does not go further into the reasons why women are more vulnerable in the context of Sri Lanka, but rather presents general statements of intersectional causes like women being socio-economically vulnerable and facing political inequalities. I would argue that is an echo of the international political discourse reflecting the general statements of women seen as the most vulnerable without mentioning any contextually related intersectional causes. Although both the GoSL and national NGOs echoed the international discourse on women being the most vulnerable, the national NGOs highlighted some intersectional causes explaining why women are the most vulnerable in the Sri Lankan context. These intersectional causes relate both to differentiated rights and access to resources, but also to vulnerabilities determined by gendered roles and responsibilities. The examples given by the national NGOs are issues related to the Sri Lankan women's lack of legal rights to landownership, lack of economic and political power, as well as being in charge of fetching clean drinking water, and lack of swimming abilities (see findings section 6.2.2).

#### What about vulnerabilities of Sri Lankan men?

Kristjanson et al. (2017) highlight the need for looking into differentiated preferences and vulnerabilities due to evident intersectional gender differences, and not excluding men from the agenda. The GoSL neither mentions men in general nor anything concerning men's vulnerabilities to climate change in Sri Lanka in the governmental key document. The national NGOs on the other hand shared some interesting thoughts on male gendered vulnerabilities to climate change. These reflections were related to a high prevalent number of suicides among male farmers in the agricultural sector, and explained by social and cultural expectations of men as breadwinners. Studies on rural farmers in India and Australia have also shown high numbers of suicide among male farmers related to climate change stressors in relation to masculine expectations (Alston, 2013; Lambrou and Nelson, 2013).

This finding from the national NGOs underlines that there exists gendered vulnerabilities among men related to gendered roles and culturally embedded masculine

expectations to men as being the 'strong' sex and the 'provider for the family'. I will come back to this when discussing the findings from the local farmers in relation to men's vulnerabilities to floods in section 7.3.2.

#### Key informant usage of language

Another aspect within the national discourse is the key informant's (GJL) use of language when describing her view on Sri Lankan women. During the analysis of the key informant interview, I found it very intriguing that the key informant consequently spoke of Sri Lankan women in terms of 'they' or 'these women' as if it did not include herself, or as though she did not identify herself as one of 'them' even though she is a Sri Lankan woman. This use of highlights the need of not overgeneralizing women as a homogenous group, and indicates that there exist intersectional differences between women in Sri Lanka in terms of for instance economic status, access to higher education and resources, and due to class or ethnicity. To me, the key informant's use of language made it clear that it is extremely important to include these intersectional aspects of gender into gender analysis, and not only look at gender as binary or homogenous. It would be very interesting to look further into this aspect of hierarchical structures between women in relation to impacts of climate change.

# 7.3 Local farmers' perspectives on gender and experiences with floods

My first sub-objective aims to explore local perspectives on gender and the local farmers' (men and women's) experiences with impacts and responses to flood events. The findings from the FGDs with the local farmers illustrated two main points that will be discussed in the following sections. There is 1) an existing denial of gendered roles and responsibilities due to collectivistic embedded values and norms (section 7.3.1), and 2) the farmers' vulnerabilities (impacts) facing flood events are highly poverty related rather than related to gendered vulnerabilities (section 7.3.2).

#### 7.3.1 Gendered roles and responsibilities

As stated initially in section 7.2 in order to fully understand gendered vulnerabilities in relation to flood events I found it important to gain knowledge about the national and local views of the gender equality, - norms, - roles and responsibilities in Sri Lanka. One of the interesting findings related to the local farmers' perspective of gender was their denial of the existence of gendered roles and responsibilities.

During all three FGDs I experienced that how I asked the questions and what words and terms I used, influenced how the participants answered. When I asked, "What are the different gender roles in the household or community?" I was met by a denial of the existence of gendered roles and gender inequality in all three FGDs. Despite this denial of existing gendered roles I got a different picture when I re-phrased the question to ask concretely about women and men's roles and responsibilities. To this question the farmers outlined a picture of existing traditional gender divided roles and responsibilities within the households and the community. Men's role and responsibilities were then described by the farmers as being the 'breadwinner' of the family and their household, through being in charge of the paddy fields and by going to work in the capital for supplementary income. In contras, women were described as being in charge of the household and caregivers for the children. In addition, the women were responsible for going to the market and to town to sell and buy vegetables/food in addition to helping out with the paddy fields. Despite the contradicting answers from the local farmers, the study suggests that there are clear and prevalent gendered divided roles and responsibilities within the household and local communities. However, from the local farmers' point of view this is not seen as related to 'gender divided' or 'gendered inequality'.

From another point of view, the local farmers denial of the existence of gender divided roles and responsibilities has made me reflect on whether the local farmers were unfamiliar or did not have enough knowledge about academic terms like 'gender' or 'gender equality', that my use of language in the interviews thereby made a distance or caused misunderstandings. Or from yet another point of view, what I experienced as 'a clear division in gender roles' from a "western-individualistic point of view" would not be seen as division in gender roles in their context and frames of cultural norms, but as traditional and the natural norm. I think this example of denial and how the local farmers spoke about gendered roles and responsibilities highlights the importance of contextualization and the need for taking into consideration both social and cultural norms, and how this affects people's views and behaviour when exploring topics related to gender divided roles and responsibilities.

#### Collectivistic embedded views of roles and responsibilities

Another interesting aspect in relation to both the denial of existing gendered roles and the outlined gendered roles and responsibilities, is the collectivistic embedded views of roles and responsibilities. From the local farmers' perspective this is not a matter of divided roles but about collaboration for the collective best. One example is the local farmer statement that in times of flood events they all help each other out (M1F) These embedded norms

concerning roles and responsibilities are based on long determined cultural norms and values and are first and foremost reflecting a necessary collectivistic - embedded strategy for survival. I will discuss this further in section 7.3.3 when addressing the local farmers' responses to flood events.

#### 7.3.2 Gendered impacts of flood events

During the FGDs the local farmers did not speak explicitly about how men and women are being differently or individually impacted (vulnerable) facing flood events. The local farmers were more concerned about how they as a local community or 'collective' household were affected rather than focusing on different gendered vulnerabilities. The local farmers' concerns were first and foremost related to survival and poverty in terms of economic-, health-, infrastructural- and structural issues. This is consistent with their denial of the existence of gendered divided roles and their strong collectivistic view. Despite this, I have indirectly obtained knowledge on gendered vulnerabilities embedded in the long-term traditional norms on different responsibilities of men and women that the local farmers described (section 7.3.1). Due to women's role and responsibilities as being in charge of the household and the children, the findings show that women face many difficulties and obstacles during times of flood events. Local farmers often face infrastructural challenges like being isolated at their homes and therefore experience difficulties travelling to the market for food supply. Furthermore, the lack of electricity causes challenges for cooking and other household responsibilities. During the FGDs the women also expressed concerns related to the lack of sufficient water supply and access to clean drinking water, which causes obstacles for cooking and cleaning and sanitation. I will argue that these concerns are related to, and confirm the gendered roles and responsibilities. In alignment with this, the findings show that women face many difficulties and obstacles related to their gendered responsibilities during times of flood events, meaning that their daily work and responsibilities are more challenging and harder during times of such events.

Another interesting finding related to gendered vulnerabilities is linked with both economic- and health related burdens especially for male farmers, namely how flood events through loss of economic capital and recourses cause economic harm and burden on their livelihood. According to the findings men act according to masculine social expectations. During all the interviews it was the male farmers who brought up concerns about the economic burdens caused by flood events (except when the women talked of the limited access to the market to buy food and sell vegetables). In relation to the economic burdens, the

findings point out that recurring flood events put the local farmers, and especially the male farmers, in a vulnerable situation. The findings show that the economic burdens are both crucial for the collective poverty situation of the family, their household and livelihood, but also for the male farmers' self esteem and burden of having the economic responsibility (Alston, 2012). During one of the FGDs the reality of male farmers committing suicide due to their economic burdens was highlighted. High prevalent numbers of suicide among male farmers were also highlighted by the NGOs indicating men's vulnerability (see section 7.2.) (Alston, 2012; Lambrou and Nelson S., 2013). This finding again highlights the importance of including both men and women's vulnerabilities. This finding is also linked to the health aspect of the psychological burden of experiencing flood events, both during floods but also during the aftermath recovering from the damages caused by such events. It would be interesting to conduct more research on the impacts of flood events in relation to psychological health aspects, gendered roles and responsibilities in relation to socially embedded norms of masculinity and femininity.

### Limited access to gendered data due to methodology?

I believe that if I had been able to have FGDs with men and women separately this could have provided a better access to information about the differences in men's and women's views on gendered vulnerabilities and given a more credible insights into the gendered impacts. In this study it is hard to know how the presence of both men and women in the FGDs affected the answers given to my questions. My experience from the FGDs was that it was mostly men who lead the conversation, and that men often spoke on behalf of all as a 'collective'. Through observations I found it hard to state whether the women were uncomfortable or if they were marginalized during the conversation, and men being the spokesmen on behalf of the women. This experience leads me to question whether the way men and women took different roles during the FGDs indicate women's collective acceptance of culturally and socially embedded norms or not saying that men are spokesmen on behalf of the women. I will continue to discuss the methodological limitation to gendered impacts in relation to the limitations of the study in section 7.5.

#### **Interlinked impacts**

As already mentioned, the study shows that the impacts of flood events on the local farmers as individuals, household and community, are first and foremost poverty related concerns. Through analysing and discussing the findings from the FGDs, I have realized the

close linkage between the different described impacts of flood events and how they combined can cause increased negative impacts on the local farmers' vulnerability and poverty situation. One example is how the damaged infrastructure is linked with both economic challenges and health challenges. If farmers are isolated at their houses due to damaged roads, they are prevented from being able to go to work, to their paddy fields, to the market or to the doctor. Infrastructural challenges affect their economic situation in relation to limited access to food and economic income, limited access to available health services etc. Another example of showing the linked impacts is how economic stressors can affect their mental health and cause a raise in number of men committing suicide.

To me, these examples of interlinked impacts made me realize the importance and the reality of the farmers' poverty-related concerns when facing impacts of flood events. Their concerns are first and foremost related to survival and the responsibilities for their family and local community.

#### 7.3.3 Farmers' perspectives on responses to flood events

The local farmers perspectives on the national NGOs and Governmental response to flood events can give insight to both how the local farmers perceive them as national institutions and how the local farmers express the relation between the local and national level.

#### Long experience of flood events

When I asked the farmers about how they handle flood events and how they cope during the recovery period, I was surprised by their "positive view" of handling such events, and that they don not see themselves as vulnerable. All farmers' communities highlighted their long experience of handling flood events, and as something 'normal' that happens every year and that they know how to deal with. The local farmers' main concern was rather related to the trend of an increased frequency of flood events and the difficulties of not being able to predict or prepare for these (annual) events as the patterns and seasons are more unpredictable than before. This causes the farmers to face shorter time between hard recovery periods and the occurrence of new flood events. Again the local farmers' concerns around flood events were not related to gender, but to their fear of a worsened poverty situation, especially in terms of economic struggles. This indicates that gender is not an integrated aspect in the individual or collective awareness of how climate change affect men and women differently caused by gendered determined injustices or inequalities.

# Collectivistic and granted thought of helping each other out - could climate change rotate gendered roles?

When the local farmers talked about the recovering period and their adaptation strategies after a flood event, they talked of the collective community with an embedded collectivistic thought of helping each other out, doing "joint work" during the reconstruction period, as a granted ideal or collectivistic norm. This is in alignment with the local farmers view of non-existing gendered divided roles and responsibilities in times of risk events. Due to this I will argue for the local farmers' collectivistic views and joint work as a coping strategy facing flood events, embedded in the 'collective' cultural and social norms of the local community.

It would be interesting to look further into the local farmers' statement of "During risk events there's no difference in roles" (M1F), and their collectivistic thought of joint action after a flood event. This to make further research on whether the state of emergency has any impact on established gender-divided roles and responsibilities, or more specifically if the risk events challenge the embedded cultural gendered norms and create a space for rotated gendered norms.

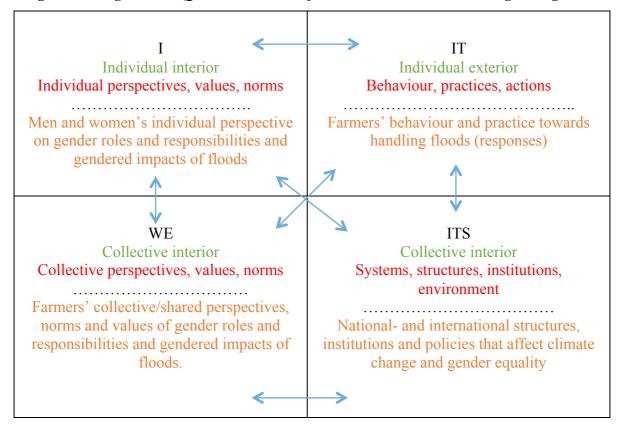
### Farmers' view of national responses

Due to applying a multilevel analysis of gender and climate change, including both local perspectives and the national and international discourse, it was expedient to ask the local farmers about their views on how the national (Government and NGOs) and international organisations are helping out with adaptation and emergency help in times of flood events to be able to investigate their views in coherence. The local farmers expressed a positive picture of the NGOs' help and responses to flood events, but an overall dissatisfaction with the Governmental responses. This could indicate a feeling of distance between the local and the national governmental level.

#### 7.4 The coherence between the local, national international levels

In this section I will use Wilber's (2005) Integral Four-Quadrant Model (see section 3.2) to guide the discussion of the coherence between the presented local perspectives and the national- and international discourses when it comes to interlinking gender and climate change. I have adjusted the four-quadrant model to the context of my study and to the crosscutting field of climate change and gender into a new four-quadrant model that will guide the discussion within this section (see Figure 2 below).

Figure 2: Integral Four-Quadrant Model adjusted to address climate change and gender



The model (Figure 2) illustrates the complex interplay between the local farmers' individual and collective values and behaviour, and the national and international discourses as structures and systems. All the four quadrants in this model are closely interlinked and can mutually affect one another. To show the complexity and make the linkage clearer, I will give an example of how the "I" quadrant is interlinked and affected by all the other quadrants (IT, WE, ITS). The "I" quadrant representing the local farmers' individual perspectives and values is linked with or will directly impact the farmers' behaviour (I  $\rightarrow$ IT). In the opposite direction the behaviour of the local farmers can affect or change their individual perspectives and values (IT→I). The local farmers' individual perspectives and values are linked and affected by the collective shared cultural norms and values (WE→I), and at the same time the individual farmers' perspectives could affect or contribute to change the collective norms and perspectives ( $I \rightarrow WE$ ). In addition to this the local farmer's individual perspectives can be influenced by national structures and systems like the political approved laws and policies (ITS $\rightarrow$ I). On the other hand the individual perspectives of the local farmers can reveal challenges in the national systems and structures, thereby contribute to change the national systems and structures ( $I \rightarrow ITS$ ).

In this sense the complexity of The Four-Quadrant Model could help to understand the local farmers' individual and collective perspectives (I and WE) and their behaviour (ITS) facing flood events and the linkage to gender, in addition to understanding the linkage to structures and the systems (ITS), represented by the national- and international discourses in this study. Integral theory and the Four-Quadrant Model could contribute to highlight the complex coherence between climate change and gender being addressed through a multilevel analysis (local, national and international levels) such as this study. I will in the following sections go through the four quadrants one by one, and discuss the coherence and relations between the four quadrants revealing the linkage between the local perspectives and the international and national discourses.

#### **Individual interior (I)**

In this study the individual interior quadrant relates to the individual perspectives of the male and female farmers on gendered norms and the link to impacts of flood events. Within the framework of this study it was hard to obtain completely reliable data on the individual perspectives of the male and female farmers and their individual feelings and thoughts, due to the methodological choice of FGDs rather than individual interviews with male and female farmers or separate FGDs with women and men. However, the study provides indirect knowledge on women and men's gendered impacts or vulnerabilities when facing flood events revealed through their collective views on impacts of such events and through knowledge on their views on gendered divided roles and responsibilities. In addition to this, insight into women and men's individual views through the FGDs has been gained by identifying the different statements made by women and men. According to the findings the study suggest that the local farmers' individual perspectives of values and norms of gendered responsibilities and impacts when facing flood events are in coherence with their behaviour in terms of the how they respond to flood events (IT) as well as being in coherence and strongly affected by the collective shared norms and values in the community (WE).

#### **Collective interior (WE)**

In this study the collective interior quadrant relates to the local farmers' shared norms, values and perspectives on both gendered norms and collective perspectives of impacts of flood events. The methodological choice of conducting FGDs provided collected data on the collective views and shared norms of gendered roles and responsibilities, as well as impacts of

flood events. The study shows that the farmers share an embedded collectivistic view of gendered roles, and that gendered responsibilities are not considered as unequal or as divided, but as a natural strategy for the collective best. Their collectivistic view on gendered roles and responsibilities is also embedded in their reflections around impacts or flood events, as they talk of "joint work" without reference to gendered divided roles and responsibilities, but as a natural reflection of their collectivistic embedded norms.

According to this, the local farmers' collectivistic views and norms of gender roles and responsibilities are affecting the individual perspectives and norms (I), and their behaviour (IT) are in coherence with their perspectives and norms. When it comes to the relation to "ITS" or the national and international discourses, I will argue that the local farmer's shared norms, values and perspectives are in coherence with the national NGOs' perspectives both in terms of outlined gendered roles and responsibilities, but also in terms of gendered impacts of flood events. However, the study shows incoherence between the local collective norms and values and the local farmers' focus when it comes to gender and climate change and the international and national political discourses. The local perspectives on gendered norms appear concerned with the collective poverty situation and not with the different vulnerabilities of men and women, even though they are prevalent. The international and national discourses are very focused on women's disproportionate vulnerabilities.

#### **Individual exterior (IT)**

In this study the individual exterior quadrant relates to farmers' behaviour, practices or responses to flood events, and within the framework of my study this quadrant will also relate to how the local farmers' perceived the national NGOs and Governmental responses to flood events. In times of flood events the local farmers highlighted that they all help each other out and that gendered roles and responsibilities in times of flood events do not exist. This collectivistic view of behaviour or response to flood events (IT) is in alignment with the collectivistic and individual embedded cultural norms of gendered roles and responsibilities (I and WE). When it comes to the local farmers' view on the national NGOs, GoSL and international responses, the farmers expressed satisfaction with the national NGOs' help and responses to flood events, but overall dissatisfaction with the Governmental responses. This could indicate a feeling of distance or lack of coherence between the local and the national governmental level.

Based on the findings in this study I would argue that the farmers' behaviour or responses to floods is in coherence with both their individual values and perspectives (I) and

the collective embedded values (WE), but their dissatisfaction with the Governmental responses represents a gap between the national and international discourse (ITS).

#### **Collective exterior (ITS)**

In this study the collective exterior quadrant relates to the structures and systems, represented by both the national- and international discourses. According to the findings the study shows that the international discourse of climate change and gender is highly focused on the political aspects of the field, like increased participation of women and gender mainstreaming. In addition the national discourse echoes an understanding and focus on women as being the most vulnerable to climate change. In relation to the national discourse there is some divergence between the NGOs and the GoSL in relation to the coherence with the international discourse. Both the GoSL and the NGOs echo the international discourse stating women as being the most vulnerable, and the need for increased participation of women in climate politics. At the same time the national NGOs are being critical of the GoSL's positive views on the gendered context, and call for looking beyond the approved policies and focus on better implementation skills. This indicates incoherence according to the gendered context and the impacts of flood events between the GoSL and the NGOs.

In relation to the rest of the quadrants the study shows a prevalent incoherence between on the one hand the international and national "ITS" and the "I", "IT" and "WE" quadrant on the other hand. The local farmers' are not concerned with gendered issues but their concerns are rather poverty related. The national NGO's perspectives, however, do have some alignments not only with the international and government discourses, but also with the local perspectives. They are largely in coherence with the local perspectives concerning gendered norms, roles and responsibilities (I, WE) as well as coherent to responses and behaviour (IT). These diverse alignments of the national NGOs, both in directions of the GoSL and the international discourse on the one hand, as well as the local farmers' perspectives on the other hand, have made me think of the national NGOs as mediators. They can be seen as bridging the institutional level with alignments both to the international and national discourses, as well as with the local farmers' perspectives.

#### Are men being left out of the agenda?

As pointed out throughout this this chapter, the study suggests a need for including gendered vulnerabilities of men into the agenda of gender and climate change. The findings from all levels in this study have indicated that men also face gendered vulnerabilities to the

impacts of flood events. These are closely related to gendered roles and responsibilities and cultural- and social expectations of men's masculinity and breadwinner role (Alston, 2012; Lambrou and Nelson, 2013). This shows a lack of coherence and an existing gendered gap between the local reality and the international-and national discourses as the international and national political discourses continue to exclude men, and focus on the disproportionate vulnerabilities of women. The study therefore calls for further studies that include both men and women when exploring gendered vulnerabilities using an intersectional and contextual approach to the research.

#### Are we talking of a politically motivated hegemonic discourse?

The lack of coherence between the international- and national political discourses and the local perspectives and concerns (except the NGOs as possible mediator between the discourses and the local perspectives), I will argue that the international- and national discourses are contributing to a continued "victimization of women in the South" by echoing generalized statements of women as being the most vulnerable (Djoudi et al. 2016; MacGregor, 2010; Arora-Jonsson, 2011). I want to underline that I am neither rejecting or nor supporting the statement that 'women are the most vulnerable', because in many contexts this may be the fact due to universal knowledge of women facing inequalities and different rights than men, especially in many developing countries. Despite this, I still question the actual empirical basis for such generalized statements, and would like to highlight the pitfall of echoing them even if their aim is the achievement of gender equality. This way of positioning women as the vulnerable, and focusing solely on women within gender studies, are contributing to leaving men out of the gender equality agenda. In my view the international agenda needs to pay attention to including both men and women to fully achieve gender equality, and to avoid even more polarisation between men and women (Bannon and Correlia, 2006; Wanner and Wadham, 2015). It is time to go beyond a binary approach to gender, not only by words but also by actions, and to focus on the intersectional causes to gendered inequality and vulnerabilities in a contextual manner. I question the international discourse's usage of power and the impact of it's usage of language. Against this background I am therefore inclined to raise the question whether these international and national political discourses can be seen as a part of a broader 'hegemonic discourse' of generalized and simplistic statements on gendered vulnerabilities that are used within the bigger picture of politicization of women within the gender equality agenda. This would be a very interesting question to look further into, yet for another study.

#### 7.5 Limitations and strengths of the study

In addition to already methodological limitations highlighted in Chapter 5 (section 5.6) concerning men and women attending the FGDs together, the use of translator, access to recordings of national NGO participants and orally given informed consent. I want to raise some further limitations to the study. I have to acknowledge that the change in methodological approach might have affected the access to gendered knowledge and experience. I believe that if I had been able to conduct FGDs with men and women separately this could have provided a better access to differences in men's and women's perspectives, and given me a more credible insight into the gendered impacts of flood events. In this study it is hard to access how the presence of both genders in the same FGDs affected their answers.

Given more time to adapt the methodology and theoretical framework before going on the field trip to Sri Lanka, I would have been better prepared for collecting data and conducting such a complex study for the first time as a researcher. Despite the lack of previous experience and skills as a researcher, and despite some changes a long the way, I have done my utmost to complete the study in the best and most reliable way possible. I would argue, however, that the chosen methodological approach with mixed FGDs not only caused some limitations, but also gave some additional important insights about gender roles in the Sri Lankan society and the local communities that I studied, that have benefited the study.

#### 7.6 Transferability

As mentioned in the introduction to this thesis, to my knowledge no study has yet been conducted using both an integral and an intersectional approach when researching gender and climate change, nor has such an approach been used when looking at the coherence between multiple levels in the field. Therefore, the findings of this thesis can fill a gap within the existing research literature, and point at new directions for-, as well as underlining the need for further research using both an intersectional and an integral approach to understand the complexity of gendered impacts of climate change.

#### 8. Conclusion

This study set out to address the complexity of a gendered perspective on climate change, through exploring local farmers' experiences of floods in Sri Lanka in relation to gender, and discuss the coherence between the local experiences and the national and international discourses of climate change and gender. The study has undertaken a multilevel analysis of the field, and used intersectionality and integral theory to guide the study.

According to the key findings the study suggests the international and national discourses to be mostly concerned with the policy-related aspects, such as a generalised notion of 'women as being the most vulnerable', the promotion of increased participation of women in decision-making and of Gender Mainstreaming. The national Sri Lankan discourse echoes the international discourse and the notion of 'women being the most vulnerable'. Thus, the study suggests that the international – and national discourses of reinforcing and echoing an overgeneralized notion of 'women being the most vulnerable' and leaving men out of the gendered agenda of climate change. Despite the national discourses overall echo of the international discourse the study also shows an existing divergence within the national discourse between the GoSL and the NGOs, especially when it comes to the gendered context in Sri Lanka according to political participation of women and education. When it comes to the local farmers' experiences with impacts of floods, the study found that local farmers' concerns are mainly poverty related rather than related to gendered vulnerabilities. Nevertheless, the study has shown gendered impacts or vulnerabilities towards floods through knowledge of gendered norms in terms of roles and responsibilities in the Sri Lankan farmers' communities. Women's vulnerabilities are related to their roles and responsibilities as 'being in charge of the household and children'. The study found that women face difficulties and obstacles during flood events that make their gendered responsibilities more challenging. Examples are household responsibilities like cooking, cleaning, sanitation, fetch clean drinking water etc. In addition the study shows that lack of access to resources puts women in a more vulnerable situation than men in terms of survival, due to their more common lack of swimming abilities among women.

In contrast to the virtually non-existent focus on men's impacts of climate change at the national- and international political discourses, this study shows that men also face gendered vulnerabilities due to the impacts of floods. Men's vulnerabilities revealed in the study are first of all related to socially and culturally embedded expectations of their gendered role and responsibility of men as the "breadwinner" of the household. More specifically

findings from the study show how the financial burden of flood events even has led to male farmers committing suicide.

When it comes to the coherence between the local perspectives and the national- and international discourse the Integral Four-Quadrant model has been used to look at the complex interplay between the three levels. Overall, the study has identified incoherence and a gap/distance between the international- and national political discourses on the one hand, and between the local perspectives of interlinking gender and climate change on the other. At the same time the study suggests the NGOs at national level of being a mediator between the discourses, due to their alignments in both directions. The NGOs roles as mediator between the local and national discourse possibly contributes towards reducing the gap between the GoSL/international discourse and the local perspectives.

When it comes to the suggested incoherence between the national and international political discourses, the study suggests a continued generalization of "women being the most vulnerable" and argue for leaving men out of the gendered agenda of climate change. This may indicate that the national and international discourses could be a "hegemonic discourse", which does not sufficiently take into account nuances and context-specific variations at local level. This, however, needs to be further analysed in further studies. This study therefore sees a need for more qualitative contextualized empirical data that could examine whether, and how, the general notion of women as the most vulnerable is reflected in various local contexts. The study furthermore argues that one should look beyond a binary approach to gender and look into gendered vulnerabilities related to climate change in an intersectional manner and calls for more studies that explore the gendered vulnerabilities of men. See Appendix 12 for recommendations for further studies.

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# **Appendices**

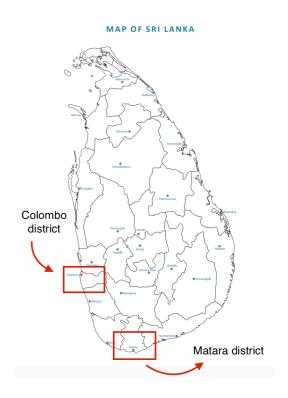
# Appendix 1: Map of Sri Lanka and three farmers communities

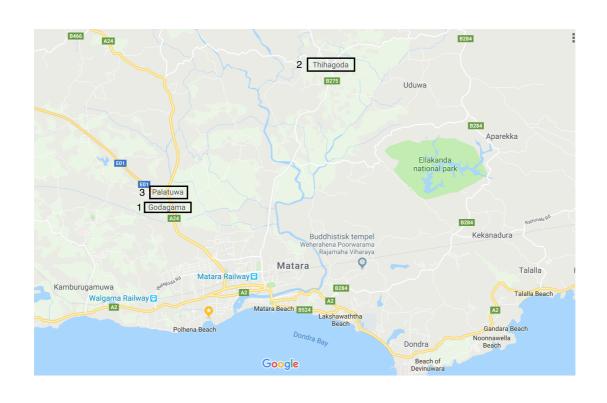
# 1) Map of Sri Lanka - Colombo and the Matara district

The mainpart of the study was conducted in the Matara district located in the south region of Sri Lanka, and the NGOs interviews were conducted in the capital Colombo on the west-coast of Sri Lanka.

# 2) Map of the location of the three farmers' communities in the Matara district

The three farmers' communities were located in the rural areas within the Matara district. All communities 1) Godagama, 2) Thihagoda and 3) Palatuwa were affected by the devastating flood event in May 2017.





# Appendix 2 Interview guide FGDs in the local farmers' communities

- 1. What are the different gender roles and responsibilities in the household or community?
  - a. What are men's roles and responsibilities in the household and the community?
  - b. What are women's roles and responsibilities in the household and the community?
- 2. When did you last experience a flood event? Can you tell me about it?
  - a. How did it affect your family and household?
  - b. How did it affect you as individuals?
  - c. How did it affect the community?
  - d. Did you get any help?
  - e. How long did it take to recover form the floods for both the paddy fields and for the damages?
  - f. Is everything back to normal now?
  - g. How did the flood impact you economically?
- 3. How do your gender roles and responsibilities impact you in terms of vulnerabilities when flood events occur?
  - a. When flood events occur, what are your concerns?
  - b. What kind of difficulties or challenges do you face?
  - c. Do you think men and women have different vulnerabilities?
- 4. How do the community respond when flood events happen?
- 5. How do the national NGOs help when floods happen?
  - a. Do you receive anything from the national NGOs?
- 6. How do the Government respond?
  - a. Do you get any economical support form the Government after the floods for damages?
- 7. Is there anything else you would like to share, add or experiences you would like to share with me?

# **Appendix 3: Interview guide GJL and national NGO representatives**

- 1. Can you tell me about yourself, your organisation and your work?
- 2. I want to know more about the gendered context in Sri Lanka. Can you tell me about it?
- 3. What are the gendered roles and responsibilities in the rural areas of Sri Lanka? Within the household, labour force and community. Especially within the agricultural sector?
  - a. What are women's roles and responsibilities and what are men's roles and responsibilities?
- 4. Are there any differences between the cities and the rural areas in terms of the gender equality situation?
- 5. How do the different ethnicities and religion affect the gender situation?
- 6. How is the situation among women and among men? Is there prevalent hierarchy between women in Sri Lanka?
- 7. How does the Government work towards gender equality?
- 8. What do you think is the linkage between gender equality and climate change?
- 9. Have you or the organisation any experience with or worked with interlinking gender and climate change?
  - a. Do you have any programs or work towards gender equality and/or climate change?
  - b. Do you know any national NGOs in Sri Lanka working with interlinking gender and climate change impacts at grassroot level or at policy level?
- 10. In the study I focus on floods what do you think are the gendered vulnerabilities of especially farmers within the agricultural sector towards floods?
  - a. In terms of gender and floods what are women vulnerable of?
  - b. In terms of gender and floods what are men vulnerable of?
- 11. Do you have anything else you would like to share?

# **Appendix 4: Inclusion criteria for farmers participants**

The inclusion criteria for the farmers participants were pre-formulated as followed;

- Equal number of men and women; 4 women and 4 men
- Age of participants should be above 18
- The participants should be from the same local community and from the agricultural sector.
- If possible, I would prefer the participants of men and women to be "husband" and "wife" or at least from the same households.
- The participants should have recently experienced an event of flooding impacting their livelihood.

All 'active' participants were above 18 years, there were children in the interview setting but just viewing the conversation or sitting with their parents or grandparents. All participants within each farmers community were from the same local community, and worked within the agricultural sector, namely with paddy fields or vegetable farming. So I have to acknowledge that it could be some small variation in culture or other social circumstances affected by for instance religion between the different farmers communities. Participants were also within the same household or several households (neighbours), so there were mostly generational representation or family representation like both husband and wife, grandmother/grandfather, daughter/son or uncle/aunt in the conversation. All three farmers' communities had recently experienced a flood event in May 2017. The only criterion I had to exclude or change in the study was the criterion of including an equal number of women and men, that was due to changes in data collection method with the farmers' communities from photovoice method with individual interviews to FGDs.

# **Appendix 5 Document Analysis - brief overview**

| Level                                  | Type of document   | Title  | Author/Publisher   | Year | Content  |
|--|--------------------|--|--|------|--|
| Research<br>institute<br>(2 documents) | Research<br>report | Gender and Climate Change –<br>Overview report                                     | Emmeline<br>Skinner in<br>BRIDGE by IDS,<br>UK.  | 2011 | The Report highlights the need to put people at the centre of climate change, and include a gendered perspective on climate change. Women and men experience climate changes differently, depending on intersectional factors like socioeconomic status, rights, cultural norms etc. Women and girls especially vulnerable towards climate changes, bu men are also negatively affected by climate changes. Need of including gender into climate policies, and need c including women into the decision-making processes. Climate changes hav the potential to challenge existing gender norms and imbalances and play transformative role towards gender equality.   |
|  | Research<br>report | Gender and Environmental<br>Change in the Developing<br>World                      | Sarah Bradshaw<br>and Brian<br>Linneker,<br>International<br>Institute for<br>Environment and<br>Development | 2014 | Review of the literature and evidence within the field of gender, climate change and disasters. Growing literatur and research on the field. Within the international policy agenda there is still a need of gender mainstreaming into several international policy agendas on climate change. In the policy literature the women are assumed the most vulnerable and not based on actual contextual evidence. Within the growin body of knowledge within the topic of interlinking gender and climate change there are still some gaps. There is a lack of sex-disaggregated data, and there's a need of studies at micro level that show how women and men experience environmental change differently.                              |
| NGO<br>(1 document)                    | Report             | Gender into Climate policy –<br>toolkit for climate experts and<br>decision-makers | GenderCC –<br>women for<br>climate justice   | 2009 | Highlights the important to integrate gender into the climate change negotiations, because men and women contribute differently to the causes of climate change, are differently affected by the climate changes and react differently to its impacts. Gender roles and responsibilities and access to recourses and political influence, influences vulnerabilities. There is a lac of gender-disaggregated data and recognition of the gender aspects of climate change within the literature/reports. At the same time a view of women as victims are overrepresented in the literature, which keeps woman trapped. Need of addressing the gender dimension of climate changes and see the opportunit of women as agents of change. |

|  | Policy brief | Women as agents of change:<br>Towards a climate and gender<br>Justice Approach  | The Government<br>of Ireland                 | 2018 | Policy brief that highlights the linkages between gender equality and climate change to raise awareness of the urgency of addressing gender in efforts to address climate change. Women as important agents of changes in achieving the SDGs, including solutions for climate action. Need of women representation and participation at climate-related decision-making forum.  |
|--|--------------|---|--|------|---|
| Global<br>governance<br>organisations<br>(6 documents) | Report       | Gender and Climate Change:<br>Impact and Adaptation   | UNDP   | 2009 | Climate change is a critical global issue with the potential to reverse already achieved developing goals, and to cause further devastation to the already most vulnerable in developing countries.  Women are being disproportionally affected by climate changes, due to the gendered responsibilities and rights.  Governments and stakeholders should include a gendered perspective, and analyse and identify gender-specific impacts and solutions into their policies and programs. It's needed to include a gender-sensitive approach to find good solutions to reduce vulnerability towards floods, both towards mitigation and adaptation strategies. Women can play an important role both towards mitigation and adaptation strategies. Sr Lanka is an especially vulnerable countr towards climate change related events such as droughts, landslides, floods and extreme weather. Sri Lanka focuses more on adaptation than mitigation, an have programs within energy project that have incorporated gendered aspects. In Sri Lanka the representation of women in decision-making processes is a challenge. |
|  | Report       | Gender and Climate Change: 3 things you should know   | World Bank                                   | 2011 | Gender equality is intrinsically importar to development, and it matters for effective climate action. Three key implications for how gender equality matters for climate change; 1) Women are disproportionally vulnerable to the effects of climate change but are also important agents of change, 2) Empowerment of women is important i terms of building climate resilience, 3) Including a gendered approach can be a key towards low-carbon-emissions.  |
|  | Report       | Review of the Implementation<br>of the area K of the Beijing<br>Platform for Action: Woman<br>and the Environment, Gender<br>and Climate Change | European<br>Institute for<br>Gender Equality | 2012 | The first EU report on gender equality and climate change that reviews the progress made by the EU's member states in the implementation of the are K in the Beijing Declaration and Plan for Action for Equality, namely Women and Environment. The report highlight a   |

|   |              |  |  |      | prevalent lack of women's participation in decision making processes related to climate change in the EU, and highlight the importance of increasing women's participation. The report acknowledge climate change as one of the key development challenges the world is facing, and that climate change impacts women and men differently due to gender differentiated roles and responsibilities, as well as socioeconomic status, access to recourses etc. The report also acknowledge that women are likely to be more disadvantages than men |
|---|--------------|--|--|------|--|
| Multilateral cooperation between Global governance organisations, NGOs or governments (5 documents) | Policy brief | Gender and Climate Change Asia and the Pacific: Overview of linkages between gender and climate change | GGCA and UNDP  | 2013 | Poverty and Climate Changes are closel related. Climate Changes effects the poorest the most, and the degree of climate impacts are depending on intersectional inequalities and aspects such as poverty situation, social status, gender, access to resources etc. Climate change is not gender neutral, and women tend to be particular vulnerable At the same time women are important resources for climate action, and could be important agents of Changes.  |
|   | Policy brief | Gender and Climate Change Asia and the Pacific: Overview of linkages between gender and climate change | UNDP and GGCA  | 2016 | Climate change as the greatest threat to sustainable development. Climate change is not gender-neutral. Climate change impact women and men differently due to their gender-differentiated roles, responsibilities and power. Poverty, socio-economic and political marginalization put women in a disadvantage position in coping with the impacts of climate change. Women as keys to climate mitigation and adaptation strategies.  |
|   | Report       | United Nations Sustainable<br>Development Framework<br>2018-2022 Sri Lanka                             | UN Sri Lanka and<br>the Government<br>of Sri Lanka           | 2017 | Report of the UNs Sustainable Development Framework for Sri Lanka within the period of 2018-2022. One of the focuses is on cross cutting issues lik gender equality (SDG 5). The report declare climate change as one of the main development issues Sri Lanka is very vulnerable towards, and that affects their populations poverty situation. The report highlights a focus of increased women's participation and the use of gender mainstreaming as a strategy towards gender equality.   |
|   | Report       | Sri Lanka Rapid Post Disaster<br>Needs Assessment: Floods and<br>Landslides                            | Ministry of Disaster Management, Ministry of National Policy | 2017 | Post disaster Needs assessment after the devastating flood and landslides in Sri Lanka May 2017, due to the southwest monsoon. Gender identified and acknowledged as a crosscutting issue that needs to be considered in the   |

|              |  | and Economic,<br>UN, WB and EU. |      | recovering strategies. The report affirm gender-disaggregated data crucial for revealing the needs of the affected in the best way, and the report shows concern for the lack of existing gender disaggregated at the moment. According to the report the women are the most vulnerable due to the negative implications the damages had for women's responsibilities and daily activities, such as the kitchen.  |
|--------------|--|---------------------------------|------|---|
| Policy brief | Woman and Gender Constituency Key Demands for UNFCCC at COP24                              | WGC under UN                    | 2018 | Seven key demands for UNFCCC outcomes. Ensure that climate solution are gender just and taking into account intersectional considerations.  |
| Handbook     | Frequently Asked Questions:<br>Gender equality and Climate<br>Change                       | UN Woman, Gef,<br>UNDP          | 2018 | Every country is affected by climate change, and it affects economies and people's lives. Women face higher risks and burdens from climate change impacts. Women are underrepresented within decision-making processes withic limate change planning, policymaking and implementation. Gender equality necessary towards solving climate change. Need of Gender mainstreaming into the climate policy agenda, and gender balance in decision-making.  |
| Report       | Gender and environment statistics: Unlocking information for action and measuring the SDGs | UNEP and IUCN                   | 2018 | On of the latest reports found on interlinking gender and climate change. The report provide a framework to measure the nexus between gender and climate change, and presents recent statistics on the field and recommender gender-environment indicators. Throughout the report it refers to the Sustainable Development Goals, and how gender and climate change are two interlinked goals that affects each other and needs to be considered in relation. The report highlights that climate change are not gender neutral and the differentiated impacts needs to be considered through an intersectional approach. Increased women's participation is one aspect highlighted. The report also calls for the need of minding a gap of the lack of existent gender-disaggregated data no the field, and highlight the need for national statistics systems. |

# Appendix 6: Thematic Network Analysis table: Local farmers' perspective

| Codes  | Basic themes                                | <b>Global Themes</b>                            |  |  |
|--|---|---|--|--|
| Women and men help each other out "There are no such as gender inequality" "No gender roles during floods"     | "No gender roles"                           |   |  |  |
| Joint work with the re-building and cultivation of paddy fields  | TVO gender roles                            |   |  |  |
| In charge of household; cleaning, food, children Selling vegetables at the market Go to the market and to town | Women's responsibilities                    | Gender roles and responsibilities within        |  |  |
| Help husband with cultivation of the paddy fields  | women's responsionness                      | household and paddy<br>fields/vegetable gardens |  |  |
| Breadwinner role towards household and family  |   |   |  |  |
| Go to work in the capital, Colombo In charge of the hard work at the paddy fields                              | Men's responsibilities                      |   |  |  |
| Paddy fields and vegetables ruined   |   |   |  |  |
| Loss of economical capital; House, personal belongings, Animals die  |   |   |  |  |
| Not possible to travel to the market or to town.   |   |   |  |  |
| "No money to spend at the marked"  | Economically impacts and                    |   |  |  |
| Increased loans and debt   | challenges                                  |   |  |  |
| "Loans leads to problems at home" Hardly any money for buying food at the                                      |   |   |  |  |
| market and to pay debt   |   |   |  |  |
| Diseases after floods; Rat-fever, influenza  |   |   |  |  |
| Suicide  |   |   |  |  |
| "We suffer a lot"  |   |   |  |  |
| "Hard to get through the situation"  | Health impacts and                          |   |  |  |
| "Feel so scared" Isolated at their homes   | challenges                                  | Impacts of floods                               |  |  |
| Lack of access to food, clean drinking water   |   | impacts of floods                               |  |  |
| and medical health services  |   |   |  |  |
| Isolated at their homes  |   |   |  |  |
| Issues with transportation because of the water  |   |   |  |  |
| Children could not go to school Lack of access to boats  | In fine at market and a health and a second |   |  |  |
| "The electricity was gone for weeks"   | Infrastructural challenges                  |   |  |  |
| Lack of access to light  |   |   |  |  |
| Lack of economical support   |   |   |  |  |
| Not enough supplies of food, water and seeds   |   |   |  |  |
| "We got nothing from the government"   |   |   |  |  |
| Unintended challenges and impacts of flood   | Structural impacts and                      |   |  |  |
| relief because of governmental infrastructural projects like bridges, roads                                    | challenges                                  |   |  |  |
| Salty soil affects paddy fields ability to absorb  |   |   |  |  |
| water when rain comes  |   |   |  |  |
| The local religious communities help out by  |   |   |  |  |
| supplying food, water, clothes   |   |   |  |  |
| Neighbour communities bring supplies like  |   |   |  |  |
| food and water by boat  People are working together and helping each   |   |   |  |  |
| other to repair the houses.  | Community responses to                      | Responses to floods                             |  |  |
| Sharing supplies.  | flood events                                |   |  |  |
| Joint work with re-building houses and fixing  |   |   |  |  |
| paddy fields.  |   |   |  |  |
| Long experience of floods "We have experienced flood events from the   |   |   |  |  |
| "We have experienced flood events from the childhood and know what would happened after                        |   |   |  |  |
| a flood"   |   |   |  |  |

| Supplies water bottles, food and clothes Aid and fertilizers Rations distributed from organisations are balancing their income "We got a food packet with a bottle of water one time each day"                         | NGOs responses to flood events         |  |
|--|--|--|
| Army helps with bringing food and water, and bring sick people to the doctor Giving governmental support or loans after floods "Some people are being favoured by the government" "We got nothing from the government" | Governmental responses to flood events |  |

# **Appendix 7: Thematic Network Analysis table: National discourse**

| Codes  | Basic themes  | Organizing themes   |  |
|--|---|---|--|
| Stereotypical gender roles and responsibilities Patriarchal and hierarchical culture Men as breadwinners Masculine social expectations Hardworking men are working as farmers or fishermen or within the service sector as taxi drivers Women in charge of household and children Women obtain a key role and are key contributors to Sri Lankan economy and development | Gender roles and responsibilities                                       |   |  |
| Women and men equal by law Governmental commitment to ensure rights of women and gender equality. Women and men equal rights by law to education Equal access to health services for women and men Increasing women participation in politics by 25% quotation in local politics   | Opportunities for gender equality                                       | Gender equality and<br>gender norms in Sri<br>Lanka       |  |
| Existing gender gap Patriarchal culture "Women get restricted" Women drop out of education Lack of women representation in politics Lack of implementation skills by government Lack of land rights for women Alcoholism, drugs and gender-based violence Increased climate change can affect gender equality  | Barriers for gender<br>equality   |   |  |
| Women most vulnerable to climate change Intersectional causes to women's vulnerabilities Women face socio-economic, institutional, cultural and political gender gaps and vulnerabilities and climate change can negatively affect this. Climate change affects women's livelihood Lack of swimming abilities among women and children Lack of land rights for women     | Women<br>disproportionately<br>affected by climate<br>change            |   |  |
| Necessary to include women into political processes and policymaking.  Women are important agents of change Including women will benefit Climate Action Women are often leaders in developing coping strategies and building resilience. Need of gender inclusive and sensitive politics  Mainstreaming gender into national plans and policies to ensure a              | Men's vulnerabilities towards climate change  Women as agents of change | Interlinking gender<br>and climate change in<br>Sri Lanka |  |
| gender sensitive approach.  Initiatives done to all national adaptation planning processes.  | Gender Mainstreaming  |   |  |

# **Appendix 8: Thematic Network Analysis table: International discourse**

| Codes   | Basic themes   | Organizing theme                       |
|---|--|--|
| Intersectional causes to women's vulnerability Women face socio-economic, political, economical and legal barriers Climate change can increase women's' vulnerability                 | Women most vulnerable to climate changes   |  |
| Women need to be included in environmental decision-making processes and forums Women as agents of change Need of women's skills, knowledge and experience for good climate solutions | Lack of representation and participation of women in policy- and decision-making | Interlinking gender and climate change |
| Strategy for promoting gender equality into policies<br>Gender Mainstreaming needed in all environmental<br>policies and programs   | Gender Mainstreaming   |  |
| Gap in gender disaggregated data<br>Limited collection, dissemination and assessment  | Lack of gender disaggregated data  |  |

#### Appendix 9: Research Approval by NSD



Marguerite Daniel Christiesqt. 13 5015 BERGEN

Vår dato: 06.07.2018 Deres dato: Vår ref: 61260 / 3 / MSS Deres ref:

### Vurdering fra NSD Personvernombudet for forskning § 31

Personvernombudet for forskning viser til meldeskjema mottatt 22.06.2018 for prosjektet:

61260 A Qualitative Study of the Gendered Perspectives of Climate - Changes in Sri

Lanka: Explore men and women's experiences and vulnerabilities to flooding

in the agricultural sector within the Matara district, Sri Lanka

Behandlingsansvarlig Universitetet i Bergen, ved institusjonens øverste leder

Marguerite Daniel Daglig ansvarlig Student Mathilde Orlien

#### Vurdering

Etter gjennomgang av opplysningene i meldeskjemaet og øvrig dokumentasjon finner vi at prosjektet er meldepliktig og at personopplysningene som blir samlet inn i dette prosjektet er regulert av personopplysningsloven § 31. På den neste siden er vår vurdering av prosjektopplegget slik det er meldt til oss. Du kan nå gå i gang med å behandle personopplysninger.

### Vilkår for vår anbefaling

Vår anbefaling forutsetter at du gjennomfører prosjektet i tråd med:

- · opplysningene gitt i meldeskjemaet og øvrig dokumentasjon
- · vår prosjektvurdering, se side 2
- · eventuell korrespondanse med oss

Vi forutsetter at du ikke innhenter sensitive personopplysninger.

#### Meld fra hvis du gjør vesentlige endringer i prosjektet

Dersom prosjektet endrer seg, kan det være nødvendig å sende inn endringsmelding. På våre nettsider finner du svar på hvilke endringer du må melde, samt endringsskjema.

### Opplysninger om prosjektet blir lagt ut på våre nettsider og i Meldingsarkivet

Vi har lagt ut opplysninger om prosjektet på nettsidene våre. Alle våre institusjoner har også tilgang til egne prosjekter i Meldingsarkivet.

## Vi tar kontakt om status for behandling av personopplysninger ved prosjektslutt

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Ved prosjektslutt 31.05.2019 vil vi ta kontakt for å avklare status for behandlingen av personopplysninger.

Se våre nettsider eller ta kontakt dersom du har spørsmål. Vi ønsker lykke til med prosjektet!

Marianne Høgetveit Myhren

Marie Strand Schildmann

Kontaktperson: Marie Strand Schildmann tlf: 55 58 31 52 / marie.schildmann@nsd.no

Vedlegg: Prosjektvurdering

Kopi: Mathilde Orlien, mathilde.orlien@gmail.com

# Personvernombudet for forskning



#### Prosjektvurdering - Kommentar

Prosjektnr: 61260

According to your notification form the sample will receive written information and will give their consent to participate. The information letter we have received is well formulated.

In accordance with the General Data Protection Regulation (GDPR) that will be implemented this summer/autumn, the sample should also receive information about the following rights:

As long as you can be identified in the data material, you are entitled to:

- an overview of what personal data is registered about you,
- to get personal information about you,
- to delete personal information about you,
- to get a copy of your personal information (data portability), and
- to send a complaint to your privacy representative or data protection authority regarding the processing of your personal information.

We ask that you send a revised information letter and consent form to personvernombudet@nsd.no When the information letter has been revised in accordance with our comments (and sent to us), you can then get started with the project.

The Data Protection Official presupposes that you will process all data according to the Universitetet i Bergen internal guidelines/routines for information security. We presuppose that the use of a personal computer/mobile storage device is in accordance with these guidelines.

According to your notification form you intend to use of an (external) translator if an interview can not be conducted in english. The translator will be considered a data processor for the project because the translator gets access to personal information. If a data processor agreement does not already exist between Universitetet i Bergen and the data processor, then a written agreement about how personal data will be processed must be entered into. For advice on what the data processor agreement should contain, please see: https://www.datatilsynet.no/regelverk-og-skjema/veiledere/databehandleravtale/

The estimated end date of the project is 31.05.2019. According to the information letter you intend to anonymise the collected data by this date.

Making the data anonymous entails processing it in such a way that no individuals can be identified. This is done by:

- deleting all direct personal data (such as names/lists of reference numbers)
- deleting/rewriting indirectly identifiable personal data (i.e. an identifying combination of background variables, such as residence/work place, age and gender)
- deleting digital audio
- deleting video files

#### Appendix 10: Approval of changes in method by NSD

#### 1. Confirmation of approved revised informed consent letter

On 04 Feb 2019, at 14:32, Marie Strand Schildmann < Marie.Schildmann@nsd.no > wrote:

Hi.

I can confirm that we have received the revised letter of information, and that it is according to our comments.

Your sincerely,

Marie Strand Schildmann Seniorrådgiver | Senior Adviser Seksjon for personverntjenester | Data Protection Services T: (+47) 55 58 31 52

NSD – Norsk senter for forskningsdata AS | NSD – Norwegian Centre for Research Data
Harald Hårfagres gate 29, NO-5007 Bergen
T: (+47) 55 58 21 17

postmottak@nsd.no www.nsd.no

#### 2. Informing NSD about changes in method during fieldwork

Fra: Mathilde Orlien [mailto:mathilde.orlien@gmail.com]

**Sendt:** 4. februar 2019 14:39 **Til:** Marie Strand Schildmann

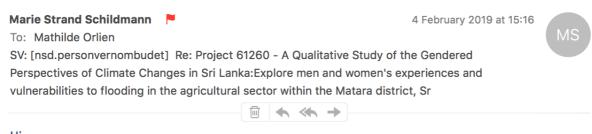
**Emne:** Re: [nsd.personvernombudet] Re: Project 61260 - A Qualitative Study of the Gendered Perspectives of Climate Changes in Sri Lanka: Explore men and women's experiences and vulnerabilities to flooding in the agricultural sector within the Matara district, Sr

Thank you, thats great!

I also wanted to inform you that because of time limitations and the circumstances when I was in Sri Lanka, I had to follow through in-depth interview instead of photo voice. Is it possible to get a new confirmation letter from you that is changed from photo voice to in-depth interviews? Or do I have to apply again? The only change in the study is that I have done in-depth interviews instead of photo voice.

Best Regard Mathilde Orlien Master's student at Global Development in Theory and Practice, UiB +47 48 25 35 60

#### 3. Confirmation e-mail from NSD of approval of changes in research method



Hi,

As long as you have collected the same information, and the only change is face-to face interview instead of photo-voice, you don't need to submit any change request.

#### Mvh

Marie Strand Schildmann Seniorrådgiver | Senior Adviser Seksjon for personverntjenester | Data Protection Services T: (+47) 55 58 31 52

NSD – Norsk senter for forskningsdata AS | NSD – Norwegian Centre for Research Data Harald Hårfagres gate 29, NO-5007 Bergen T: (+47) 55 58 21 17 postmottak@nsd.no www.nsd.no

#### Appendix 11: Consent and Information Letter for Research Project

#### 1. Background and purpose of the study

The study you have been asked to participate in is a part of a data collection for a final master's thesis through the master program Global Development in Theory and Practice at the University of Bergen. The purpose of the study is to explore if there are gendered impacts of climate changes and whether men and women experience the climate changes differently concerning their daily lives and responsibilities.

#### 2. Participation in the study - what does it imply?

Your participation in the study will consist of attending an 1) introductory workshop, doing a 2) Photovoice assignment and followed by a 3) conversation with the researcher about your stories behind the pictures.

- 1) **The workshop** will be held to inform you about the study, the photovoice assignment, ethical considerations when taking a photo and giving camera training.
- 2) **The Photovoice assignment** will be given during the introductory workshop. The assignment will be to take pictures of your daily life and responsibilities, and show how floods affect this. You'll have two days to complete the assignment, and you'll be lent a camera to use. Information and training of how to possible solve the assignment will be given.
- 3) **The individual conversation** will be conducted after you have finished the photovoice assignment. The pictures will guide the conversation and be used to understand your experience of the impacts floods have on your daily life and responsibilities. I will take notes during the conversation and ask of permission of audio-record the conversation so I can listen to the conversation later for analysis.

Participating in the study is voluntarily and you have the right to discontinue at any time of the study. I will underline that there will be no risks associated with participating in the study.

3. Confidentiality

By participating in the study I assure you that all personal information will be treated

confidentially and totally anonymously. This means that your personal identity will not be

identifiable in the final thesis. I will ensure this confidentiality and anonymity through the use of

pseudonyms in the thesis. However, I will also ensure that the audio recordings and transcripts of

the conversation about the photos will be deleted after the thesis is handed in, in May 2019. I also

ensure you that as long as you can be identified in the data material, you (as a participant in the

study) are entitled to:

• Get an overview of the personal data registered about you

• Get the personal information about you

• Be ensured that all personal information about you are being deleted

• Have the right to get a copy of your personal information (data portability)

• Have the right to send a complaint to your privacy representative or data protection

authority regarding the processing of your personal information.

If you have any questions or concerns, please contact the researcher or her supervisor at the

Faculty of Psychology, University of Bergen (Christies gate 13, 5015 Bergen).

**Researcher:** Mathilde Orlien (Mathilde.orlien@student.uib.no)

**Supervisor:** Marguerite Daniel (marguerite.daniel@uib.no)

4. Signature

By signing below I acknowledge that I have read and understood the above information. I'm

aware that I can discontinue my participation in the study at any time. I also allow the researcher

to use the photos towards work concerning the thesis.

| Signature |  |  |  |
|-----------|--|--|--|
|           |  |  |  |

Date\_\_\_\_/\_\_\_\_

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#### **Appendix 12 Recommendations**

Against the background of the findings of this thesis, the following main recommendations are put forward:

- 1. Increase gender disaggregated- and contextualized data to avoid overgeneralized statements
- 2. Include men as well as women into research on the nexus of gender and climate change
- 3. Make use of an intersectional approach to look at gendered vulnerabilities within climate change research

In addition to the mentioned recommendations the study raises some issues that could be interesting to research- and consider for further studies;

- For further studies in relation to gendered impacts and vulnerabilities of men and
  women towards climate change, it would be interesting to go beyond impacts due to
  gendered roles and responsibilities and research further other intersectional aspects
  such as existing laws and policies such as land rights, or the impact of religion,
  differences between ethnic groups, etc.
- It would be interesting to look further into social expectations of masculinity and femininity in relation to vulnerabilities, and in particular to address the physical and health related burden of economic impacts of floods that lead to some male farmers committing suicide.
- Look further into the suggested role of NGOs as a mediator between the national- and international discourses, and the local level perspectives.
- Most research within the field has been conducted in a developing country context. It
  would be interesting, and there is a need of research looking at the gendered
  vulnerabilities of climate change in a developed country context.