

# Vulnerable or Capable?

*Adolescent girls and vulnerability to climate risks. A case study from El Salvador*

Marit Flood Aakvaag



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## **Abstract**

The recent attention from NGOs and other organizations towards young people underscores a need to improve our understanding of the vulnerability and capacities of the adolescent population in places around the world. Adolescent girls are of particular interest when it comes to vulnerability research, as they can analytically be included in the categories of both children and women. Given two different perspectives on children and women's vulnerability, viewing them as inherently vulnerable and as potential agents of change, this qualitative study examines the situation and experiences of adolescent girls' relation to climate risks in two communities in rural El Salvador. This thesis it explores the question of how to conceive adolescent girls' vulnerability to climate risks, and suggests that a useful approach is to understand them as both vulnerable and capable, within the social context in which they live.



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## **1 Introduction**

Today half of the global population is under the age of 30, and many of today's youth will be alive at the end of this century (Euromonitor International 2012). Of this demographic group, 90 percent will be living in developing and emerging economies by 2020 (Euromonitor International 2012). Although their fate is "inextricably intertwined with that of the planet," youth have received relatively little attention in relation to climate change (UN 2009:34). While the older and richer parts of the global population have contributed to and benefitted the most from greenhouse gas emissions, the young generations in developing countries find themselves with little responsibility for climate change and few benefits from the emissions. Yet, the impacts will fall disproportionately on them. On their way to becoming adults, youth will have to cope with a variety of external pressures and an insecure future as climate change will have unprecedented effects on people, ecosystems and cultures around the world. They will live greater proportions of their lives with climate change impacts that are likely to become increasingly intense over time (IPCC 2007b). Climate change has the potential to increase the number of people living in extreme poverty by 3 billion and further worsen the situation of people already severely deprived (UNDP 2013). Climate change has thus been termed an ethical failure (Gardiner 2011).

The vulnerability of youth was largely absent in earlier debates about climate and development, and UNICEF's director Anthony Lake, noticed that "in the global effort to save [young] children's lives, we hear too little about adolescence" (UNICEF 2011b). Lately, however, more attention has been placed on this specific demographic group (Plan International 2011, UNICEF 2011b, UN 2009). This recent attention from NGOs and other organizations towards young people underscores a need to improve our understanding of the vulnerability and capacities of the adolescent population in places around the world.

Adolescent girls are of particular interest when it comes to vulnerability research, as they can analytically be included in the categories of both children and women. Both of these groups have traditionally been understood to be essentially vulnerable, and the discussion of their particular vulnerability continues in the climate change debate (Lawler and Patel 2012, Kakota et al. 2011, Terry 2009a, Bartlett 2008, IPCC 2007a, Dankelman 2002). This perspective highlights the higher probability of women and girls to die in natural disasters, as well as in post-disaster circumstances (Neumayer and Plümper 2007). Further contributing to their greater vulnerability are women and children's unfavorable social positions, lack of

influence in decision making, discrimination, and a gendered division of labor (IPCC 2012, Kakota et al. 2011).

However, contrasting this understanding is an emergent perspective that sees these groups as possessing capacities to take control of their own lives and be active agents of change in their lives and communities (Tanner 2010b, Back, Cameron and Tanner 2009, Mitchell, Tanner and Haynes 2009). This perspective focuses on children's capability to take on adaptive, preventive and reconstructive measures in community-based adaptation and disaster work, and their agency to do so (Tanner 2010a). Women, moreover, are increasingly seen as powerful agents of social change (Wilson Center 2013). Girls can thus be understood as being essentially vulnerable or essentially capable.

Given these two perspectives of girls as vulnerable or capable, this thesis will examine the situation and experiences of adolescent girls' relation to climate risks in two communities in rural El Salvador. It will explore the overarching question of:

*How can adolescent girls' vulnerability to climate risks be understood?*

In order to respond to this research question, this study addresses the following questions:

- 1) *To what extent are girls vulnerable to climate risks?*
- 2) *What other vulnerabilities do they experience?*
- 3) *What are the possibilities and constraints of girls to act as agents of change in their communities?*

This thesis will approach these questions from the subjective perspectives of the girls in the communities, based on interviews and focus group discussions. It will also consider cultural factors such as social norms, and explore more objective aspects, including the socio-economic conditions of the communities. Using a contextual approach to vulnerability, the thesis considers the broader context in which the girls live. By including social, cultural, and political factors that contribute to vulnerability, it becomes clear that climate risks are only one of many factors that contribute to a group's or person's vulnerability. The research provides insights into different ways of understanding the vulnerability of adolescent girls to climate risks and other pressures.

## **1.1 Climate risk and adolescents**

Climate change is considered one of society's greatest challenges (Rockstrom et al. 2009). Leaks from the IPCC report coming in September 2013, suggest that the consequences of even a "moderate" warming of the globe will be larger than what scientists have thought until now (Mathismoen 2013). Climate change impacts are expected to result in unprecedented extreme weather and climate events, including changes in their frequency, intensity, extension and timing (IPCC 2012:7). These can include cyclones, drought, heat waves, and increased heavy precipitation. In Latin America, changes in precipitation patterns have already been observed over the last decades, relating to both drought and increased heavy rainfall and floods. Future impacts in Latin America are predicted to be significant, including precipitation irregularities, increased climate variability and extremes, sea-level rise and species extinction (IPCC 2007a). In this region, between 7 and 77 million people are estimated to become at risk of water scarcity, and an additional 5,26 million people will be at risk of hunger resulting from climate change (IPCC 2007a).

El Salvador is considered highly vulnerable to climate change and was one of the countries that suffered the most losses due to extreme weather in 2011 (Harmeling and Eckstein 2012, Ordaz et al. 2010). Precipitation reduction, temperature increases, extreme weather, sea level rise and severe water stresses, are expected to occur in El Salvador (Ordaz et al. 2010, IPCC 2007a). Climate change has already had negative effects on the agricultural sector in El Salvador, which makes up 23 percent of the GDP. Droughts and heavy precipitation are expected to reduce production between 2 and 8 percent of the GDP (Ordaz et al. 2010). In addition, the social aspects of the country contribute to its high vulnerability. Although El Salvador has the third largest economy in Central America, it has several severe social problems, such as gang crime and high violence rates, poverty and high inequality levels. Almost half of the rural population lives below the poverty line, and while the poorest ten percent of the population use one percent of the country's income, the richest ten percent consumes almost 40 percent (CIA 2013). The rural population, many of whom are self-sufficient farmers dependent on natural resources, is directly affected by climate change. This makes El Salvador a suitable place for investigating girls' vulnerability to climate change.

As climate is the description of the average in weather over a longer period, no single incident can be said to be climate change. Climate change is instead observed as trends and patterns, for instance increased drought prevalence over the last fifteen years. This thesis uses "climate

risks and variability” to refer to specific incidents and the weather over the past few years, although this is not climate change as such, it is closely connected to climate change

It can be difficult for local actors, as well as for scientists, to separate between global and local environmental changes, and the impacts are mostly felt locally for local people. Local environmental conditions are, in addition to socio-ecological conditions, described as mediators of global scale processes in the literature on climate change adaptation (Pelling 2011:7). The local environment will therefore also be discussed and related to climate risks.

Adolescence is an important phase in life, and much of the basis for the adult life lies in this transition from childhood to adulthood. It is a period of many changes, and is described to “begin with biology and end with culture”, where physical changes through puberty are seen to initiate adolescence, the societal expectations and events that form part of the entry to adulthood are often less clearly marked (Smetana, Campione-Barr and Metzger 2006:258). In this thesis I define adolescence in accordance with WHO, USAID and UNICEF (2011b) as the period between the age of 10 and 19. The age group of the informants in this study is in line with other studies of adolescents that include informants between the age of 12 and 17(Kilpatrick 2003). The Convention of the Rights of the Child (UNICEF 2013) defines any person below the age of 18 as a child, and so the informants can also be categorized as children.

Erikson (cited in Tetzchner 2012:683) views adolescence as an important phase in human life, since, during adolescence, great part of the identity develops as the gap between the safe child years and the autonomous existence is to be passed. Identity formation is initiated by increased societal participation and new situations make the adolescent expand her self-understanding and place in society while she explores and develops unknown sides of herself (Keagan cited in Tetzchner 2012:685). Through identity formation the individual explores and chooses between values and attitudes to find its place as an adult in society, what roles it will take and what groups it will belong to (Tetzchner 2012). From a life cycle perspective, the adolescent period is crucial, since choices made at this stage will have a great effect on the adult life. Many make choices about commitments and possibilities that they cannot see the range of (Tetzchner 2012), for example related to alcohol or sexual relations. Choices of education, family creation and work life are also made. Tavares da Silva (2012:31) notes that:



While for boys, adolescence is a time of outward movement, of expansion and adventure, in many societies it is just the opposite for girls; it is a time of inward movement, of restrictions and prohibitions, without exempting them, however, from major tasks and responsibilities like motherhood and caregiving. The roles of adolescent boys and girls are strongly determined by gender stereotypes and what for girls could be a time of growth, discovery and development, a source of joy and happiness, becomes a source of disadvantage, discrimination, violence and denial of human rights.

Gender discrimination in this phase of life can have long-term consequences (Tavares da Silva 2012). For instance, girls that have received education are less likely to marry early and become teenage mothers, and to have healthy children when they become mothers. Consequently, investment in adolescent girls is seen as one of the most effective ways to avoid intergenerational poverty (UNICEF 2011b). Although rarely articulated, this means that the vulnerability of adolescents has two dimensions; a present one and a future one. The foundation for future possibilities and vulnerability can be influenced through present choices or deprivation of choices, such as education. Although gender roles are often introduced early in life, they tend to be consolidated during adolescence (Robinson 2011).

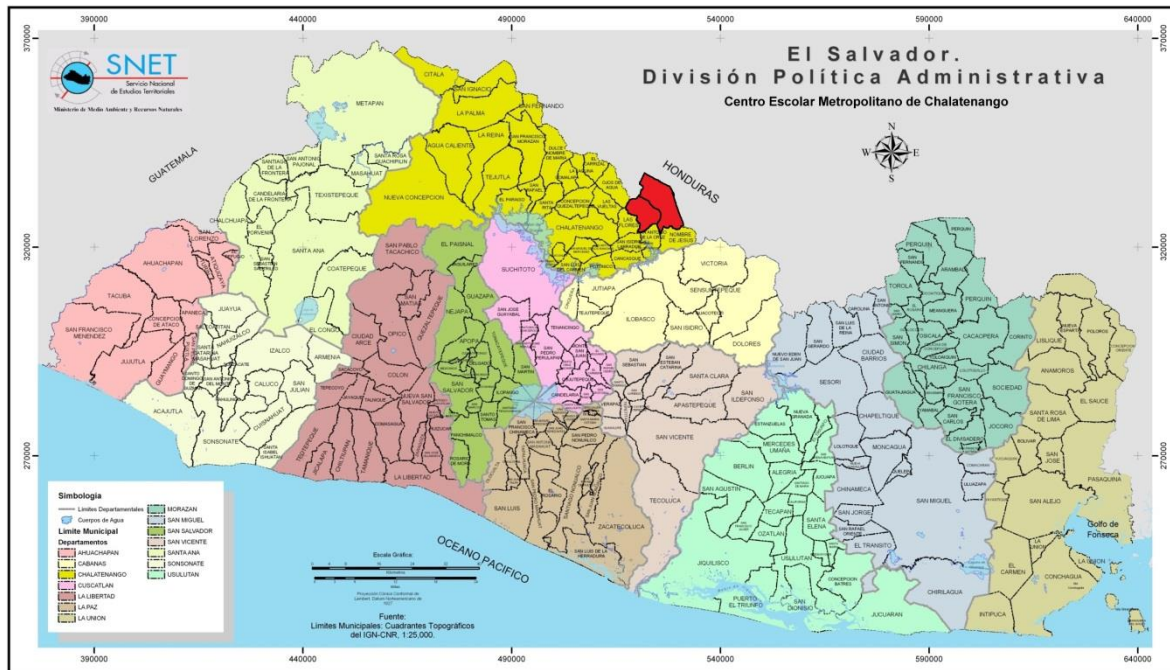
## **1.2 Outline of the thesis**

The empirical basis for this thesis results from two months of fieldwork in two rural communities in the northern part of El Salvador, where qualitative data was collected by the author. To provide the reader with an understanding of the case in question, the next chapter will discuss the context in which the case is set, providing a background for further examination. Chapter three provides insights into the two perspectives on vulnerability which provide the starting point of the theoretical debate on vulnerability. The fourth chapter presents the theoretical framework for this thesis, and discusses the concepts of vulnerability and adaptive capacity. Chapter five discusses the method and methodological questions around the production of information and the process of analysis, providing transparency of the research. Chapter six presents the first part of the analysis by investigating adolescent girls' vulnerability to climate risks, corresponding to the first of the three questions. Chapter seven responds to the second question as it looks at the social frames in which girls live. Chapter eight treats individual behavior and experiences of the girls and answers question three. Chapter nine discusses the implications of the findings for the debate on vulnerability and the broader research field. Chapter ten sums up the findings and provide a conclusion of the study.

The findings of this study can inform adaptation processes, particularly community-based adaptation, as they provide insights related to one group. I conclude that girls' vulnerability should be understood not as inherent, instead, adolescent girls can be considered both vulnerable and capable at the same time. The context in which girls experience climate risks is significant to understanding the role of climate change in the lives of girls. The findings of this study further support the importance of understanding the context in which vulnerability occurs.

## 2 Background

This chapter provides a backdrop for the case to enable the reader to better understand the circumstances and key features that places this analysis of girl's vulnerability and capabilities in an historic, geographic, social and political context.



**Image 1:** Political administrative map of El Salvador. The municipalities of Arcatao and Nueva Trinidad are marked out in red, Arcatao being the northern one, and Nueva Trinidad being south-western one. Source: SNET : <http://www.veomapas.com/mapa-de-la-division-politica-administrativa-de-el-salvador-m233.html&fullsize=1>

### 2.1 Socio-economic context

El Salvador's profound inequality, poverty and poor access to land, resulted in a twelve year civil war between the state and guerilla movement that ended in a peace accord in 1992. The old guerrilla force, FMLN, became a legal political party with the peace accord, and currently holds the presidency. The municipalities of Arcatao and Nueva Trinidad were greatly affected by the war as the FMLN guerilla had a strong foothold in this area, resulting in large bombe offensives and a massacre of the civilian population by government troops. Many civilians fled to refugee camps in Honduras or more peaceful parts of El Salvador. The Catholic Church played an important role in the civil war. 80 percent of the Salvadorians are Roman Catholics, and leaders of the church defended the poor people, questioning the inequality in the country and condemning the military violence inflicted on the peasants.

40 percent of the Salvadorians live in rural areas (UNDP 2010b). The rural household economy in the area under study is to a large degree geographically spread out. Farming provides most of the food and some income, but the monetary income of the households is often supplied by family members working in the cities or abroad. El Salvador is one of the countries with the highest proportion of remittances contributing to the GDP (Acosta et al. 2012). Rural households are especially dependent on remittances, which make up 15,4 percent of the total income in rural El Salvador, and it is estimated to consist of 42 percent of the total income of receiving households, thus providing a great economical contribution (Acosta et al. 2012). Remittances have proved to have an effect on school retention, lowering the risk of pupils leaving school, particularly in rural areas, and to increase the coping abilities in times of crisis (de Brauw 2011, Edwards and Uretab 2003). Households' dependency on remittances also make them vulnerable to global financial trends, like the 2008 economic crisis showed (Acosta et al. 2012).

## **2.2 Agriculture and Salvadorian environment**

At a national basis, agriculture is declining and losing its importance both as part of the national economy and in providing food security for subsistence farmers, according to the governmental social fund *Fondo de Inversión Social para el Desarrollo Local* (Schipper 2004). This is due to low levels of investment and access to technology, poor conditions of the natural resources, limited management capacity and politics at the macroeconomic level that bias against agriculture and the rural sector (Schipper 2004). Central America has seen a decrease in state support for agriculture while trade barriers have been removed, resulting in a transformed food sector that has become a net importer of basic grains (PRISMA 2011). This is felt by the local farmers whom are sensitive to fluctuating food prices, and often have to sell their grains at low price.

El Salvador's environmental profile is considered problematic due to deforestation, soil erosion, water pollution, contamination of soils from the disposal of toxic wastes, for instance from mining activity (CIA 2013). Only about six percent of the land cover is primary and secondary forest, and 98 percent of the vegetation is estimated to have been greatly altered due to human activity during history (Dull 2008). As the smallest and most densely populated country in Central America, with its 5,7 million people, per capita forest is no more than 0.02

hectare<sup>1</sup> a considerably low number as wood and coal are habitual energy sources for the population (Marcoux 2000). However, the deforestation rate is somewhat disputed (Hecht and Saatchi 2007).

Another environmental challenge in El Salvador is erosion, between 40 and 83 percent of the land is affected by degradation, causing severe yield decline (MARN 2007, World Bank 1998). A typical “green revolution” policy” in agriculture, aiming at increasing food production through modern technology of chemicals and improved seeds, has increased local dependency on pesticides and chemical fertilizers and this has been noted to cause resource degradation, affect biodiversity, and increase vulnerability to climate change (PRISMA 2011). It is estimated that 90 percent of the rivers in the country are contaminated with toxic pesticides, excrements and spills (Arévalo 2006). Pesticides also bring dangerous health risks, and a study from 1999 detected insecticides in half of the people participating in the study, and in thirty percent of the participants who had no direct contact with pesticides (Azaroff 1999). Although parts of civil society are fighting for a ban on several dangerous pesticides, toxic sprays are a normal part of daily life for many rural people (UNES et.al 2012).

### **2.3 The communities under study**

For this study I conducted field work in two communities, that are about 15 kilometers apart. I will refer to the communities as the “high-lying community” and the “low-lying community” in order to keep the community names anonymous, while acknowledging their physical geographical differences.

The high-lying community is located in the municipality of Arcatao (population 4500), on the mountainous border of Honduras. From this community it is an hours’ walk on a relatively steep path down to the nearest village, the village of Arcatao, from where a bus can be taken to the province capital of Chalatenango. The main means of transportation to the community are walking or by horse as no one in the community owns a car. The nearest village in Honduras is further away, and people reported that they seldom travel there, although some had family there. The high-lying community is the smaller of the two communities, consisting of about 15 families, almost all of them related. The community has a small shop in the house of one family, and a primary school up to 6<sup>th</sup> grade. It also has a mill, and a dilapidated community house, but no church, which was their next community project.

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<sup>1</sup> 1995 numbers

The community was destroyed during the civil war that ended in 1992. During the civil war the inhabitants were predominantly refugees in Honduras or guerilla warriors. The community had been somewhat isolated both before and after the war, but its development level has increased and they now have a broader road to the village, electricity, toilets, and running water in the houses. During the fieldwork the first internet connection from the community was made by a female university student who bought a computer.



**Image 2:** Map of the Department of Chalatenango showing villages, towns and road net. The municipality capitals of Arcatao and Nueva Trinidad are located at the north eastern part.

Source: <http://www.chalatenangosv.com/imagenes/2013/04/mapa-de-chalatenango.jpg>

The low-lying community is situated in a valley in the neighboring municipality of Nueva Trinidad (population 2300). It has a river running past it and also several small streams that can get flooded with heavy rain. The temperature is higher here than in the more mountainous high-lying community, and the low-lying community is better connected to other communities. It has a better road that connects it to the main road going from Arcatao through the village of Nueva Trinidad and ends in the city of Chalatenango. Some months before my arrival a truck had started to pass through the community once a day to bring people to the city of Chalatenango about 30 kilometers away. This community is somewhat bigger and has more than a hundred inhabitants; also in this community the population is closely related. In addition, this community lies closer to other communities. The community offers school until

9<sup>th</sup> grade, has a church, a small shop, a medicine house, a community house, a mill, a football field with stands, and through assistance from NGO's they now have a fish farm project that is selling fish to the nearby communities. I am not aware of any internet connection in this community.

Both communities were organized, and different people had different positions and responsibilities, like being in the school council. The low-lying community seemed fairly active in its organizing efforts and several committee meetings were observed during my stay, like the health committee and the water committee. Women were part of the committees and the low-lying community even had a female representative in her thirties in the municipal council.

The high level of organization can be partly explained as a result of the war, as it made it necessary for the population to organize. The social organization, unity and the vigilant heritage by the guerilla, in combination with the rather remote location from any city, could be one explanation of why the area did not suffer from the high violence rates produced by the *maras*, youth gangs, as other parts of El Salvador.

Although El Salvador is only 21,040 square km, the natural geography varies between different parts of the country, as does the hazard exposure. Situated in the mountainous terrain bordering to Honduras, the municipalities of Arcatao and Nueva Trinidad are less prone to major flooding and less exposed to hurricanes coming from the Pacific Ocean, compared to the low-lying area of the Lower Lempa basin at the coast. However, tropical storms do occur in this area. Schools were closed all over the country due to the 2010 hurricane Agatha (Valencia 2010) which flooded the area's big river, the river Sumpul, tearing away the bridge and thus cutting the communities off from the rest of the country. Tropical storms cause great damages to the country's agriculture (Seelke 2011). However, it is not only extreme weather events that affect the production, the rural population also notice changes in the weather patterns. Kvamsås (2012) writes that while the 25th of April traditionally has been the first day to sow in the municipalities of Arcatao and Nueva Trinidad, in 2011 farmers had to postpone sowing until the beginning of June due to lack of rain, causing great distress. Changes in the climate reported in this area include: changes in the precipitation patterns and increased heat that is associated with more termites, decrease in water and physical distress due to the heat (Hochachka 2012). "Last year the rainy season was very short and we couldn't plant beans for the first time in history," reports a local woman (Hochachka 2012:19). The inhabitants of the communities under study have started to notice increased temperatures, and

a teacher from the low-lying community tells that before, the men could work all day in the field, but that they now do not manage to work in the afternoon because of the heat. This has also been reported in other places in El Salvador (Vázquez, Acosta and Alonso 2011).

Both of the communities under study were prone to landslides. In the low-lying community a landslide had occurred some time before the fieldwork was conducted. Although fortunately no human damage resulted, the landslide destroyed all the crops in the area where it had passed. In the high-lying community, government officials were inspecting a mountain behind some of the houses for landslide risk, and the population reported having witnessed stones sliding from the mountain.

The main crop production in the area is maize and beans, which also makes up the basis of the local diet. Some vegetables and fruits are also grown, though several types of vegetables could not be cultivated because of poor soil conditions. Over the last 20 years, pesticides have become a central part of the small scale production in the area, even though people in the communities associated it with kidney diseases and illnesses for the livestock. Due to environmental campaigns against clearing the field by burning, the use of pesticides has become a normal practice to clear the field before sowing, according to informants and observations in the field. El Salvador has a tropical climate with a dry season and a rainy season, the rainy season lasts from May to October.

Adult informants in this study described how life in the communities was hard, with little and insecure income. A woman explained the poverty experienced in the communities, and that the global economic crisis had not been noticed in the area; *Because here we are always in crisis!*, she laughed warmly. The NGO supporting me during the fieldwork, Centro Bartolomé de Las Casas, also considered the communities poor. Especially in the high-lying community people insisted on the equality between households because all had a tight economy. Still, differences also exist within poor communities, as will be discussed in the analysis.

## **2.4 Youth in El Salvador**

There are many challenges for Salvadorian youth, and poverty, violence and unemployment are the reality for many young people. The youth are an increasing segment of the total population in Central America and the Caribbean, and people between the age of 15 and 24 accounted for 20.3 percent of the total population in 2001 (Breinbauer and Maddaleno 2005,



CEPAL 2001). This represents a potential work force and societal contribution that is largely left unused.

Young people have the highest unemployment rate in the country; 14 percent for youth between 18-24, and for those young people who have jobs, almost half are underemployed (UNDP 2010b). This is without taking into account the unemployment of persons under 18, which, as the education levels discussed below suggests, could be considerable. Youth unemployment represents a major challenge for the country but also for the individual who sees him or herself with limited possibilities for the future.

Even though El Salvador will soon reach the goal of 100 percent literacy for the population between 15 and 24 years, there are still challenges for the youth with regards to education. While a person with four or less years of education can expect to earn 184 US dollars a month, those who have completed at least 12 years of education can expect a salary of 631 US dollars. This suggests the importance of education to avoid intergenerational poverty (MINEC and DIGESTYC in UNDP 2010b). Although the Salvadorian constitution guarantees the right to free primary education for all children, several obstacles limit the individuals' access to education. For instance, urban children are likely to get 7.1 years of school, while rural children only have an average of 4.1 years. School expenses such as school material, transport and lunch are among the factors that inhibit marginalized families to send their children to school, added to the often vital role that the children have in earning income or doing domestic work for these families (UNDP 2010b).

Many young people emigrate in search of a better future, often to the United States, and as much as 16 percent of the Salvadorians now live abroad (Ratha and Shaw in Acosta et al. 2012). An increasing part of the emigrants are youth, and the last ten years 68 percent were under thirty years old, this is much higher than in other developing countries (Acosta et al. 2012). Most emigrants, of which the largest part are men, have their parents still living in El Salvador and send remittances back home (Acosta et al. 2012).

Another concern for the youth is the high level violence in the country. El Salvador has one of the highest murder rates in the world with 66 homicides per 100.000 inhabitant that to a large degree are associated with the Central American gangs; *maras* (UNODC 2011). Youth unemployment in combination with poverty and social exclusion are considered a risk-factor for entering into gangs (Seelke 2013). Although men have been the main target of violence, there has recently been an increase in female homicides and sexual violence (Lakhani 2013).

Last year, reported sexual offences increased 17 percent, and amongst the victims of rape and sexual offences reported during the three first months this year, two thirds were under the age of 18 (Lakhani 2013). Most of the sexual violence towards children happens within the house, and 85 percent of women who had been sexually abused reported that the offender was someone they knew, due to a survey from 2010 (Lakhani 2013, Ministry of Health El Salvador 2010). Hierarchical relationship between parents and children contributes to normalize the abuse of children that can be very severe, and in spite of having decreased some from the parental generation, child abuse as physical punishment is considered a common problem in El Salvador (Speizer et al. 2008, Hume 2009).

The above describe some of the challenges that Salvadorian youth meet in the transformative period from child to adult, which adolescence is. Yet these do receive attention, for example by the National Council for Childhood and Adolescence (CNNA) and NGO's such as Plan International, IMU, and UNES, to mention a few.

## **2.5 Women in El Salvador**

The female role in pre-war El Salvador was subordinated the man in a gender relationship based on *machismo*. Machismo is an expression of masculine identity that, defined by Martín-Baró (in Hume 2009:128), includes “a strong tendency and valuation ascribed to genital activity, propensity towards physical aggression, indifference to everything that is not considered *macho*, and an extremely close relationship with the mother.” Women had little access to education and their dignity consisted of motherhood, women were without economic rights, legal claims or women's rights (Thompson and Eade 2007). A change in the gender relations arguably happened during the war, as women contributed greatly to government resistance through female organizations like CRIPEDES and CO-MADRE, and partook in different tasks in the guerilla forces, like being messengers and taking leadership roles in repopulation of communities. Thompson and Eade (2007) report how experiences in organization and collaboration from refugee camps gave women self-confidence and power to take action. Still, while some women have reported change in gender relations, others have not noticed any change (Luciak 2001). In the two communities where this study was conducted, women took part in organizations and some had leading roles. I was told that the gender relations were not like before, when women had to ask their husband for permission to leave the house.

However, gender roles that disfavor women persist. Rodrigo Bustos, director of Plan El Salvador, comments: “the roles assigned to women are very fixed: take care of the home and family, and be submissive to all men in all relationships” (Lakhani 2013). Luciak (2001:85) reports women that perceived men to be working, while they “only took care of the household.” Further, gendered violence continues to be a major issue. Male violence towards women is not considered unusual behavior by many people in El Salvador, indicating that *machismo* is still an accepted understanding of men’s behavior (Madrigal and Tejeda 2009, Bird et al. 2007). Hume (2009) claims that women have a structurally weaker position than men in society and that there is usually little that they can do to avoid domestic abuse by their husband or by other family members. Further, he points to women’s and men’s differentiated sexual roles, where women are valued for their chastity and men for their virility. This encompasses the implication that the responsibility for preventing abuse is put on women and girls themselves, which also leads to mothers’ responsibility to protect their daughters (Hume 2009).

This chapter has discussed the context in which Salvadorian girls grow up. Economic, historic, political, social and environmental aspects of the Salvadorian society have been explored, and the context described might portray Salvadorian girls to live in vulnerable conditions. At the same time El Salvador is listed as number 5 on the Happy Planet Index which reports an increase in Salvadorians’ feeling of well-being (NEF 2012). Further, women are participating in organizational life, and people in Arcatao and Nueva Trinidad have been described as especially resilient on background of their experiences in the civil war (Hochachka 2012).



### **3 Two perspectives on vulnerability**

The two perspectives of women and children; as vulnerable and as capable, make up a debate on how to understand girls and vulnerability, and the findings of this thesis will contribute to this debate. In this chapter I will discuss the concept of vulnerability with a focus on gender and age, based on these perspectives.

I have chosen to describe the two theoretical positions regarding girls' vulnerability and capacity as perspectives, and understand these perspectives to operate within the field of vulnerability. Several words could be used depending on who one talks to and what is read in the concepts, for example, 'debates,' 'discussions,' 'narratives,' 'discourses.' Perspectives are used to distance this thesis from discourse analysis, as the term 'discourses' easily suggests, and to describe that the perspectives represent two different viewpoints that share the same base, or field of vulnerability.

#### **3.1 Perspective one: traditional view of “vulnerable victims”**

Sharing the impacts of climate change does not mean that everyone is affected the same way (Yamin, Rahman and Huq 2005). This is not only the case from a global perspective, but is also true at the local community level. Climate change can have different effects on different groups, and the groups may perceive risks, adequate responses and strategies in different ways (see Heijmans 2004 for examples). It is therefore important to take the complexity of communities into account when working with development adaptation to climate change. Two groups that have been characterized as especially vulnerable by scholars, development actors, policymakers, and now also in the climate change literature, are women and children.

##### **3.1.1 Women**

The *International Panel on Climate change* (IPCC 2012:313) has found that “gender makes a difference in vulnerability.” Gender can be seen as an axis where vulnerability and perception of climate change and risks vary. Due to different interactions with nature between women and men, because of women's status, activities, social roles as care givers, lack of mobility, gendered responsibilities in livelihood strategies, and access to resources and working possibilities, women are experiencing climate change differently than men and can be more vulnerable to its impacts (Kakota et al. 2011, Dankelman 2002, Fothergill 1996). The gendered difference in interaction with the material world, as nature, is the starting point for

many gendered analysis as well as political and power aspects. (Dankelman 2010, Benjaminsen and Svarstad 2010, Agarwal 1998). In many contexts, women are perceived as more vulnerable both before, during and after disasters, due to factors deeply rooted in social and cultural processes (Fordham 2004). Existing social, political, economic and cultural aspects have the potential to also make women more vulnerable to climate change.

It is feared that climate change can exacerbate existing gender inequalities and hence it is important to address this in policies (Kakota et al. 2011). It is considered likely that women will be further disadvantaged by interventions not including a gender perspective, as these may reinforce traditional roles and relationships (Clifton and Gell 2001). In addition to differences in vulnerability, gender differences can also contribute to variances in perceptions about risks and coping strategies. Terry (2009b) cites a study from rural South Africa where male and female farmers perceived risks of rain and drought differently, these different perceptions can be attributed to the gendered livelihood division of labor. A gender sensitive understanding in studying climate change is thus important so that valuable knowledge, perceptions and experiences from the female part of society do not get lost, and so it enables policies to be as effective as possible, taking into account the needs and understandings of all parts of society.

### **3.1.2 Children**

Children are another group considered especially vulnerable to climate risks, as most are highly dependent on others in order to survive. Malaria, malnutrition, not knowing where to flee in a disaster or not understanding situations of disasters are only some of the effects of climate change that children are vulnerable to, and children in developing countries are assumed to be bearing the “total burden of disease due to climate change” (Baker and Kyazze 2008, Haines et al. 2006:592). According to Save the Children (2011), more than half of those who are affected or die in disasters are children. The organization further notes that in emergencies, children are not only facing heightened risk of family separation, psychological distress, physical harm and gender-based violence, but they are also at higher risk of being exploited. In addition, children are at great risk to a number of health issues that are expected to increase with climate change, such as water- and vector-borne diseases and malaria. Migration and relocation due to climate change is considered to affect child protection, social cohesion and school attendance (UNICEF 2011a). In their study of disasters in 141 countries, Neumayer and Plümper (2007) find that not only are women more vulnerable than men, but

that more girls than boys die during and after disasters, mainly due to social causes as discrimination in food and resource distribution, higher risk of sexual assaults and lack of access to hygiene. The Salvadorian feminist organization *Instituto de Investigación y Capacitación y Desarrollo de las Mujeres* (IMU) holds that girls in the study area of this thesis were “triple vulnerable”, as age, gender and rural origin all are reasons for discrimination<sup>2</sup>. A frequently quoted number underscoring the vulnerability of women and children states that women and children are 14 times more likely to die in disasters than men (UNDP 2010a, Araujo and Quesada-Aguilar). The origins of this quote seem to be poorly founded, and suggest a propensity to portray women and children as the most vulnerable (Arora-Jonsson 2011). Although there are scholars questioning the victimization of children, they are nevertheless often portrayed as such. Barlett (2008), for example, while recognizing that children have capacities, still almost only focuses on their higher social and physical vulnerability to climate change impacts.

The legally binding Convention on the Rights of the Child from 1989, ratified by 193 countries, is an acknowledgement of children’s greater vulnerability and bigger need for protection. This is also manifested by organizations targeting the protection of children such as Save the Children, UNICEF and Plan International.

### **3.1.3 Critique of the “vulnerable victims” perspective**

The way vulnerability is being claimed for women and children in the traditional vulnerability perspective, called “vulnerable victims”, has however been criticized from various holds. For instance, some discourses almost essentialize vulnerability of these groups. Essentialism is the thought that there exists some attributes that are necessary for the identity or functioning of an entity, such as gender (Cartwright 1968). In the case of women, feminists have tried to move away from an essentialist perspective, where they are seen to have intrinsic features as for example being vulnerable and weak, to a social construction of gender. They hence understand inequality as based on identity and roles attributed to the different genders, rather than based on physical or “natural” features of women. Although an essentialist view of women’s relation to the environment is being produced in the field of eco-feminism (Shiva 1989) there are intents to steer away from such a perspective. In the field of feminist political

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<sup>2</sup> Interview with representative of *Instituto de Investigación y Capacitación y Desarrollo de las Mujeres*, San Salvador July 2013

ecology, for example, Agarwal (1998) views inequality in environmental aspects in relation to gendered division of labor and other social and gendered roles. Yet, there are also examples of larger generalizations and flirting with essentialism, for instance in the field of animal rights where the supposed specialness of women's humane view of animals is highlighted (Seager 2003). In their study of Malawian women, Kakota et al. (2011) point to the fact that women are responsible for food preparation and nutrition as one of several causes that make female headed household more vulnerable, without properly accounting for its reasons. The authors fail to give an account of nuances, as the composition of the households that have influenced income strategies in other places (Heijmans 2004), and this suggests a danger to interpret everything to fit the concept of "the vulnerable woman." Arora-Jonsson (2011) criticizes what she sees as a predisposition to generalize women in the south as vulnerable and she questions related assumptions. For example, she challenges the "feminization of poverty" and the widely accepted higher likelihood of female death in calamities. She quotes Reed (in Arora-Jonsson 2011:747) in noting a tendency to predetermine women as economically and/or socially vulnerable, and further argues that the a skewed view of the inherent vulnerability of women is a result of the desire to put women and unequal gender relations on the map in climate change debates.

A focus on women as essentially vulnerable can easily slip into categorizing women as a homogenous group and falling into the criticized "women-in-general" perspective that identifies women as a unified interest group without looking into other "cross-cutting differences" (Chant and McIlwaine 2009:223). It is not a given that women feel solidarity across the category of gender, nor that all women feel and perceive poverty and climate change impacts in the same way. A "vulnerable victim" perspective may at times be at risk of suggesting the opposite which contributes to stereotyping women as a unified and vulnerable group. Focusing solely on women is also in danger of failing to recognize the vulnerability of men. Fordham (2004:179) draws on Cornwell when she argues that powerlessness is not only a female condition. Some examples are that more men than women died as an immediate cause of Hurricane Mitch hitting Central America in 1998, or the documented stress from social expectations of men and boys as the economic provider of the family in times of decreased livelihood possibilities exemplified by the series of suicides among Indian farmers, mainly men, in times of pressed food security (Demetriades and Esplen 2008, Delaney and Shrader 2000).



However important it is to take such critique into account, it should not lead to a failure to investigate women's and girls' perspectives. Rather than disregard a focus on the gendered impact of climate variability and change, such critiques should encourage more and deeper investigation on the subject, and a more context specific understanding that does not generalize. Further, masculine domination is portrayed in both disaster management and climate change work (Terry 2009a, Fordham 2004). This indicates the importance of an increased focus on women to learn about their knowledge, needs and perspectives, as social roles and livelihood work can differ between genders. After all, when inquiring into vulnerability and adaptation it is necessary to understand the complexity of the issues. In order to do this, several scholars have advocated for sensitivity across gender, and also across other axis such as class, ethnicity and age (IPCC 2012, Chant and McIlwaine 2009, Demetriades and Esplen 2008).

A sole focus on a group's vulnerability has been criticized from many angles. To be put in the category of vulnerable is often associated with poverty, weakness, limited capacity and a lack of resources, and hence being perceived as an object of development rather than an active agent in life (Delica- Willison and Willison 2004). In relation to disasters, Heijmans (2004) points out the tendency to think on behalf of victims without understanding that these might conceive both the disaster and the circumstances differently. Additionally, focusing on a groups' vulnerability can lead to a neglect of its capacities, resources and long-term interests (Clifton and Gell 2001). Groups considered vulnerable, such as women, have capacities and are often accustomed to coping with difficult situations, making many of them resilient (see for example Hochachka 2012). Fordham (2004) argues for analyses that focus on both vulnerabilities and capacities. After all, "[women] are not simply helpless victims- despite often being represented as such in media images" (Fordham 2004:178).

A focus on women and girls as the most vulnerable will not ensure that their interests and needs are being taken into account and acted upon, as Tanner (2010b) reminds us while arguing that the vulnerability framing can reinforce the view that girls and children are without agency and encourage others to act on their behalf.

## 3.2 Perspective two; women and children as “agents of change”

### 3.2.1 Children

Partly based on the critique of the traditional vulnerability perspective of “vulnerable victims,” a new perspective on vulnerability is emerging in the field of climate change and disaster risk reduction (DRR). It portrays children not just as victims but as agents of change (Tanner 2010, Plan International and World Vision 2009, Save the Children 2008). This perspective emphasizes vulnerable groups’ agency, and sheds light on the capacities of children. It is even being advocated that adolescent girls “should be the cornerstone of their societies. They have enormous potential, although it often goes unrealized and untapped” (Robinson 2011:7). This perspective also contains a notion of essentialism, as children are considered to inherently be capable and agentic; they are assumed competent until proven otherwise (Gallagher in Hartung 2011:257). This perspective, although still in development, has been consolidated through the platform *Children in a Changing Climate*<sup>3</sup> constituting of various big development- and research actors; the Institute of Development Studies, Plan International, Save the Children, UNICEF and World Vision. The perspective of “children as agents of change” shows children as having the potential for agency and the capacity of being risk mediators before, during and after disasters (Tanner and Seballos 2012b). The agency of children can be viewed in their ability to identify risks. An example from the Philippines showed how children had a different focus on risks than adults; emphasizing low frequency high impact risks, while parents paid greater attention to high frequency low impact risks (Mitchell et al. 2009). In Pepeta, El Salvador, children identified the extraction of rocks from the river Sumpul as a possible increase to the risk of riverbank erosion and flooding of houses during the rainy season. In cooperation with the local authorities the children had signs erected prohibiting the extraction of rocks (Plan International and World Vision 2009). Although with warnings about the danger of manipulation of children and their innocence (Mitchell et al. 2009, Hart 1997), it is argued that “children are receptive to new ways of thinking, creative in approaching obstacles, and enthusiastic to share their knowledge with peers and the wider community in innovative and effective ways” (Plan International and World Vision 2009). While taking into account children’s own experiences and actions to meet disasters and climate change, the perspective contests the top-down approach to disasters and climate change understandings and information where scientific institutions are at the top and populations at the bottom of the hierarchy (Tanner 2012).

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<sup>3</sup> <http://www.childreninachangingclimate.org/home.htm>

The perspective of children as “agents of change” is in line with the idea of “children as citizens”, the child centered direction within the field of citizenship, in which children are not only viewed as future citizens, but rather as active citizens in the present that should take part in the decisions made about their lives, since simply listening to children does not take into account their rights as citizens (Hartung 2011). By viewing children as citizens, children are considered social actors with proper agency. They are entitled to respect, recognition, meaningful participation, have their voices heard and expressing their agency, in addition to the fulfillment of duties and obligations (Smith and Bjerke 2009).

### **3.2.2 Women**

Although with its differences, the “children as agents of change”- perspective echoes the empowerment perspective on marginalized people, often with a special focus on women. Vulnerable groups are also within an empowerment perspective viewed to possess capacities and great potential, though these are often restricted due to lack of power in different spheres of life (Friedmann 1992). Empowerment has come to be understood as the “harnessed, self-generating power of women to act in their own interest” (Saunders 2002:11). This resembles the “children as agents of change” perspective that advocates for children’s participation and the right of their voice to be heard in important matters, to avoid them being excluded while others take decisions on their behalf.

Confidence and the perception that they can make choices, have been pointed out as factors contributing to women’s empowerment (Afshar 1998). Empowerment becomes an enhancing of “*the ability to make choices,*”, and this ability will be affected by available resources, but also by agency as a necessary ingredient for women’s ability to set their own priorities and make their own choices (Kabeer 2001:18,emphasis in original). Power, in empowerment, has thus also been described as a “power from within,” or a “power to” act or make choices, rather than a “power over” someone or something (Rowlands 1998:15). In gaining this power, women can become active agents that promote their own cause in different spheres of life. Women are also portrayed as important agentic actors who can generate social change (Wilson Center 2013). In fact, “Women as Agents of Change” was the theme for the Commonwealth Day in 2011 that highlighted the valuable resources women are (Royal Commonwealth Society).

### **3.2.3 Critique of the “agents of change” perspective**

Some promoters of the “agents of change”- perspective are themselves aware of the risk aspects of this approach, as for example the possibility of putting children in danger. Mitchell et al. (2009) reflects on this as they write of children in El Salvador protesting the extraction of stones in the local river, climbing up on a lorry from outside the community that came to extract stones. Thus, the importance of adult support is emphasized by advocates of children’s participation and agency (Tanner and Seballos 2012b). Furthermore, if children engage in political issues, their role as neutral individuals may weaken, potentially exposing them to criticism or other consequences by adults.

Hartung (2011:163) understands the promotion of agency of children to exist within the context of individualization and democratization. She proposes that the notion of the “agentic child” includes the idea that they can make independent decisions without regard for the social structures within which they live, and she suggests that through this children are given the responsibility of “improving their own performance.” It is perceived as unfair that children, considered powerless, should bear the responsibility of changing structures within which they lack power (Ennew cited in Hartung 2011:98). While children are offered the opportunity to be actively and freely involved, the implications of this is that they take on the responsibility to carry out the activity and ensure the outcome to be appropriate or approved (Hartung 2011). In addition, there is a question of whether such a responsibility could be considered too much for children. How might the responsibility make children feel if they, for example, would fail in their disaster risk reduction (DDR) task? However, many children are already taking part in adult life and responsibility, but often without the possibility to participate in decision-making or debates concerning their own life. Yet, it should be considered whether participatory approaches could add further responsibility to children who already are experiencing adult responsibilities.

One could also imagine a sense of fear, responsibility and disempowerment if DRR measures are not implemented. Hayward (2012) notes how some children are highly concerned about environmental issues but have little belief in that they can have any impact on the situation. These children expressed a strong sense of anxiety in her study in New Zealand. She therefore argues for an approach of collective action, as too great expectations on the individual can lead to anxiety and ineffective action. Another concern about making children the agents of change is that small-scale children initiatives can give governments an excuse not to take on action and responsibility concerning child protection, as DRR for children is already being

worked on by local children's groups on the ground. In the case of community-based adaptation, Allen (2006:90) shows how local responsibility on non-political issues in the Philippines were supported by local governments, that at the same time avoided "any meaningful debate on government responsibilities with regard to, for example, coastal protection and development" (90:2006). There may be a danger that child centered DDR programs can provide a legitimate basis for governments who avoid looking at underlying, often political, causes for children's vulnerability.

The discussion above suggests that adolescent girls can be understood as the most vulnerable of the vulnerable, being both women and young. It also suggests that they can be viewed as agents of change. Girls can thus be understood to be at the intersection between two groups characterized by great vulnerability or by great potential for agency and full of capacities.

If we want to conduct research on how to understand girls' vulnerability to climate risks, informed by the perspectives conceiving them as "vulnerable victims" and as "agents of change," there is a need to understand what lies behind the concepts. The next chapter provides such an understanding by discussing the theoretical framework for this thesis.



## **4 Theoretical framework; vulnerability and adaptive capacity**

This chapter will provide a theoretical framework to understand the discussion of adolescent girls' vulnerability and potential agency and capacities to responding to climate change in their communities. It is essential to understand what vulnerability and capacities mean, as these concepts are interlinked with the impacts and responses to climate change. Further, I will argue for a contextual inquiry into this groups' vulnerability to climate risks instead of a narrow outcome vulnerability. The complex concept of adaptive capacities will be used here to provide a foundation for the empirical discussion on both vulnerability and the girls' possibilities to act with agency and contribute to society. I will look into what adaptive capacity can mean at the individual level with the main focus on agency as an adaptive capacity. I briefly touch upon the discussion of agency and structures, to provide an understanding of the actor's relation to its surroundings, which will be an issue in the analysis. This more abstract debate has been discussed in depth by a number of scholars (for a comprehensive overview see Hays 1994) and with the limited scope of this thesis, I will give a rather brief account of what I consider necessary for the empirical discussion of this thesis. This thesis uses an integral approach to understand adolescent girls' capacities and vulnerabilities, and this chapter concludes with a discussion of this approach.

### **4.1 Vulnerability**

The IPCC defines vulnerability to climate change as “the degree, to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes” (IPCC in Pelling 2011:22). Vulnerability can refer to exposure and sensitivity. Exposure will be understood in terms of “geographical and temporal proximity to a hazard, and sensitivity to the propensity for an exposed unit to suffer harm” (Pelling 2011:22). High exposure does not necessarily mean higher vulnerability if the unit in question has low susceptibility. Although vulnerability is by the IPCC described in a systems perspective, it can also be applied to understand the situation of societies, sectors, communities, groups and individuals. Vulnerability as a concept can take into account both social- and environmental systems, their interaction and their synergy. Ecosystems and the climate system affect the social system, for example through providing society with resources. The social system will again affect ecosystems and the climate system, for example are deforestation affecting biodiversity and climate change. Important questions to ask when

treating vulnerability are who are vulnerable to what, and why? (Ensor and Berger 2009b, Heijmans 2004).

#### **4.1.1 Outcome vulnerability**

One way vulnerability has been understood in relation to climate change is as an outcome of climate change impacts. Outcome vulnerability is perceived as the result of a linear process where projected impacts of climate change and measures to reduce these impacts are calculated, the outcome being a more or less vulnerable society, sector or unit (O'Brien et al. 2007). Responses to climate variability and changes from this perspective target a predicted outcome, often with technical solutions such as the development of drought resistant crops or the construction of sea walls. Although this perspective makes valuable contributions, it contains several difficulties. For example, climate predictions contain high levels of uncertainty, which make it difficult to take measures towards predicted climate change impacts, as it may not happen in the foreseen way (Ensor and Berger 2009b). Perhaps more importantly, vulnerable people and groups are typically vulnerable to a great variety of stresses, not only climate change. For many, climate change may not be their main preoccupation. For example, in communities in Puerto Rico health, family well-being and land tenure security are given a higher priority by local actors than adapting to climate change (Lopez-Marrero and Yarnal in Pelling 2011). In addition, it is important to recognize that other social and political factors will be tied to adaptation measures. For instance, a particular measure often favors one group over others, and so adaptation is rightly understood as a political process (Eriksen et al. 2007). From an outcome perspective on vulnerability Sen's (1999) focus on access and entitlements may be overlooked. The introduction of water wells may for example overlook who has access to the water. Perhaps it was not the water in itself, but it's accessibility that created the vulnerability (Eriksen et al. 2007). The outcome perspective has been associated with a scientific framing of vulnerability, that aims at a better understanding of key responses to biophysical processes and impacts (O'Brien et al. 2007).

Blaikie et al. (1994) conceive vulnerability to consist of root causes that create dynamic pressures and lead to unsafe conditions. Such a conception introduces a broader picture of vulnerability. If only considered from an outcome perspective, or a narrow focus on unsafe conditions, there is a risk of failing to address the fundamental causes that made people vulnerable in the first place, and so patterns of acute vulnerability will keep returning (Davis 2004). Heijmans (2004) calls for development and disaster risk managers to take a political



and social perspective on the causes of vulnerability; a starting-point or a contextual vulnerability perspective (O'Brien et al. 2007).

#### **4.1.2 Contextual vulnerability**

Contextual vulnerability highlights the multiple factors that contribute to vulnerability and the interrelation between social, political, economic and environmental arenas that generate the vulnerability of groups, often to a variety of risks. Where an outcome perspective would look at changes in rainfall as an impact, and focus on crop varieties that could bring better yields as a response, a contextual perspective also includes related and dependent issues such as unemployment, poverty, lack of technical support and food security (Schipper and Pelling 2006). The contextual vulnerability perspective focuses on the pre-conditions of disasters and the social structures that create these, rather than the post-disaster conditions (Fordham 2004). For example may children feel that social conditions as drugs, or a lack of household coherence, can affect their ability to respond to disaster events, factors that would not be taken into account by an outcome vulnerability analysis that might simply focus on infrastructure (Tanner 2010).

Vulnerability is not a static state of being, but can be changed in social, economic and political ways, and it is changing with the process of climate change. Ensor and Berger (2009b) highlight the dynamism of contextual vulnerability, as well as the dynamism of climate change, both being ongoing processes. The contextual conditions of both society and nature are understood to affect the vulnerability of a person, group or place to climate change and climate variability. Davis (2004:134) notes that “people are generally not at risk by accident” but that there are complex and multifaceted causes, including exploitation, that serve political, racial and commercial ends behind risk. Not all inhabitants are equally hit by a hazard.

Vulnerability is often a much greater issue for the poor. Poverty is a factor that contributes greatly to vulnerability because poverty limits people’s ability to mitigate risks (Delica-Willison and Willison 2004). Poor and marginalized people are assumed to be the ones suffering the most from climate change, often with high exposure and limited means to address the vulnerability. Diversification of agriculture as a risk spreading, and thus risk mitigating, strategy can be inaccessible for poor people due to a lack of money to buy seeds, or a lack of fields to sow (Kakota et al. 2011). Poor people’s possibilities to recover from a

disaster may also be limited. Still, considering vulnerability as an inherent property of poverty is entering into essentialism. However interrelated, poverty and vulnerability are not the same (Eriksen and O'Brien 2007). Not all poor are vulnerable to climate change, and not all vulnerable to climate change are poor (Yamin et al. 2005). Income generating activities such as tree logging or shrimp farming can decrease monetary poverty while increasing vulnerability as mangroves or forests, that are important ecosystems and buffers towards floods and storms, disappear. Higher income farmers doing irrigated agriculture have also shown to be vulnerable towards climate change and marked fluctuations (Eakin 2008). Vulnerability can be understood to be what drives people into, and keeps them in, poverty, as “today’s poverty is yesterday’s unaddressed vulnerability” (Yamin et al. 2005:5). Poverty is here understood not only in monetary means but also as deprivation of freedoms and capacities to well-being (Sen 1999). Although large parts of the vulnerability literature come from the field of hazards and disasters, the discussions are applicable to less abrupt risks, such as food security, since both should be considered in light of their social, economic and political contexts.

The way in which vulnerability is conceived can thus have implications for what measures are applied to reduce vulnerability. Within the discourse of contextual vulnerability there are different opinions when it comes to measures. Schipper and Pelling (2006:29) propose that the most effective way to address the risks produced by climate change is by working on the underlying factors causing vulnerability to the phenomena. Eriksen and O'Brien (2007) argue for an approach that targets the risks posed by climate change while at the same time focusing on the causes of vulnerability and building up capacities to cope and support a sustainable adaptation. Targeting outcomes while also addressing underlying vulnerability, is the focus of the NGO Practical Action’s community-based adaptation approach. Their purpose has been to “identify the significant climate-related hazards facing the communit[ies], and understand the human and environmental components of vulnerability to those hazards” (Ensor and Berger 2009b:163).

## **4.2 Adaptive capacity**

When discussing vulnerability to climate change, a closely related concept is adaptive capacity. Capacities, and lack of such, have been understood as an important component of vulnerability. Davis (2004:129) conceives capacity as a mediating factor in relation to

vulnerability, illustrating it as a formula that describes disasters as occurring where a hazard meets vulnerability, but capacities can restrain the possible disastrous outcome:

$$\text{Disaster} = \text{Hazard} \times \text{Vulnerability}$$

### Capacity

Capacities are thus seen to be able to moderate the impact of a hazard. For example, a vulnerable community can have capacities of knowledge or information that can warn them about a hazard. Building capacities is thus considered to reduce vulnerability (Werg, Grothmann and Schmidt 2013).

Adaptation is understood as “the process of adjustment to actual or expected climate and its effects” (IPCC 2012:556). The capacities to engage in such a process of adjustments, adaptive capacity, is described by the IPCC (cited in Jones et al. 2010a:5) as “the actual ability of a system to adjust to climate change, variability and extremes, moderating potential damage, taking advantage of opportunities, coping with consequences, as well as expanding its coping range under existing climate variability or future climate condition”. Adaptive capacity is thus understood as the ability of a system to meet climate change challenges. Importantly, this is not the same as the actual process of meeting these, the adaptation, but rather it describes the condition or possibilities a system has for facing these. Underlying determinants of adaptive capacity can be resources, institutions, social capital, human capital, risk spreading, information management and awareness (Yohe and Tol 2002).

From a community perspective, with a focus on people and not only on the systems in which they live, Ensor and Berger (2009b:17) define adaptive capacity as “the potential to adapt to the challenges posed by climate change, describing the ability to be actively involved in processes of change.” Having the capacity to adapt when applied to people, thus involves activeness. Where responses to climate change can be separated into spontaneous processes and intentional processes, it is the latter they emphasize, distancing themselves from a Darwinist concept of adaptation as inevitable, natural, and passive process where species evolve differently over time in order to fit better into its new environment. Adaptation is the process of putting actions into life to meet climate changes in the best possible way, and so adaptive capacity makes up the range of these possible actions as well as the input for the possible actions. All possible actions will not necessarily be used and acted upon. Drawing on the World Research Institute, Jones et al. (2010a) emphasize that the adaptive capacity is not

only what a system *has*, but what it *does* to enable adaptation. For instance, it would not only be interesting that a community has the capacity to organize, but rather *how* it organizes, and that it actually *does* organize. Organization can be conceived as a continuous process, a capacity that can be lost if it is not exercised. And so, Jones, Ludi and Levine (2010b) highlight issues such as flexibility, innovation and redundancy which are important for understanding the preconditions for adaptation, and which differentiate it from the concept of capitals used within the livelihood approach.

Adaptation will have to take place at different scales and places, and across different domains of society. Adaptive capacity is context specific, which indicates that what can be viewed as a capacity in one context does not necessarily have to be it in another. For instance, capacities to manage floods can be irrelevant in a drought prone area. Moreover, the drivers and barriers of adaptation processes are likely to differ between social systems (Grothmann et al. 2013), and capacities can also differ over the geographical scale; from the individual to the global. The scale- and context specific features of adaptive capacity can make it difficult to see what can be meant by it at a more concrete level. Smit and Wandel (2006) find very little consensus or support for a robust specific model of the elements and processes of adaptive capacity beyond the broad categories. Nevertheless, wider assumptions can be found in the literature. In the following I will discuss some possible features of what adaptive capacity can be at the individual and collective level.

### **4.3 Features of individual and collective capacities**

Most of the literature on adaptive capacity deals with community, organizational and national capacities, and rather few look at the individual and collective local level. The capacity of an individual will be closely connected to its community and household, as cultural aspects and understanding, knowledge, discourses, educational level are to a large extent similar in a community of interdependent individuals. Adaptation has to a large degree been understood as the ability to meet uncertainty, and strategies of livelihood diversification have been proposed as a means to respond to such an uncertainty (Pelling 2011, Ensor and Berger 2009b, Eriksen and O'Brien 2007, Ellis 2000). Livelihood will in many cases be a household and community issue, rather than an individual one. Learning, conceived as a capacity, is not only dependent on individual capability to take in new knowledge, but can also depend on the learning environment and knowledge in a community.

The following discussion will draw on some capacities highlighted in the literature that can be applied to individuals and collectives, and which I consider relevant in relation to the empirical findings. Special focus will be given to agency, as the third research question explores whether girls can become agents of change. Agency will in this thesis be considered a capacity in itself, understood as the ability to put forward intentional actions. But agency is also closely interlinked with other capacities, as it can be important for realizing these. Where there might be a space for innovation, the individual or collective will need the ability to actually try out new things. However, other capacities will affect the possibilities for agency, for example can knowledge expand the possible options for action. Ensor and Berger (2009a) consider an active attitude towards adaptation a fundamental part of adaptive capacity, in order for adaptation to be intentional and not only reactive. Agency thus seems to underpin adaptive capacity. However, agency does not exist without its limits, and the last part of this section will discuss the relationship between agency and structures.

The discussion about adaptive capacities considers the asset base as important for adaptive capacity, as from this one can derive the scope of possible actions. It is the *use* of the assets that creates opportunities as it expands ways to use resources. The use of assets can increase the scope of possible actions and take advantage of new and old potentials. Innovation and experimentation are therefore central for the capacity to adapt. Innovation is not only a processes directed at physical assets, it includes social innovation and imagination. New organizational forms emerging among the Kuria people in Tanzania have been found to help vulnerable groups to obtain security and support beyond the traditional network of the family (Rodima-Taylor 2012). The new networks further created spaces for learning and sharing information, communication and innovative conversations, thus showing the synergies between different capacities.

Social networks and social relationships are continuously shaping and re-shaping adaptive capacities since actors and their actions do not operate in isolation, but are interrelated (Pelling and High 2005). It is through social networks that capital flows, and opportunities and constraints are created by the structure of the network which is enabled by its actors (Ensor and Berger 2009b). Indeed, flows of a variety of resources, knowledge, learning and support are reported to circulate through different kinds of networks (Rodima-Taylor 2012). Children and children's groups have, for example, shown to have potential as communicators of risk to their family and community, in addition to take on action and mobilize other parts of

society (Tanner 2010a). Network-building has thus been a key post in community-based adaptation projects (Ensor and Berger 2009b).

Information about climate change and what it means to a specific place, as well as the notion of uncertainty that it contains, is important to enable people to look forward and include it in

useful to rural dwellers. Access is central for information to be of use, though having access to information does not ensure that it will be sought, understood or used. An example from rural farmers in Zimbabwe presented with probabilities of rainfall and crop success showed that the information did not affect their choice of crops (Grothmann and Patt 2005). Knowledge is an important aspect of risk and capacity perceptions as it helps constitute a local reality of what is at stake, for instance with information from mass media (Kroemker and Mosler 2002). In consequence, it is not just any understanding of the information that will be important, but a critical understanding of it, as framing of information by for example mass media can be biased. This suggests the importance of education for building adaptive capacity, as literacy and training in understanding information can facilitate both access and use of information. There are several kinds of knowledge that can be important in different ways in forming the preconditions for adaptation. For example, traditional knowledge on the use of nature can be valuable for supplementing the regular diet with wild plants in times of food shortages. Knowledge, such as know-how, or action knowledge, is also of importance as a person, for instance, may know that civil society pressure is an effective means, but might not know how to start a pressure group (Kroemker and Mosler 2002). Knowledge and information about options of insurance, state support, or NGO initiatives can also be important, and can come from different channels; official and private. Providing and generating various types of knowledge can facilitate decision-making and future planning.

#### **4.3.1 Agency**

In the discussion about adaptive capacity, agency was considered essential for an intentional change process rather than spontaneous and reactive change. The Oxford dictionary defines agency as “a thing or person that acts to produce a particular result” (Oxford Dictionaries 2013). Agency thus includes intentionality, which is based upon “desired or intended states of affairs- goals to be attained and the actions suited to realize them” (Prinz 2012:113). It is the ability to reflect upon and plan for the future that makes agency so special for humans

(Moench and Dixit 2004). By planning, humans can analyze the probability of the desired outcome from different possible actions and thereby select the best suitable action for achieving a goal or desired state of affairs. Agency can be what transforms possible actions into actual actions, and it can also open up for new possible actions. The capacity for agency has been understood as inherent to all humans, but with the need to be learned and developed in a persons' milieu, much like the capacity to use a language (Sewell 1992). Based on literature from various disciplines, I consider risk perception, judgment self-efficacy, aspirations for a better life and a critical consciousness important dimensions of agency.

As discussed above, an ability to experiment and innovate, networks, information and knowledge are capacities that can exist within a society, community or the individual that can contribute to make up the possible range of actions available. Still, having capacities is not the same thing as using them. In their study of cognitive aspects of decision-making and what makes individuals take actions, Grothmann and Patt (2005) argue that the main determinant of the motivation to adapt is the perceived risk, which consist of the perceived probability for being exposed to harm, and the perceived severity of the harm, also relating this to other possible harmful problems. Underpinning motivation are values, norms and goals, because even if danger is perceived, motivation for taking action on it will include a feeling that important material or immaterial values are at stake (Kroemker and Mosler 2002). Indeed, values have been considered determinants of adaptive capacity as they both inform institutions and individuals and are instrumental in determining actions (Bussey et al. 2012).

A second determining factor in decision-making is the perceived adaptive capacity, not only assets and the objective capacity to act (Diener and Biwas-Diener 2005). Efficacy of one's own action is crucial for initiating action (Bandura 1998). In fact, Grothmann and Patt (2005) argue that the individual's perception of one's own adaptive capacity (efficacy of one's own actions to influence the situation) might be even more important than the objective adaptive capacity (the assets and possible range of actions), and they suggest that these two can be very different. The background for action will be the perception of a risk, leading to an evaluation of the persons' ability to avoid harm, in other words, carry out adaptive actions. This underlines the importance of subjective dimensions of adaptive capacity, as "unless people believe they can produce desired effects by their actions they have little incentive to act" (Bandura 1998:52). Low belief in the possibility of one's own influence can lead to a failure to take action. Highly perceived adaptive effect and self-efficacy is shown to correlate with taking on adaptation measures (Grothmann and Patt 2005). Achievements have been

considered to enhance agency as experiences of achievements can increase the feeling of self-efficacy, and so there can be a synergy between achievements and agency (Friedmann 1992, Kabeer 2001). Importantly, the perception of both risk and adaptive capacity of an individual takes place in the broader perception of the society on these issues; within the frames of the social discourse (Grothmann and Patt 2005).

Appadurai (2004) conceives aspiration for a better life as a capacity. He argues that without a vision for a better future it is difficult to act towards such an end. He understands the rich to have a more complex experience of the relation between means and ends, aspirations and outcomes, and thus they have better developed the “metacapacity” to aspire. This resembles both Sen in his notion of poor people as having limited capability to articulate their wants and Nussbaum in her explication of poor people having internalized their low possibilities for themselves through a life of experiences (Narayan-Parker 2005). If agency is intentional actions that work towards a goal or desired state of affairs, the capacity to aspire will necessary be a crucial component of agency, as those goals and desired states of affairs need to be created and aspired for in order to act upon them. Appadurai (2004) argues that aspiration is a cultural capacity.

Following Appadurai’s logic, if aspirations are based on experiences, they may also differ within a certain group as individuals have different personal experiences. In a community one can imagine different levels of participation in the community or involvement with NGO’s affecting people’s differentiated experiences, which in turn influence their aspirations.

The Brazilian pedagogue Pablo Freire (1999) also puts attention on the lack of capacity to aspire. He views poor people to be born into a world where they are subordinated to wealthy people, and they accept their subordinated role as they are not supposed to reflect upon this. Narayan-Parker (2005) argues in line with this that more powerful social groups define the poor and excluded groups, and that these are held in place by social norms and expectations of behavior. Freire (1999) argues for a greater consciousness of poor people, enabling them to become subjects of their own lives, not only objects who exists for others. Without a critical reflection of the structures under which one lives, it is difficult to take on action to change these structures. Pelling (2011) understands critical consciousness as an adaptive capacity, since gaining the ability to analyze oneself, the problems one faces, and one’s position in society is a first step to initiate change in societal structures. Freire (1999:71) sees reflection and action as closely connected; if reflection is lost, one gets mere activism which he



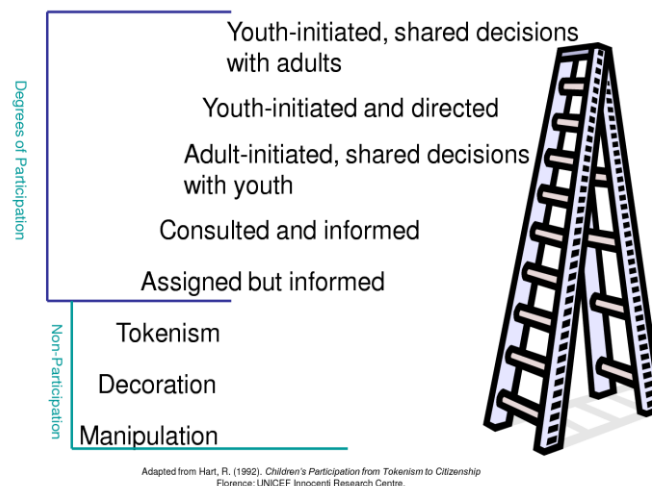
describes as “action for the sake of action,” if action is lost, the reflection becomes alienating and empty. Action lead by slogans and monologues that lacks people’s critical reflection, will make people into masses that can be manipulated. A critical consciousness can thus be seen as vital for agency.

Agency is often portrayed as an individual capacity, but there are also those who call for an understanding of agency as both a collective and an individual capacity, since purposeful and intentional action can be a function of the individual as well as the collective (Narayan-Parker 2005, Bandura 1998, Hays 1994, Sewell 1992). Hayward (2012), for instance, criticizes “personal responsibility” and individualism in today’s citizenship, and questions the context in which young people grow up, where more private and less government action is urged. She advocates for social agency and public and communal action in meeting environmental and democratic challenges.

The basis of conceptions of agency is that humans have free will (Prinz 2012). Although children and young people are recognized as autonomous persons with a

proper sense of right to own decisions and spaces (Helwig and McNeil 2011), Hart (1997:3) warns about the ability to manipulate children, and the danger of them becoming “parroting clichés from someone else’s environmental agenda.” Hart (1992) has elaborated Sherry Arnstein’s Ladder of Participation. The three lowest stages of the ladder are to be avoided if one seeks genuine participation. These are manipulation; when children lack understanding of the issues and their actions in the project or process they are participating in, decoration; where children and young people are used to decorate adults’ cause indirectly by for example singing or dancing, but with little idea of the cause or participation in organizing, and tokenism; when children apparently give voice but have little choice or opportunity in how to express themselves. The important thing for Hart(1992) is that children and youth have a

## Ladder of Youth Participation



Adapted from Hart, R. (1992). Children's Participation from Tokenism to Citizenship. Florence: UNICEF Innocent Research Centre.

**Image 3:** Hart’s (1992) ladder of participation. Source: UNICEF Innocence Research Centre. <http://www.docstoc.com/docs/56721777/Ladder-of-Youth-Participation>

choice, and so, from the fourth stage of “assigned but informed” to the eighth stage of “child-initiated with shared decisions with adults” are all considered genuine participation. The quality of the participation is not necessarily dependent on how high up on the ladder youth and children’s involvement is. In fact, Hart (1992) points out that different children at different times might prefer different degrees of participation. Genuine participation by children and youth must be one where they can develop their proper agency and express their own meanings.

#### **4.3.2 Structure and agency**

If we accept that agency is based upon freedom, what kind of freedom and what social boundaries there are for this freedom become central questions, as social actions are not taken in a vacuum, they are always socially shaped (Hays 1994). Kymilcka (cited in Ensor and Berger 34:2009b), for example, suggests that “freedom of choice is dependent on social practices, cultural meanings, and a shared language ... the context of individual choice is the range of options passed down to us by our own culture.” Culture is a central part of social structures that acts as the resilient “principles that patterns our social practices” and constitutes possibilities and boundaries for human actions (Sewell 1992:6). The much debated relationship between structure and agency can be seen as a relational one; where structures are shaped and reproduced by human praxis and choices at the same time as humans are shaped by these very structures, as Giddens proposed (Hays 1994). Capitalism, for example, shapes how humans interact with each other, but without humans to reproduce the capitalist system in their everyday praxis of selling and buying objects and services there would be no capitalism. Such an understanding unites two concepts that have been seen as opposed to each other, with structures as absolute determining at the one extreme and humans in complete control of the social world at the other.

Sewell (1992:17) conceives structures as cultural rules,<sup>4</sup> and inspired by Bourdieu he argues that the agent has knowledge about these rules and that the rules can be applied to a wide range of cases that are not fully predictable and different from the type of context in which the rules were learned in the first place. This means that the creativity and knowledge about a

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<sup>4</sup> Sewell changes Giddens’ use of “rules” (considered virtual) to the use of “cultural schemes,” as he does not want to confuse them with publicly fixed codifications that he regards as actual rather than virtual. Still, I have used “cultural rules” when referring to Sewell to make the discussion easier to understand in its shortness.

cultural rule can make an agent capable of extending the rule to new contexts, and this for Sewell is agency. Hence, structures don't only become the boundaries for actions, as they to a large degree have been understood, they also become the possibilities. Hays (1994) bases herself on theorists such as Durkheim and Giddens when she further argues that structures are the very basis for human power and self-understanding. She gives the example of language that constrains what we can think but also provides humans with the very opportunity to think, and the spectrum of ways it is possible to think. Social structures can provide young girls with both limits and possibilities. For example, structures can provide self-understanding and have a meaning-making function when social norms about the role of a girl in society can offer identity and security of her position in the world, yet at the same time these structures might constrain what she considers possible actions for herself.

Girls' possibility to act with agency must thus be understood in relation to their context, the social structures that enable and constraints their actions. The discussion above shows that although resilient, structures are not fixed. To inquire into the complexity of the role of agents within the structures, the analysis has been informed by an integral approach, which will be discussed in the following section.

#### **4.4 An integral approach**

In the context of climate change vulnerability and adaptive capacities have been connected to the concept of adaptation. Adaptation has to a large degree focused on behavioral and systemic changes (see for example Ministry of the Environment Norway 2007). However, it is recognized that other more subjective dimensions of human reality also need to be considered when working with adaptation to climate change (O'Brien and Hochachka 2010). Both an individual subjective perspective of personal experiences (that involves intentionality, self-belief, and leadership), and a subjective perspectives of the collective; the culture, (including world views and social norms), are increasingly being taken into account (Horn 2013, Gupta et al. 2010, Esbjörn-Hargens 2010, Grothmann and Patt 2005).

The analytical part of this thesis takes an integral approach, and uses these dimensions with the intention to gain a more holistic analysis. It takes into account elements categorized within the different spheres of reality to obtain a comprehensive understanding of the adolescent girls' vulnerabilities, capacities and possibility for agency. Such an approach has been argued to fit a transdisciplinary framework, where different disciplines and perspectives can be

integrated meaningfully and with space for different methodologies (O'Brien and Hochachka 2010). There are, however, also good examples of the benefits of awareness of the multiple dimensions of reality in research that do not use a variety of methods and disciplines (Horn 2013). In order to understand the complexities of problems and phenomena, the integral approach, takes four irreducible aspects of reality into account; that of experiences and that of culture, described as subjective or interior aspects, and also as outer, observable aspects of behavior and systems. Like critical realism, it recognizes both interior and exterior dimensions of reality, as well as their individual and collective dimensions. Interior refers to subjective dimensions as intentionality, feelings and perceptions, and exterior to outer, observable physiological aspects and behavior in the singular. In plural exterior refers to systems and interior to culture (O'Brien and Hochachka 2010). Figure 1 shows these dimensions.

	<b>Interior</b>	<b>Exterior</b>
<b>Individual</b>	Experiences	Behavior
<b>Collective</b>	Culture	Systems

**Figure 1:** Overview of four aspects of reality, adapted after Esbjörn-Hargens (2010).

The two right quadrants, behavior and systems, are associated with external features of reality. The behavior dimension examines the actual and observable behavior of individuals. An example of an isolated focus on behavior has been “nudging,” a guiding of behavior towards more environmentally friendly behavior without the individual making conscious choices. In a development context it can mean the physical health of an individual, its skills and intentional behavior (Brown in Hochachka 2010). The system dimension explores systemic structures and exterior behavior of a collective, like socioeconomic systems, ecosystems, agricultural systems or food systems (Esbjörn-Hargens 2010).

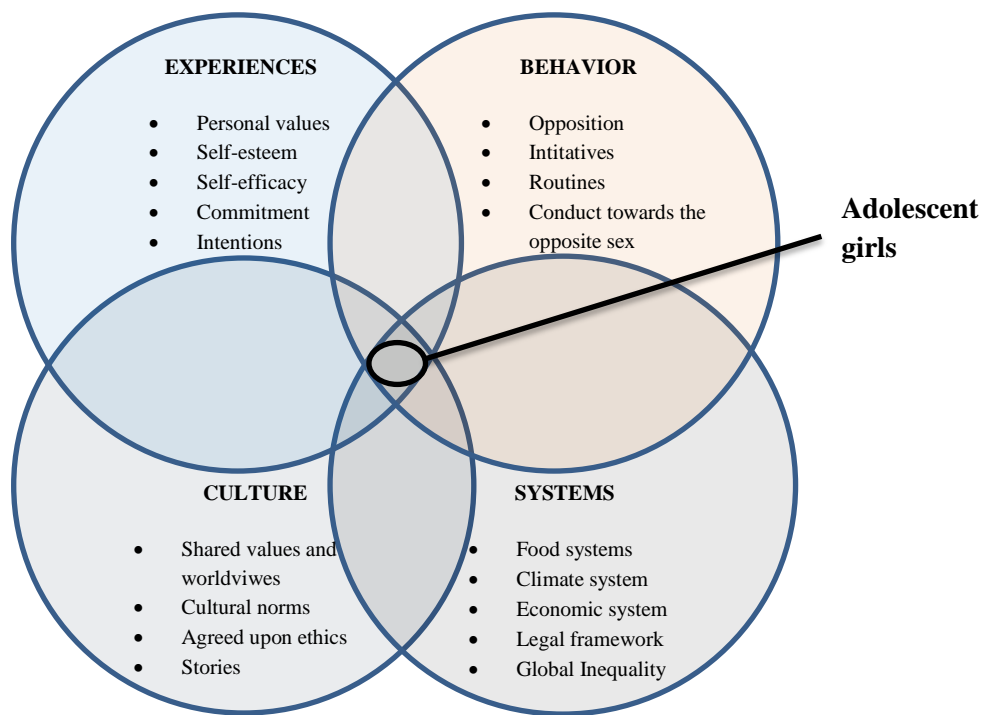
The two left quadrants examine interior aspects of reality. Personal experiences involve spiritual, psychological, emotional, and intentional aspects (Esbjörn-Hargens 2010). Personal experiences, values and understandings are a vital part of our motivation for action and

personal change is linked with social change (Hochachka 2010, Grothmann and Patt 2005, Kroemker and Mosler 2002).

Internal or subjective aspects of reality do not only have an individual dimension, the internal also include a collective dimension. The cultural sphere explores the interiority of a collective like social norms and ideologies, stories, collective values, shared meanings and world views. These are often taken for granted and go unnoticed, though they “inform our actions and decision-making” (Horn 2013:397). Consumer culture and narratives of infinite progress go almost unnoticed in the Western world as they become an integrated part of many people, while they are decisive for the behavior of or politics supported by individuals.

An integral approach acknowledges that “no reality can be based on only one set of validity claims” (O'Brien and Hochachka 2010:92), as framing fossil fuel dependency only as a systemic issue (the basis of our transport systems, economic systems dependency on fossil fuels) would be disregarding cultural aspects (consumer culture, stories of eternal growth) and personal experiences (driving and traveling as parts of self-identity, moving as part of the value and ideology of freedom) and behavior (travel habits, number of children per family). An integral approach can help to organize knowledge, check for biases and reveal blind-spots (Horn 2013).

The dimensions are not clear cut, absolute categories. They are intersecting and overlapping; they engage with each other and have mutual influence. Esbjörn-Hargens (2010) emphasizes that they are not divided into categories as “interior” and “exterior,” and “collective” and “individual,” to reinforce dualisms, but that the value of this categorization lies in its ability to provide us with a structure that can facilitate an inclusion of more of reality than current practice is including. In order to highlight this relational and intersecting feature of the dimensions of reality, Figure 2 depicts the integral quadrants as overlapping spheres of adolescent girls’ reality, in which factors that contribute to vulnerability and capacities of the girls in this study are outlined. Adolescent girls are placed at the center, where all the spheres intersect, as these are all interrelated and mutually influencing the girls.



**Figure 2:** Aspects of the different dimensions of reality illustrated as overlapping and interactive.

In the analysis I will discuss the collective dimensions; the systemic and cultural dimensions, as the “social frames” in which the girls live. This draws on the discussion of agency and social structures in the last section. I use social frames rather than social structures as I believe “frames” better expresses systemic and cultural dimensions as making up the context that creates and limits room for action, framing their existence.

The inclusion of various dimensions and perspectives is not new within the social sciences, as for example the recognition of the interaction between social structures and individual agency (Giddens 1984) or the acknowledgement of understandings of reality as different domains and the need for interdisciplinary to meet with climate change as critical realism (Bhaskar 2010). Inspiration from the integral approach, however, has been useful in this thesis as it rigorously gives a roadmap of ways to comprehensively conceive complexities.

#### **4.5 Summing up**

This chapter has discussed the concepts of vulnerability and adaptive capacity. These concepts are closely connected, as the lack of adaptive capacity is understood to increase vulnerability. Put another way; “adaptations are manifestations of adaptive capacity, and they represent ways of reducing vulnerability” (Smit and Wandel 2006:286). The discussion of adaptive capacity, understood as the range of possible adaptive actions, has at the individual level given special focus to agency as a capacity, noting the place of agency within social

structures. The discussion above constitutes the framework from which I will analyze young Salvadorian girls' relation to climate change and their potential agency, looking at both their vulnerability and their emergent and absent capacities.





## **5 Methods**

This chapter gives an account of the methods used in the thesis as well as discussing the most important choices made during the research. By doing this I seek to enable transparency of this study so that the reader can judge its credibility. The research process constitutes of decisions made from the very start of choosing the topic until the end of the writing process. It has been an imperfect process, as research necessarily is, because alternatives in choices and dilemmas have its advantages and disadvantages. I have tried to balance this by choosing what I in each case believed was either the best for the research, or the most ethical.

### **5.1 Qualitative research and case study**

This study has been carried out as a qualitative case study, based in two rural communities in the municipalities of Arctao and Nueva Trinidad in El Salvador. The methods used to gather information have been interviews with adolescent girls and other community members, focus groups with girls and observation during two months of fieldwork in June and August 2012.

Qualitative research is used when seeking an in-depth, detailed and ‘thick’ understanding of a phenomenon. As the intention of this thesis has been to explore adolescent girls’ experiences and perceptions of climate change and variability, an in-depth qualitative approach was considered best fit to obtain meaningful information. The qualitative approach is well suited for more inductive research as has characterized this thesis with its explorative starting point, as inductive research uses “evidence to formulate or reformulate a general idea” (Ragin and Amoroso 2011:16). With a qualitative approach the researcher is able to explore unexpected aspects of information, without being tied by the strictness necessary for a quantitative approach.

A case can be described as an example of the phenomenon under study. More concise Gerring (2007:19) defines it as “a spatially delimited phenomenon (a unit) observed at a single point in time or over some period of time.” A qualitative case study will, unlike a quantitative study, not be able to make statistical generalizations, that is, it cannot attribute findings and explanations to be valid for a whole population. However, it can make theoretical generalizations that show the transferability of the case to other similar cases or phenomena, through contributing to the development of theory, that is neither too abstract nor too case-specific (Baxter 2010).

The research objective covers underlying goals of qualitative research in social sciences, such as giving voice to marginalized groups, interpreting culturally and historically significant phenomena, and advancing theory (Ragin and Amoroso 2011). Though not all goals were explicit parts of the research project, they all came to be incorporated during the work.

## **5.2 Going into the case**

In the beginning of the research, a literature review of adaptation to climate change on a local level led me to the under-researched theme of young girls and climate change. As the least-developed countries are expected to suffer the most from climate change impacts but with the least capacity to deal with the changes (Huq et al. 2004). Therefore, I wanted to investigate a place in the global south where climate variability already is a risk to the well-being of people. With a good level of Spanish and the fortune to get support during my fieldwork from the local Salvadorian NGO Centro Bartolomé de Las Casas (CBC), El Salvador seemed a suitable place for the research. Many students report benefits from being backed by an NGO (Hesselberg 2012), and especially when researching a group that could be difficult to access, and in a country known for its high level of crime, this seemed particularly important. However, collaborating with a local actor also implies that the actor can influence the research process. Being introduced by an organization and by a staff member to the communities can have influenced my meeting with the communities and my perceptions. I benefitted greatly from the network and good reputation of the CBC, but I was also aware of some conflicting issues between the organization and parts of the population. The information told to me by community members could have been colored by how people wanted to represent themselves and their communities to the CBC, or whether they saw potential in future benefits by the work of the organization. Perceptions held by the CBC staff member that showed me around can have influenced my presumptions and understandings, as I was told a great deal about the area and the people we met. These stories were a selection of what the staff member's impression of the area and the people we met, and what he considered important.

CBC had recently completed a research project on local understandings of climate change adaptation in the municipalities of Arcatao and Nueva Trinidad in the department of Chalatenango, El Salvador, (Hochachka 2012), and they had collaborated with a student from the University of Oslo (Kvamsås 2012). Their work provided me with an understanding of the local climatic reality of the people. The good reputation and the network of the CBC in the

area would be important for the investigation. This gave me a well-funded argument for choosing Arcatao and Nueva Trinidad, El Salvador as the place for conducting the research. Even though Hesselberg (2012) warns about investigating in areas recently visited by other researchers, since repeated interview-visitors might bother people, this project depended on knowing key persons since the group under study was not easily accessible. In addition, this zone is known for being safe in a country with exceptionally high crime rates. As I was to move around on my own, this was also of great importance to the choice of place.

It is important for a researcher to be familiar with the context where the research is being done (Hammersley and Atkinson 2007). Since it was to be my first time in El Salvador I read extensively about the country, and talked to Salvadorians in Norway in order to increase my understanding before the fieldwork. The first two weeks of the fieldwork were spent in San Salvador with Centro Bartolomé de Las Casas, getting to know their work, visiting museums central to my investigation, and conducting interviews with NGOs working on themes related to my research. At the time I was unsure if the weeks in San Salvador were a good use of time, but it proved fruitful when I came to the countryside, knowing at least some of the local vocabulary, traditions and crops. This made me slightly less ignorant and increased my ability to start the communication with the informants.

In the field I was introduced to two communities in the area by the CBC, and I made the decision to do research in both of them. By researching two communities I did not seek to do a comparative analysis, but rather to broaden my perspectives, getting insights into different realities of girls. For this type of inductive fieldwork, where a relationship with the communities and the girls was necessary but time consuming, this was a difficult decision due to what appeared to also be lack of time in the field. However, research often involves a trade-off between breadth and depth (Patton 2002). Doing fieldwork in both communities and meeting more girls increased my understanding of the uniqueness and commonalities of the communities, which is the context in which the girls lived.

This project has been based on the methods of interviews, focus groups and observations. Before it is possible to start interviewing, one has to get accepted in the communities. The following will give an account of this process.

### **5.3 Getting access and finding informants**

Gathering information is hard work, and getting access to the informants is half of the work and often very time consuming. It is also one of the most important parts; without access, no data. Hammersley and Atkinson (2007) explain that gaining access is a process where both inter- and intra-personal skills and capacities are necessary, and that the access is a continuous process that often starts with being accepted.

The first week in the fieldwork area was used as a presentation round. Together with a staff member from the CBC and several others, we visited the mayor, the municipal council, central ecclesiastical persons, local families and important persons in both communities. I also got acquainted with two women that became indispensable gatekeepers to each community. The formal introduction round by the CBC staff member who was well liked and known in the area, as well as the CBC's knowledge about with whom I had to speak, was essential for the success of the fieldwork, and I benefitted greatly from their local knowledge built up over a long time. Being accepted by well-respected men as the priest and the mayor, was a green light to start the investigation and gave me trust and acceptance among the local population.

Part of the effort to be accepted consisted of conscious actions such as moving around the same way as the people in the zone; by bus, but mostly by foot early in the mornings to avoid the heat. I also made sure to use local place names to decrease the impression of me as very different from them, and I discovered that the detail of using a local bag as my purse was a good conversation starter, as well as a way to express respect for their culture.

Also, being a woman was determinative for the success of the research and for getting access. A man would have encountered more skepticism studying young girls, and less trust among both adults and youth due to gender roles.

#### **5.3.1 Gatekeepers**

In each community I met a woman well-liked and respected by the girls and the community, who served as my gatekeeper. This was important in at least two ways. The first way was explained by a man from a neighboring community at a bus stop who noted that if it had not been for the fact that I had stayed with my gatekeeper there was no chance that I would have been able to get to talk to the girls, particularly due to their shyness and social position. As my gatekeepers were respected, their decision to help me with my fieldwork made me trusted both by parents and by the girls. I met no skepticism from the parents.

Second, it was important to mobilize the girls and make the practical arrangement for interviews and focus groups. In both communities my gatekeepers asked me “how many girls do you want?” and whether there were specific features about the girls I wanted to talk to. Hammersley and Atkinson (2007) give examples of gatekeepers taking too much control and wanting surveillance over the investigation, and it made me uncomfortable to let the gatekeepers take control of whom I met. However, in a practical sense this was the best- and probably the only way to do it, as my fieldwork was limited in time, and I had gained trust from the community due to my relation with the gatekeepers. My first attempt to make appointments for interviews was met with a wall of silence in both places until the gatekeeper took control and planned the meetings with the girls. A few attempts of creating a snowball effect, trying to get in touch with girls with special features through the girls interviewed, did not lead anywhere. Especially with the short timeframe of the study, gatekeepers were the option to follow.

However, the influence of the gatekeeper on who became my informants was decisive at least in the low-lying community where the gatekeeper was the local teacher and one could expect her to have the most confidence in girls that behaved well at school, and perhaps wanting to present me to these girls. This possible influence became clear as one girl explained that: *Most of the youth don't like to go to the religious acts*, while almost all my informants mentioned their faith in God and their closeness with the church. This can have affected the information as perspectives of girls that not behaved well in school are not represented.

In both communities I first met with all the girls as a group explaining about the study, giving them time to think about whether they wanted to participate. In one of the communities we also played games and made kites to get to know each other. This was a suggestion from both the CBC and my gatekeeper as they portrayed the girls as afraid and shy. In the other community we went swimming in the river with the gatekeeper, and I believe these activities contributed to a more relaxed relation with the girls.

### **5.3.2 The role of the researcher**

In terms of what role to engage in when conducting research with children, Fine and Sandstrom (cited in Cope 2009:36) identify the supervisor, the leader, the observer and the friend as the most common ones, preferring the friend role because that role in particular treat the informant with respect, acquiring insight in their social world. I tried to take on the role as

“the researcher friend,” showing respect and an inquiring attitude, aiming to get at the same level as the girls. However, at times I felt uncomfortable, remembering the feeling from high school trying to be part of a group. Taking on the friend role was challenging as my role was prejudged by my age and origin. Although I managed to appear less ‘adult’ and with less authority than local women my age, due to my enthusiastic and inquiring nature, I was still at another level than the girls. However, being a foreigner made me interesting and not so easy to categorize, and provided an opportunity to come closer to the girls. At the end of the focus group in the high-lying community, one girl expressed amazement that although I came from so far and our acquaintance was recent, we were able to have fun and communicate as if we had known each other for a long time. My lack of knowledge of the local vocabulary and the distinction between their and my dialect, contributed to a position of a “less powerful adult,” as I at times did not understand the girls, and they flowingly became the experts in something that I was not (Corsaro and Molinari cited in Cope 2009:37). This contributed to provide a distortion in the unequal power balance between the adult, foreign researcher and the young informant.

### **5.3.3 The informants**

Qualitative methods give the possibility to investigate a phenomenon in depth and approach it from different angles. In addition to the girls’ perspective I was interested in other actors’ perspectives in order to get a broader understanding of the situation of the girls. During the fieldwork I conducted interviews with 14 girls between the age of 13 and 18, and two boys in this age group. The boys provided complementary information on gender roles and other subjects about the youth. Although the age group set for the investigation was girls between 12 and 17 years old, the actual age group became 13-18 years old. One girl revealed in the interview that she had actually turned 18 a few months earlier, and benefitting from the flexibility of a qualitative approach, I accepted her as an informant. No informants with the age of 12 were interviewed.

Five of the girls’ mothers were interviewed, one in a double interview with the grandmother, and also a local teacher from each community. I also talked to two women in their early twenties, the environmental representative in one of the municipality councils and representatives from three NGO’s in El Salvador; the environmental organization UNES, the children’s organization Plan International El Salvador and the women’s organization IMU. In addition, I interviewed a representative from the Ministry of Environment. Some interviews

are not actively referred to in this thesis, but they have nevertheless been important to gain the perspectives and understandings obtained. In addition to the interviews one focus group was conducted in each community with the same girls that had been interviewed, with the exception of two girls that did not want to be interviewed but who joined the focus group. While the key informants were the girls, other informants provided input enabling me to construct a deeper comprehension of the reality of the girls.

Mitchell et al. (2009) underline the fact that in participatory processes with children, the ones who participate are often the ones who have the most resources to do so, and they are often not representative for their communities. This is an issue of importance in this study as I am aware of several girls that had the offer to participate both in interviews and in the focus group but who did not. Amongst the ones who declined to participate were a girl who had been pregnant and another girl who had moved in with her boyfriend's family. Also, one girl under strict control of her parents was not permitted to participate in the study. These girls are not represented in the group of informants, but their features are relevant in studying adolescent girls' vulnerability and capacities, and will nevertheless be discussed in the analysis. Accordingly, some girls' views and voices are not being heard, and these girls might be among the most vulnerable. The reader is encouraged to have this in mind during the reading of the analysis.

#### **5.4 Interviews**

The purpose of an interview is to obtain in-depth information about the informant's experiences, opinions and perceptions (Thagaard 2003:83). Semi-structured interviews were used. Themes I wished to cover were prepared, but room was left for changes in the questions, and openness to new themes that could emerge during the conversations. In line with the purpose of the research and my situation as a new researcher, the semi-structured interview had its advantages as it enabled flexibility to explore what the informants' stories without being too bound to pre-written questions. Still, it felt safe to have questions prepared, especially in the beginning, and as I became more comfortable with the interview situation during the fieldwork, the flexibility was increased and used to a fuller extent.

A recorder was used in almost all of the interviews so that the records of the interview would be as complete as possible (Dunn 2010). On a few occasions the adult informants clearly became nervous because of the recorder, and I took notes instead. The girls did not seem to

care much about the recorder, however, it did give the conversations a more formal atmosphere, which is one of the disadvantages of recording (Thagaard 2003). Notes were also taken as soon as possible after an interview to record immediate reactions that could be compared with the transcribed interviews later. A great number of the interviews were transcribed, and the ones with less direct relevance were listened to, transcribing only the most important parts. This was an extremely time consuming process, but necessary to get an overview of the material.

The interviews with the girls varied in quality. They were not used to the interview situation, and one girl expressed that the only time she had ever had such a conversation *between two* was with the priest before confirmation. Some were nervous and wanted to answer correctly, therefore I put great effort into make the situation as relaxed as possible. One strategy used, was to talk a great deal myself during the interviews in order to turn the interview into a conversation, and not a one way questioning. Since informants tend to respond in a way that creates a positive image of themselves for the researcher, Thagaard (2003) urges the researcher not to expose his or her values. My active part in the conversations may have affected the information, as the girls may have directed their answers according to their perceptions of me. Still, without both the interviewer and the informant sharing, I believe the richness of the answers would have been much less, as was the case with the first interviews. However, I have been conscious of this working with the data. In addition, I took care to always give accommodating feedback on the responses of the girls to show acceptance and engagement for what was said.

Strategies to secure the information can be to ask the same question from different angles, or try out immediate interpretations by repeating the answers in a different wording. This was a positive experience as some interpretations got positive feedback confirming the answer, while others resulted in corrections or further explanations. And so, the interview situation could also have been a space for the girls to reflect on their situation, and gain new insights, as suggested by Thagaard (2003).

The interviews started with concrete questions about their household which the girls would easily be able to respond and make them less nervous. Later, opinions and perceptions became central themes of the questions, which for some girls were difficult to answer. Many were not used to being asked about their personal opinion on more abstract issues as their wishes for the future, and thus were unsure of how to answer.



## 5.5 Focus group

The focus groups were useful as they generated a lot of information. One focus group was conducted in each community, with mostly the same girls that had been interviewed. Focus groups are a sort of group interview where the interaction between the participants is a key feature (Cameron 2010). The synergies, disagreements and misunderstandings are valuable information for the researcher. Qualitative research can involve both patterns of similarity and differences (Ragin and Amoroso 2011), and focus groups can give a good perspective on these as the informants are interacting and can back each other up or disagree. Leinbach (cited in Cameron 2010:157) argues that “the main advantage of focus groups is that both the researcher and the research subjects may simultaneously obtain insights and understanding of particular social situations *during* the process of research” (emphasis in original). This was a pronounced aim of the focus groups before the fieldwork as the intention was not only to “extract information” but to enable the informants to widen their insights as well.

Focus groups allow children to be the experts in what is discussed, and so Hennessy and Heary (2005) argue that a child participating in a focus group should not feel questioned by the adult, rather the child should share experiences. Some one on one interviews gave me the impression that there were too many questions for the girls, as short and incomplete answers were often followed up with a *porqué?* The focus groups had a different dynamic which enabled many of the girls to express themselves and discuss without the pressure of having to answer the next question as well.

The focus groups were engaged around a series of games and exercises to see what and how the girls were thinking and explaining their worlds. The methods were inspired by participatory action research exercises aimed at children, so called “person friendly” techniques (Punch 2002), since I was unsure of how comfortable the girls would be with longer group discussions. Such methods can allow the participants move away from the role of passive research subjects and become an active part of the research as they conduct their own analysis of the issues (Tanner and Seballos 2012a). Many exercises depended on pre-established categorizations. While the categorizations could be analytical tools for the girls, it also meant that to a certain degree the data was generated based on the background of my own classifications. However, the exercises generated interesting data as the girls at times used the

categories differently from what I had expected. The girls were for the most part also given the option to expand or limit the categories, an option that was used on some occasions.

Interestingly, the two focus groups had different success. The girls from the high-lying community engaged with great enthusiasm in the exercises and seemed well connected to each other and accustomed to cooperate. In contrast to this, the group in the low-lying community was characterized by insecurity, silence, clear disagreements on subjects, and from some participants an unwillingness to contribute. This could have different explanations, and probably it was a combination of various factors. The girls from the high-lying community walked for one hour, before they came to a house where the focus group was conducted and were accompanied by the gatekeeper, who was a respected young woman from the community. In addition, a young Salvadorian woman from the CBC helped out during the focus group and was of great support. Importantly, the girls from the high-lying community all played football together, which was an activity that trained them in collaboration and expanded and reinforced their social network.

In the low-lying community the focus group was conducted in the community house, with distractions outside, as the school break and people passing (and entering) the house. The young woman from the CBC was not able to assist, nor was the gatekeeper present, their presence might have created a stronger incentive for the girls to take meaningful part of the group. Personally I felt more nervous in this community, which may have affected my performance. Although most were good friends, these girls did not show the same level of trust, relational tightness and collaborative ability as the girls in the high-lying community. The girl that the rest of the group looked up to showed little interest in participating, and thus made the rest of the girls insecure about their role. This shows how focus groups also can inhibit some participants from making a contribution, as argued by Lewis (in Hennessy and Heary 2005). At one point I considered sending the dominating girl out of the group, but decided not to in order avoid a teacher role. Still, the concern for this role was put into perspective as the only really successful exercise in this group was when the girls were placing risks into a diagram, and, due to a lack of initiative from the girls, the exercise turned into a teacher-pupil situation. The girls may not have been accustomed to equal power relationships, or cooperating the way the focus group was planned. This suggests that a distortion of the normal power relation between adults and youth in groups can potentially create insecurity and may not always be beneficial for the investigation.

One challenge with focus groups is that large amounts of data are generated at the same time, which creates difficulties in discussing in depth all aspects that emerge during the focus group (Punch 2002). This was the case in the groups conducted, where many interesting issues that emerged could have been explored in further detail. It was also a question of how much time to use on each theme and how many themes to cover, a typical breadth- depth dilemma. Looking back, the groups' could have benefitted from fewer exercises with a deeper exploration of each theme. Still, each exercise provided valuable information.

## **5.6 Observations**

Participant observations were also an important part of the research, both as a way to better understand the context and as a way to gather additional information. Observation is a suitable method for studying relations between persons as they are observed in real situations responding to other persons and their surroundings (Thagaard 2003). Some events were especially rich on information during the fieldwork, for instance a community party in the low-lying community, a "Day of the Youth" festivity in a nearby community, and the girls football match and practices in the high-lying community. Living in my gatekeeper's house in the low-lying community also provided solid contextual and tacit knowledge about the daily life in the community, observing women's work and situations first hand. Field notes were kept from these observations and have been a supplement to the interviews and the focus groups. My understanding of perspectives about youth were for example inspired by the speeches at the "Day of the Youth" and informal conversations. Kearns (2010) warns against a bias of observational research, believing only what one sees, and disregarding less visible factors such as class- or internet relationships. By making observations one of various methods this problem can be reduced, as interviews could provide different information contrasting such narrow observations.

## **5.7 The process of analysis**

The analysis of the data starts while gathering it, as the researcher makes immediate interpretations of the information (Thagaard 2003). Once the interviews were transcribed, I started a more systematic analysis by dividing the transcribed interviews into broad thematic categories. Key features of each informant were also gathered in order to compare the stories of the informants. Patterns of similarities and deviances in the informants' explanations were

identified in thematic categories. Important features within the thematic categories were then categorized according to the dimensions of personal experiences, behavior, culture and systems, discussed in the previous chapter. The categorizations enabled me to see connections and give meaning to the information.

Deduction and induction often work together in an interplay in the scientific method, known as retroduction (Ragin and Amoroso 2011). Retroduction has characterized the analysis of this study through shifts in focus between theory and empirical information. The information is interpreted through the theory, while what is found in the empirical information is important to establish a theoretical framework fruitful for analyzing the empirical material.

## **5.8 Ethics when researching with children**

Ethics can be described as “the application of a system of moral principles to prevent harming or wronging others, to promote the good, to be respectful and to be fair” (Sieber quoted in Morrow and Richards 1996:90-91). This study was conducted with the approval of the Norwegian Social Sciences Data Services, though this in itself does not ensure the ethic of the study.

Research on children poses increased ethical considerations, and though ethical guidelines for research on children exists, these are considered insufficient as they do not provide guidance in the real life, practical dilemmas and situations that the researcher will encounter (Morrow and Richards 1996). Norwegian guidelines for research with children are limited to the same guidelines as for adults, though with emphasis on the special vulnerability of children in a research situation (De Nasjonale Forskningsetiske Komiteer 2006).

Informed consent is highlighted as special for children, based on their greater vulnerability in the situation of accepting participation, since they might not understand the information given or understand what participation means (Morrow and Richards 1996) and so. Norwegian guidelines on ethical research require consent from the parents when the child is under 15 years old. (De Nasjonale Forskningsetiske Komiteer 2006). Because of the high age of the girls in the group of children, I considered them competent to make the decision to participate. However, to be sensitive to cultural norms I wanted consent from the parents of the girls, preferably both mothers and fathers to ensure that both felt included in what their daughter was doing. This proved difficult as the fathers were working in the field at daytime when I

visited the houses, but not obtaining their consent did not pose any problems. The girls had informed their parents before I met them. In both communities I first met with all the girls and presented the project and its purpose. I made clear that it was voluntary to participate and emphasized that they could leave the research project at any time. Involving the girls in the decision of whether they wanted to participate or not could also have been “a useful experience, giving children the feeling of control over their own individuality, autonomy and privacy” (Weithorn and Scherrer quoted in Morrow and Richards 1996:95).

The information given at the meeting was repeated before each interview with emphasis on their right to not answer questions. In practice, this might have created more skepticism than trust as I believe it made them wonder if we were actually going to talk about the rather harmless themes that I had just outlined for them, of which assurances of privacy and rights seemed strange.

Constant reflection on the power relations between the informant and the researcher is important. Age difference and the different social positions of children and adults add another layer to the often unequal power between informants and researcher. Children and youth are used to being under the authority of adults, and are often told what to do, as can be seen with the girls’ passivity when asked when and where they wanted to do the interviews. Children are often used to pleasing adults and might fear negative consequences to what they say, and thus Punch (2002) argues for the importance of a relationship of trust with the child. Extra care needs to be taken in reflecting about the child’s best interests.

The potential harm an investigation can have on its participants does not finish by the time the fieldwork is done. This is especially important with children and young people as they have less experience and may lack an understanding of how much they want to reveal of themselves and their family. They might not completely understand how what they say can be used and the consequences it could have for them. Anonymity of both informants and the communities is therefore used in this thesis to avoid recognition of informants, and potential harm or future discomfort created by this study. Nevertheless, anonymity is a balance between protection of the informant and lack of acknowledgement of the informant, and can create difficulties in transparency and credibility of the research (Alver 2009). In this case, however, the concern for protecting the girls and their communities has been given the most weight as the thesis will be distributed in El Salvador as well, touching themes that can be considered sensitive for both the girls and the communities.

An ethical dilemma that occurred during the fieldwork was the indication from one girl that she experienced domestic violence. Though a widespread problem in El Salvador, I consciously did not inquire about domestic- or sexual abuse in the interviews, as I was not sure of my abilities to take care of the girls in such conversations, and thought it better suited for health personnel or other professionals. Norwegian guidelines for research with children states the duty of the researcher to give alert in cases where abuse is discovered (De Nasjonale Forskningsetiske Komiteer 2006). The girl did not follow up on invitations to talk more about the subject that she had brought up, and I considered it unethical to pressure her on the subject. She further indicated discussing her father's alcoholism with an adult outside her home as out of place. In the small community it was well known who was drinking. In the culturally different context of the girls, with a child protection system not as well-functioning as that of Norway, I considered that going further with the suspicion of violence could potentially cause more harm than good, doubting that any satisfactory solution to the situation would be found. I thus decided not to take action on the issue. Even though I did not feel that this was an adequate solution, an intervention from my part would have been more unsatisfactory.

During research with children and youth there is a risk of exposing the informants to discussions that can cause stress and give a feeling of disempowerment when difficult themes are treated (Tanner and Seballos 2012a). Discussing themes such as food insecurity and risks, this was a challenge. This was approached by having a solution-perspective on many of the issues. For example, the "beneficiary race" exercise in the focus group only concentrated on the benefits while avoiding of environmentally damaging practices, but not the risks caused by the practices. The interviews also dealt with possibilities of what individuals and the community could do, and what the girls were good at, after talking about vulnerability in order to create a sense of agency and possibilities.

There are many ethical considerations to be taken into account when conducting research with children and young people. However, Tanner and Sellabos (2012a:61) highlight the right of children to participate, arguing that engaging children in research can be regarded as "crucial in empowering them as individuals and members of civil society." The girls in the two communities were considered shy by people around them, and I was warned by the difficulties I would meet in getting them to talk. The experience of being part of this small investigation, where their opinions were asked for and their voice sought, could have been an encouragement of their agency. As one girl expressed at the end of a focus group: *I really*

*liked that all of us gave our opinions.* And so, Morrow and Richards (1996) suggests that excluding children from research because of the many ethical questions arising, is an ethical issue in itself.

## **5.9 Credibility**

Ensuring the quality of qualitative research is a complicated issue. Trustworthiness is a central concept for judging the credibility of a study. Trustworthiness includes transparency that consists of the openness about the perspectives and position in the research (Mansvelt and Berg 2010) as well as giving an account of the research process. Though the information obtained from children and youth often have been considered less trustworthy, Mayall (cited in Morrow and Richards 1996:99) argues that the same issues of trustworthiness can be applied to adults. One way to try to secure the quality of the information is through triangulation. Triangulation means the “checking of inferences drawn from one set of data sources by collecting data from others” (Hammersley and Atkinson 2007:183). Method triangulation is used in this thesis. Inspired by the advocacy for a balance between traditional and innovative methods when working with young people (Punch 2002), I use the variety of methods described in this chapter.

The use of terms as credibility can be difficult in qualitative research. This thesis tries to follow Geertz (cited in Mansvelt and Berg 2010:348) suggestion of using a ‘thick’ description with the analysis so that the reader can get an in depth understanding of the context, reasons, motivations and understandings before reading the interpretation.

## **5.10 Summing up**

This chapter has given an account of the choice of methods and the process of this study. It has contributed to transparency by presenting important choices that were made, my position in relation to the informants and ethical dilemmas encountered during the research. In reflecting on these issues this chapter has intended to give the reader insight into the research process, providing the credibility of this study.

## **6 Girls' vulnerability to climate risks**

Climatic variability and risks affect girl's vulnerability in many places. Rural communities are especially vulnerable as much of their livelihood is based on agriculture and are by this directly dependent on climate and weather conditions. In the traditional vulnerability perspective women and children are highlighted as especially vulnerable. This chapter inquires into their presumed vulnerability by discussing this in the empirical case of young girls in two communities in the municipalities of Arcatao and Nueva Trinidad, El Salvador.

In order to understand girls' relation to climate risks, identification of risks in general were worked on in focus groups and through one-on-one interviews, enabling me to place climate risks into a wider context of risks experienced by the girls without, presuming their greater worry about climate. This chapter starts the analysis of the data collected in the field as it examines girl's vulnerability to climate risks, responding to the first research question: *To what extent are girls vulnerable to climate risks?*

This chapter will address vulnerability with a focus on climate risks, while next chapter will look at features of vulnerability within the girls' wider societal context. Although the context of vulnerability is important, adaptation involves an additional consideration of vulnerability towards specific climate risks (Eriksen and O'Brien 2007). This chapter elaborates on girls' proper conception of risks. Inquiring about girls' problems as individuals made them feel awkward, and they expressed difficulties in responding to this. Most girls, however, had a good idea about their families' worries, which they sheared. Both individual and household risks will thus be discussed. It is important to comprehend the girl's view since understandings of risk can differ between analysts and people at risk, as well as between different groups in a community (Heijmans 2004).

### **6.1 Food insecurity: "It's always about the crops"**

Contrary to warnings from community members, that the girls might not be interested in climate risks, several girls identified climate risks as the most pressing issue for them and their families as it threatened their food security. Many girls expressed that they shared the worry with their families. A thirteen year old girl explained the difficulties with the weather when she described her family's biggest problem: *It's always about the crops. The biggest challenge is when it rains a lot, and often. Sometimes when it rains a lot it's good, but other times not. [...]. It's always the water. Often there's not enough [water] for everything. As*



self-sufficient farmers the weather was of great importance and the variability in the weather the past years had led to several crop failures, both due to drought and to excessive rain. This was felt deeply by several girls, although their work mainly consisted of domestic tasks inside the house such as cleaning and cooking, and grinding maize at the mill. A girl of 15 explained a concern to her family:

Girl 15: *This...the lack of rain.*

Interviewer: *Aha, the lack of rain?*

Girl 15: *Yes. Because of the lack of rain there is much food scarcity*

The failure of crops could lead to food shortages in the households, leaving those families with economic resources with the option of buying food, often at a high price. Those with less purchase power had to reduce the variety or quantity of their diet. Another thirteen year old girl recalls a recent crisis:

Girl 13: *Two years ago there were quite a lot of shortages.*

Interviewer: *And how was that?*

Girl 13: *Well, there was rationing on a lot of things... there was less to eat.*

While some girls noted the effects of bad yields directly on the food supply, others did not conceive this as an issue to worry about. Some girls denied that they were concerned with agriculture and the weather. Differences in perception of the importance of weather became especially clear in the focus group in the low-lying community when the girls together categorized earlier identified risks according to frequency and impact. They agreed upon the high frequency of the risk “rain and lack of rain affecting the crops,” but openly disagreed on the strength of impact as one girl insisted on medium impact while another insisted on high impact. Low impact was also suggested, and this was the only time in both focus groups where perceptual differences were directly pronounced. This suggests distinct experiences of crisis among the girls. While some had experienced periods of rationing and decreased food supply, others reported that they had never been in crisis. One girl stated that *Well, we say that the climate affects all of us.* Although this was true to the extent that drought would kill all maize plants equally, the contrasting experiences of the girls suggests a difference between the households’ ability to cope with failed crops and crisis. Though all households could be considered poor, situations of the households could vary due to size of land they owned, access to off-farm income, family composition and quantity of remittances from

relatives. Different perceptions can also be attributed to girls' different involvement in the household economy. A combination of these explanations is also likely, as girls in especially marginalized families took a greater part in the household economy.

Unequal food distribution in families in crises has shown to disfavor girls (Bartlett 2008). This was not found in this research, and girls emphasized that food crises affected boys and girls equally. Although not found in this study it does not exclude the possibility of it occurring.

## **6.2 Economy: “Everyone does their own laundry here”**

Agriculture was the basis for most household economies and was also an important income source as the surplus was sold and the household economies were therefore affected by the success or failure of the crops. Failed crops were for example reported to affect the ability to pay school fees, as will be discussed later. The economy was identified by several girls as the most pressing issue for their family, and it was a multifaceted problem with many factors affecting it. The labor force was highlighted as an economic challenge by one girl:

*Well, I don't know, maybe that my father can't work [due to him being sick]. Because when he could work, they [my parents] besides working in the maize and bean fields, went all over the place. Buying things and later selling them. [...] This way one gets more money. But they can't do this anymore because of the illness.*

A 17 year old girl showed great involvement in the pressed family economy as she expressed her concern about the input cost of the agriculture. Her family depended on rented labor to do the work in the field, as besides a 4 year old boy, there were only women in the household.

*The difficult thing is to pay the lad and everything, because there is not a day that we don't have to pay him. There are lots of expenses in the maize field. You have to buy poison [pesticides], fertilizer... and a bunch of things! And you have to pay the lad. And perhaps if you don't have the money, you have to look for a way to borrow it to be able to pay him. Because he needs the money.”*

For this girl's family, as for many, remittances contributed greatly to the economy. The rather frail mother explained the dependency on her son in the United States for paying the man working for her: *I wouldn't manage to pay the lad if it wasn't for him [the son] helping me.*

*Tell me, with what would I pay him?* All the girls had close relatives that had been or were in the United States, and who sent remittances that provided the families with income and a buffer in difficult times. It could also enable education, as one girl reported that her high-school costs were partly covered by remittances from her brother in the US. Yet, dependency on remittances is not without difficulties. The mother quoted above commented on the lack of work in the United States and the little money she was receiving lately. The dependency makes the households vulnerable to external shocks as during the financial crisis when remittances to El Salvador dropped with 8.5 percent in 2009 as the unemployment rate of Hispanics in the US increased considerably (Acosta et al. 2012). However, remittances in Vietnam have shown to be able to enhance resilience as it can provide risk spreading, but at the same time increase social inequality for those without access to remittances (Adger et al. 2002).

Some additional income sources were also available, as working in the fields of others, cooking the school lunches, driving a truck, selling traditional food on Sundays, growing cucumbers to sell as snacks or importing soda to sell in the community. Still, employment opportunities were scarce. One woman explained: *It is not like in other countries where they'll pay you even if it is to clean their cloths. Here no one pays for this. Everyone does their own laundry here.*

The economy was seen to affect the households, and focus group discussions confirmed the perception of the economy as a challenge for the families by many girls. Economic problems were complex and could be affected by household composition, off-farm work, agricultural input, as well as climate variability.

Several girls directly identified climate as one of the biggest challenges for their families, or indirectly through its affect the economy and livelihood. This suggests a vulnerability to climate risks for the community in general, hitting some household especially hard. It also highlights the differences between what the girls' experience as problems.

### **6.3 School attendance: “Those beans they sell to give me money for the school”**

Vulnerability has so far been discussed in relation to the household, but there were also ways in which the girls reported to be affected as individuals by the climate. In the high-lying

community most children quit school after sixth grade as this was the highest grade offered in the community. High school could either be taken in the village of Arcatao, an hour's walk from the community, or at a Sunday school based on homework during the weekdays in a village further away. Although requiring school fee, the Sunday school seemed to be preferred as the mothers were reluctant to let their daughters walk alone to Arcatao, and the distance seemed too long for the girls to want it. Being in Arcatao all weekdays would in addition take away time from domestic work, and a girl from a particularly marginalized household explained how her family would not be able to afford her lunch expenses if she was in Arcatao every day. The only informant in the high-lying community who went to high school was an 18 year old girl. Talking about the failure of the bean crops the previous year, she explained how school attendance at the Sunday school depended on the economy of the family, *It affected me a lot. Because those beans they [my parents] sell to give me [money] for the school. And right now they don't have anything to sell to give me money for school. We're working on this right now, to see how we work this out.*

In this case it was the girls' younger brothers, 13 and 15 years old, who were the ones working in the field as their father was sick. The expected surplus of their work was sold to pay the sisters school fee. As the family's livelihood depended upon the labor of the two boys it would be difficult for her brothers to continue education after 6<sup>th</sup> grade, and it was reported that boys were often tired and less interested when going to primary school since many had been working in the fields before going to class. This poses the question of whether the situation of her brothers actually makes the brothers more vulnerable, as their access to education was somewhat limited, while their work was paying for their older sister's school, developing her capacities and expanding her future options. The gendered division of labor can in this sense be understood to have the potential to enable the development of girls' capacities, while limiting that of boys.

School attendance had also been directly prevented due to the weather. A girl from the low-lying community explains that she could not attend classes at her school in a nearby village for nearly a week due to heavy rain: *The climate is a bit disordered. Because last year a whole week went by when it was raining all of the week. It never stopped raining, and one couldn't go out, because it was raining all the time.*

#### **6.4 Water: “It’s better this way”**

Freshwater resources are vulnerable and could potentially be strongly impacted by climate change (Bates et al. 2008). As in many places in the world women had also been responsible for the water in the communities I visited. In the low-lying community they had lived with running water in the houses for some while. In the high lying-community however, they only acquired access to water in the houses a few months before the fieldwork was conducted. *It’s better this way, because we don’t have to go that far to clean the clothes, and then in the summer we don’t have to get up that early to fetch water*, explained one of the girls. In light of both development and climate risks, this is a project that benefits the whole community and especially women and girls that have the responsibility for water. It frees time for the women and girls, especially in the summer when there is less water, as well relieving them of the physical burden of carrying heavy buckets.

#### **6.5 Physical distress: “It’s noticeable”**

The girls also reported physical discomfort like exhaustion and headache due to heat. This was especially reported in the low-lying community which was considered hotter. One girl in the low-lying community, aged 13, explained her experience with the heat; *They [my family] say that the climate is changing and that quite some time ago it was less hot. They say that one endured more. Now, one almost can’t stand to be in the sun. And we are accustomed [to heat]! (...) Before, the rainy seasons have always been cooler and the summers hotter, but I’d say that now it doesn’t matter in what season we are - it’s always hot.*

Although some girls still experienced the rainy season as cooler, many complained about the climate being especially hot. One girl noticed physical distress as: *sometimes people get sick because it’s so hot.* During my stay in the low-lying community it did not rain as much as normal, which increased the sense of heat.

The causes of the heat were explained as a result of local environmental degradation as well as of lack of rain.

Interviewer: *And do you have problems with the environment here?*

Girl 15: *Mmmm...yes... because at times it gets very hot. And this is because they cut down the trees. Because these are needed to give air. (...). Because here you feel very hot when they cut down trees. Sometimes it gets really hot. [Now, when it is not raining] it’s like in the*

*summer when everything dries up. And in the rainy season, when it rains, the environment stays good and fresh. I almost always feel fresh [when it rains]. It's noticeable.*

This girl refers to increased temperature in the community, stating that nowadays she could feel equally hot because of the deforestation. It is suggested that local action is a mediator of the impact of global scale environmental processes, and this shows how it can also be an accelerating factor (Pelling 2011).

The heat was not only felt by the girls. One boy explains how when working in the field it sometimes felt like his back was burning. While some girls complained about how they felt feebler delivering the lunch to the men in the field when it was hot, the men and boys were working in the field in the heat, often in the sun. Although the heat was felt strongly by girls, it does not seem to be a burden especially borne by them as a group in society.

## **6.6 Feeling powerless: “What she can do to get out of that situation!”**

Girls were also called out to work in the fields in the harvesting period, pulling up beans and cutting of the maize cobs. Still, when it came to experiences of food security crisis, one girl in particular expressed frustration about not knowing how to contribute to the family. In an exercise in the focus group in the high-lying community, an invented story was told about a fifteen year old girl who's family saw their crops failing due to heavy rain. The group was asked: *What does she [the girl in the story] think then?*

*Girl 13: [She is thinking ]how she can...what she can do to get out of that situation! About the maize, all to... how she can solve this problem that the family has!*

This was followed by a discussion on what girls could do to earn money in a situation like this. The suggestions were selling fruits if the family had fruit trees, cleaning houses, working in shops or restaurants, and babysitting. Of these suggestions only selling fruits seemed like a realistic option, as there were no restaurants in the community, and the only shop was a small family business. The girls were babysitting brothers and cousins all the time, without payment. Towards the end of the focus group session, summing up our experiences, the same girl that expressed frustration said:

*Girl 13: I really liked it when we talked about this thing, about the crops, how it affects us, and what we can.... (does not find the word)*

*Girl 18:... do. Do to improve [the situation].*

Girl 13: *Yes, [what we can] do.*

This statement underlines the worry felt in these difficult situations and the frustration of not knowing what to do. This resembles other investigations with children where uncertainty is experienced as difficult. In a Philippine community prone to landslide Plan International and World Vision (2009) note that children reported to no longer be afraid when it rained after having received training in disaster preparedness, because they now knew what to do in case of a landslide. This account also suggests that the girls have the desire and motivation to take part, but that they lack options or ways to contribute, as seen in their discussion for generating money with few realistic propositions.

### **6.7 Other- or no problems: “Now we don’t”**

It is worth noticing that a few girls mentioned social relations as the biggest challenge for their family, and these were felt strongly and often very immediate. One girl, whose mother was economically deprived due to the husband’s alcohol consumption, explained the difficulties of living with her, sometimes violent, father. Though his alcoholism led to a secondary poverty, the girl did not see any economic problems in the family. Another girl, in a marginalized, female headed household, did not identify any current problems when asked about her family’s biggest problem because her mother’s ex-husband, had moved out of the house.

Girl 15: *Mmmm well, we don’t have any problems at the moment.*

Interviewer: *Well that’s great! But have you had problems before?*

Girl 15: *Before yes, but befoooore, when he [my mothers’ husband] still lived here. But now we don’t.*

This suggests the importance of a safe environment for girls, as it could appear that the social problems became all-encompassing that they did not see poverty as a problematic issue.

One girl noted *scarcity of land for agriculture*, as one of her family’s problems since they rented land for agriculture. El Salvador is Central America’s most densely populated country, and although the municipalities of Arcatao and Nueva Trinidad are not as threatened by land tenure insecurity as other parts of the country, land for agriculture was not abundant. The girl was reluctant to turn the land issue into a political theme or a societal critique, and she was quick to point out that the rent was quite low.

A few girls did not feel that their family had any problems. This contrasts with the clearly identified problems by other girls, and underscores the different experiences of the girls. It does not necessarily mean that the parents of these girls did not also struggle with crop failure and the economy, but perhaps not to an extent where the girls would notice it at the dinner table. The girls that reported that their family had been in crisis also seemed to be the ones best informed about their family's economy, for example knowing the family's income sources and in what way the crops were destroyed what year.

### **6.8 More vulnerable?**

Many girls were aware of their family's challenges and the threat the weather could pose to their well-being. This was most noticeable in the families' livelihood, directly threatening the food security, or indirectly as an impact on already pressed household economies. While all girls showed an understanding for the difficulties provided by the weather on the crops, not all of them felt the impact of this or were worried about it. In contrast to warnings and suspicions that the girls might not care or know anything about climatic challenges, this shows that some girls were both affected and also aware of this. Risk perception is a central component of decision-making (Grothmann and Patt 2005), and the girls' understanding of risk is an important foundation for possible action. The differences in accessibility to resources within the community was identified as a cause for the family's vulnerability by one young girl, as her family rented most of the land for agricultural production, which was often land of lower quality. This points to an understanding of socio-political factors as deeper causes of vulnerability, as noticed by Blaikie et al. (1994). Food prices, distribution and access to resources are factors that can contribute to the susceptibility of families for entering into crisis.

Not all girls perceived their family to have problems. Although it was implied by several girls and community members that the weather affected all families equally, the diverse perceptions suggests that differences exist among girls, even in small communities that can be understood as poor. This calls for caution to view all girls as vulnerable, and suggests that some girls are more vulnerable than others. The ability to cope differs between the households and is influenced by off-farm working possibilities, household composition, remittances and other factors. Girls that reported to have experienced deeper crisis, also showed more preoccupation for the agricultural circumstances and the economy. The diverse experiences



underline the girls' position as part of a household, sharing the family's vulnerabilities and, in most cases, being conscious of these. The importance of girls' membership of their households was also put forward in the theory chapter, and the empirical data provides an incentive for attention to household vulnerability when studying girls. The household is an important setting in which the girls operate, and it is within the confines of the family that food is produced and distributed. In times of short supply, many girls share the worries of their parents.

Some girls also highlighted non-climate related features of the economy as difficult. This shows the multitude of factors that can affect their economy, and though also a threat to the economy, climate is not always the most important problem for people. This is also the case for social problems which could be experienced as very disturbing, and suggests other vulnerabilities of girls.

The way in which climate risks affected the girls specifically were in the difficulties they created for paying school fees. Failed crops decreased income from agricultural surplus, heavy rain could prevent them from going to school, and the heat was associated with increased fatigue, tiredness and headaches. In addition, one girl especially expressed frustration with her inability to improve her family's situation in times of crisis. Since both communities now had water installed in the houses, the potential increased labor burden on girls caused by a decrease in water was not an issue.

Climate risk can have great implications for girls as it can threaten the food security of their families. However, from the discussion of the field information on impacts of climate variability and risks, the girls in this study do not stand out as especially exposed or receptive to the impacts. This draws into question the presumption that girls are the most vulnerable to climate change. Although adolescent girl's vulnerability towards climate risks did not stand out in this particular case, it does not exclude the possibility of this being the case in other contexts. And so, this is not the same as rejecting this group's vulnerability towards climate risks, nor the traditional perspective of women and children as "vulnerable victims". Rather, it shows how from a food security perspective girls are not necessarily more vulnerable than the rest of the society.

Domestic violence, that is more prevalent in poor households, have in some instances shown to increase in times of crisis, often affecting women and girls (Krug et al. 2002). However, the relation between domestic violence and crisis situations was not thoroughly explored in this

study. As argued in the theory chapter, vulnerability must include the wider context of girls' lives, not only climate risks. The next chapter will discuss the contextual vulnerability of the girls by looking at the social frames under which girls live.



## **7 The wider vulnerability context**

This thesis uses a contextual approach in studying vulnerability, and thus understands climate change and vulnerability to occur within a social, institutional, political and economic context. From a context approach, reducing vulnerability does not only center around the impact of a specific threat, but rather works to enable people to respond to changes by altering the conditions within which the vulnerability occurs (O'Brien et al. 2007). By using a context vulnerability approach I seek to include the social conditions that can create vulnerability. In this chapter I will therefore explore the question: *What other vulnerabilities do girls experience?*

To comprehend the complexity of girls' vulnerability and capacities within a climate risk context, this thesis acknowledges that there are different perspectives of reality from which a phenomena such as vulnerability to climate change, can be understood (O'Brien and Hochachka 2010). Here, they will be categorized into systemic, behavioral, subjective and cultural dimensions. The categories will provide the basis for this and the next chapter. While the next chapter will explore the individual dimensions of girl's experiences and behavior, this chapter discusses systemic and cultural dimensions. These dimensions are interlinked and affected by each other. Features that will be explored here are girls' position outside the production system, their future possibilities and cultural ideas about youth and girls. The different dimensions are closely intertwined, and are used more as a means to structure the analysis than as absolute categories, and so issues corresponding to one dimension will at times be discussed under another. By using these categories as a foundation for the analysis, I seek to efficiently be able to discuss the complexity of vulnerability and capacities of girls and the structures within which they operates. No single study can cover everything of importance within these dimensions, and thus this chapter will focus on key features identified in the collected material.

### **7.1 Systemic features**

Systemic features are here understood to represent the lower right circle in Figure 2 presented in the theory chapter. These are often understood as exterior-collective factors. This refers to factors that from an objective perspective can be observed and measured in, for example, monetary systems, legal systems and climate systems. The systemic dimension does not include interior perceptions and experiences. In relation to development the systemic dimension has included "tangible material aspects," and has often been studied within

sociology and systems theory (Hochachka 2010:44). Here, I will discuss the girl's position outside the production system, (which is also influenced by cultural ideas about gender) and their future possibilities that are to a high degree affected by larger structural issues such as youth unemployment and lack of education, due to limited resources or distances.

### **7.1.1 Girls standing outside the agricultural production: “basically there are only men that do it”**

The previous chapter considered girls' role outside production as a factor that did not make them directly vulnerable to climate risks, since they did not have to work in what was noted as exhausting heat. Working in the house did not constrain them in their education, as could be the case for boys working in the field. Boys were often tired in class as they had already been working in the fields for six hours, and they were reported to show less interest in school. Additionally, the choice to continue school could be difficult if the family's economy depended on their work. However, in the high-lying community the brother of one of the girls, now studying in San Salvador, who had gone to high-school in Arcatao while at the same time working in the field to support his family. The dominant role of boys in the production system can in this sense portray them as vulnerable as their possibilities to study appear somewhat constrained. Nevertheless, this same factor, the girls not being part of the agricultural production, will here be discussed as a factor that makes girls vulnerable. I will argue that standing outside the production system makes girls dependent on others, and that such a dependency can give them a vulnerable position.

While some off-farm income was available to most families, farming was the key income providing food for all the girls' households. With a gendered division of labor, men were responsible for the field and the main food production while women's tasks were domestic work such as cleaning, washing clothes, food preparation, bringing lunch to the men in the field, and occasionally they helped out with special tasks in the field. Work in the kitchen garden where vegetables were grown could be done by both men and women. In families with a smaller male workforce the girls took greater part in the food production. Although the division of labor is discussed here as a systemic issue, it is highly cultural matter as well, due to gender roles shaping what tasks are considered suitable for men and women. This underscores the relational aspects of the dimensions.

Even if girls were doing lot of work in the house, they were not considered the productive force the boys were. Men had the role of the provider, and boys were engaging in this role

from the age of 12 or 13. At times the girls could help out in the fields, but the division of labor was nevertheless relatively gendered. The mother of one of the girls described: *Because clearing the fields is a thing for the men, you know, a woman can't do that. And seeding is the same, it has to be a man, a woman doesn't do these things.* The same view was found with a girl who expressed insecurity of her own abilities: *I don't sow. I feel that I can't. And I would have been afraid that what I have sowed wouldn't grow.* Another girl, who in the focus group clearly stated that women can do just the same as men, and sometimes even better. She explained why her brothers worked in the fields while she did not: *This... is because it is hard work and basically there are only the men that do it.* This suggests gendered stereotypes where the man is the working force and women are incapable of doing such work were present in the community. Girls were not expected to participate in the agricultural work, and this particular girl, although stating that women can do men's work, did not view agricultural work as relevant to her. The differentiated roles can lead girls to depend on boys and men, as they are the food providers, the income generating forces. Attitudes as shown by the girls above, at such a young age and the lack of agricultural training can affect the girls' attitudes towards what they are able to do. Bandura (1998) shows how belief in what one can do, self-efficacy, affects the motivation for what one will try to do. Attitudes of not being able to do agricultural work might again influence their motivation for future learning about agricultural work, reinforcing their dependency.

Dependency on men makes girls and women vulnerable to difficulties should their husband or father get injured or die. The economic and social difficulties that can arise should the husband or father be incapacitated was felt in a female-headed household where a girl of 17 commented on why she did not talk to her mother about her dead father: *...because she gets a bit sad knowing that we are not with him. Knowing how we are suffering without him. Only us here, you know. Only women, one really suffers a lot.* As they were only women in the family, they depended on hired laborers which was a great expense in an already heavily pressured family economy. The teacher in the high-lying community also commented on the vulnerability of dependency as she discussed what she saw as a tough future for girls that moved in with their boyfriend at a young age, but which could equally be true for any girl with little education that finds a husband and stays in the community: *They don't have any future, because their men have only taken up to sixth grade. (...)If their man gets sick, how will they work the field? They won't work. They won't eat. This is the problem. And if they don't study, they have to work and work in the field. And there are years where it [the crops]*

*goes well and other years where it doesn't, because sometimes it rains a lot. Every year is different.*

The teacher considers education a viable path to an alternative future than that of getting married early and being dependent on the husband. She perceives a life of dependency as a life of insecurity, where the girl will be without means to provide for herself and the family should something happen to her husband. In addition, climatic variability is understood to add a further layer of insecurity to life. It can marginalize a woman if she has to provide for herself, but it is also understood as a general burden of an agricultural livelihood.

Economic dependency also gave women little freedom of choice in a pressured family situation. One mother explained how she wanted her children to study because in that way they might earn money to maintain her, so that she could leave her alcoholic husband. This mother's situation describes how the choices of women can be extremely limited when they are economically depended on men. This woman further commented how her husband used a large share of the income to buy alcohol, and how she struggled to make the ends meet in the household and had to quarrel to get money for necessary food products that they did not cultivate. Economic dependency can contribute to social vulnerability of women as they might have fewer possibilities of choice, and possibly less bargaining power in the relationship. Importantly, being dependent on men's food producing labor does not equal women and girls not being productive forces in the household, even if they might not be perceived as such in the community. The domestic labor can be extensive and demanding. A grandmother in the low-lying community reflected upon women's big work load as she noted that the men in the family relaxed and watched TV when they came home from work, while she was working all day, from when she got up at five o'clock until she went to bed at eight thirty. At times this could be a lonely life, hardly leaving the house.

The gendered roles influenced the way the boys and girls thought about and planned their futures. This was commented on by a girl in answering to the question what she thought was important for the girls and what was important for boys in the community: *Well, there are times where the boys, as they have more freedom than you, think more about going out, partying more, and all of that. But they also think about working. Because I have heard boys saying "I'm going to work, because when the day comes that I want to have a home, a family, a wife, I will have a place to have it. To [be able to] provide for her." And then as a girl, you don't think about that, to work for that, to save money for the future.*

The bias of dependency already starts during adolescence as boys start to gain and save money while the girls may not see this as significant for them.

Although the previous chapter saw girls' position outside of production as a factor that could protect them against some climate risks, the discussion above has shown how this same factor could contribute to girls' vulnerability. By being economically dependent on men, girls were vulnerable to the difficulties that could arise with the incapacitation of their father or husband, as several households experienced. Their range of choices in marriage could also be restricted as they lacked other opportunities. Although domestic violence was not a theme discussed deliberately in this study, other studies from El Salvador highlight the frequency and severity of this (Ministry of Health El Salvador 2010, Hume 2009). Economic dependency could present women with fewer choices, it could for example make them less capable of divorce, should violence occur. However, there were also examples of women taking an active role in food production. In a female headed household in the low-lying community the mother and her twenty year old son went together to the field to work. Though she hoped for a different future for her daughter as she considered her own life tough, this example shows how women could also do men's work.

### **7.1.2 Possibilities for the future: "There is no hope"**

As discussed in the introduction, a characteristic of adolescents' vulnerability is the future dimension, due to adolescence being a period in life where important life choices are made, often without the adolescent being fully able to understand the wider scope and implications of the choices. Their vulnerability lies not only in the present but also in the future, as their present opportunities, efforts and choices can determine their capacity to handle future livelihood and crisis.

Opportunities for Salvadorian youth can be considered somewhat constrained as the country's considerable unemployment rate is one of the structural problems El Salvador struggles with. The large number of deported Salvadorians from the United States is considered to create even more pressure on the labor market for the youth (Acosta et al. 2012). Many young people take the costly and dangerous journey as illegal immigrants to the United States in hope of a better future. However, emigrating was not reported to be an alternative for the girls in this study, and only one reported to have a female friend who considered this. Many



reported to have male friends and family members that had emigrated or were considering the option.<sup>5</sup>

If the girls stayed in the community, they would continue to live in the structures described in the previous section, with the main source of income being agricultural produce based on a man's labor. Cultural norms expected girls to find a man before they became too old. In the high-lying community I was informed that only two girls in their twenties were not married, for whom the circumstances were considered very particular. Even couples as young as 15-16 years old moved in together, often into the boy's family, and by this they confirmed the seriousness of the relationship. This, however, was a cause of great distress to the adult population due to the low age of the girls. Moving out was sometimes considered a rebellious act because the girls, being so young, often left their families' house in spite of the parents' wish. Finding a man often meant the end of education for the girl, as was the case of a 17 year old girl from the high-lying community who dropped out of the Sunday high-school when she moved in with her boyfriend's family.

Education was perceived as important and represented possibilities for a different and more secure future. A mother considered the future of her daughter who had not continued school after finishing 6<sup>th</sup> grade to be complicated: *If you don't have studies, you won't have work. Nowadays you have to have a high school [education] even for a cleaning job, and if you don't have a high school [education], where will you then get a job? She will end up like me if she doesn't find a job (...) where she would know that at the end of the month she'll at least get some thirty dollars. There is no hope. Who would prefer to wait and see if the crops will overrun in order to gain some money?* Considering the hardship in her proper life, this mother wished for an easier future for her daughter, though without education this is was hard to imagine. This mother viewed agriculture as an insecure source of income, whereas off-farm work was conceived a more secure alternative for the future. All the mothers I talked to wanted their daughters to finish high school and even study at the university. It is remarkable, given the traditional role of men as maintainers, that girls are encouraged to become income earners themselves. Salvadorian women have traditionally depended on men, though the war is considered to have provoked some change in gender conceptions (Thompson and Eade 2007).

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<sup>5</sup> Being a qualitative study, statistically generalizing conclusions, such as the greater likelihood of one gender to migrate, based on the stories of these girls, should not be made. However, in order to create a picture of the future possibilities the girls imagined, I find it important to point out that none of these girls had thought of emigrating, while several male friends had.

The mothers in the communities described earlier times where a woman had to ask her husband for permission to leave the house. Though this practice still existed in some households, it was no longer the norm. When mothers encourage studies a change in attitudes towards girls is suggested, providing them with more freedom and choice than earlier generations. Furthermore, the municipalities handed out several university scholarships which made it possible for those who obtained these to study. The future of the girls could seem difficult partly because of insecure yields, to which the climate variability contributes, as described by a mother and a teacher. Education was seen as an ingredient for an alternative and more secure future. Education was also a possibility the mothers had not had themselves, some mothers had even joined first grade after the civil war to learn to read. One mother saw her daughter's education as a possible way to leave her husband. And so, the mothers encouraged their daughters to break out of institutional gender roles of dependence and become income earners.

Nevertheless, with or without education, the working possibilities inside the communities, or even in the area, were limited. The possibilities of finding paid work were considered bigger in urban areas like the nearest city, Chalatenango, some 30-40 kilometers from the communities. Several of the girls that reported that they had thought of the future (many had not, and thought the question was difficult) stated that they would like to *go out and get a job* or to study. For the most part, this implied leaving the community. As discussed above, staying in the community could create a vulnerable position for the girls as they would depend on a man and the insecure income source of agriculture. Greater variability in the weather in recent years, added to this insecurity. Paradoxically, leaving the communities in search for a more secure future, could expose the youth to other risks, as they would be outside the social control and security of their community and potentially in areas troubled by crime. Further, as resourceful youth emigrated, capacities disappeared from the community. *They leave, for what [purpose] are we educating them?* a local politician complained. Emigration from Salvadorian communities has been described as “not just a 'brain drain' as it is sometimes referred to; it is a draining of the very essence of this community and country” (Hochachka 2010:4). With the opportunities only being outside the communities several girls expressed feelings of loss, as trusted friends and family members disappeared to other places. *Now I don't tell the things that happen to me to anyone. Because I don't really trust any of the friends I have now*, a 16-year old girl whose best friend left to work in a bakery in San Salvador, explained.

However, other perspectives on possibilities for the future existed. One girl and one mother, both from the low-lying community, suggested that boys might have fewer possibilities than girls as they lacked employment opportunities for domestic work. While the *boys can only go to the fields and work, (...) girls can make bread, pupusas [a traditional maize dish] ...all the things that you can do in a community. And I feel that a boy doesn't have these opportunities*, the girl explained. Though selling pupusas would not be enough to maintain oneself in the same way as working in the field would, the girl sees innovative business opportunities for women, contrasting a perspective of a hopeless future in the communities. The ability to picture other opportunities can be a first step towards realizing such ends, and can be understood as a capacity in itself (Appadurai 2004).

In sum, the possibilities for a more secure future could to a large degree be limited by macro-economic structures of high unemployment, especially in the countryside. The option for girls that stayed in the community was to get settled with a man, and the discussion above has described how this traditional pattern of economic dependency could put girls in vulnerable positions, with climate variability as an additional layer of vulnerability. Future security was associated with education and a job outside the community. This portrays challenges to finding a viable and secure future in the community. At the same time, a future in urban areas also had its risks with violence and lack of social control and support from the community. Mothers encouraged their daughters to study, and generate income themselves through taking education. The mothers' encouragement in addition to a limited amount of available university scholarships enabled this as a possible option. Barriers to finish high school could be money for school fees, transportation and lunch, the distance to school and the girls' motivation.

## **7.2 Cultural understandings**

The above has outlined girls' position in production, their limited working possibilities, and the perception of the importance of education as structures that affect vulnerability and the possibilities the girls have in society, affecting their future vulnerability. This, as shown, has been affected by cultural aspects such as gender roles. Perceptions of girls are part of the social structures that constitute possibilities and limitations for their actions and development in society. Cultural norms are used to describe broader understandings of what girls are and

should be, and these perceptions are based on values and beliefs. This section shows how ideas about age and gender can influence spaces where the girls develop themselves.

### **7.2.1 Perceptions of youth: “The youth has changed”**

*The youth has changed*, a local politician told me. In his opinion they no longer cared about agriculture, they only wanted to go and study. A mother in the low-lying community, who hoped for education for her daughter, also spoke of little interest in agriculture among her children that *do little effort in these kinds of things*. A sense of deception of the youth could be noted. *The youth today!*, exclaimed the teacher in the high-lying community, talking about how two girls in the community had settled with their boyfriends while still being in their teens. Informal conversations with adults suggested a sense of decreased participation on the part of the youth, seen as a result of the fact that the youth of today had not lived during the civil war.

Although some girls told me about cousins who did not help their parents in the field, the concerns expressed by many girls (though not by all) about the weather, the agriculture and the economy, contradicts statements about the youth as careless. Some girls talked about how they hoped to support their families in the future: *You would like to have a profession. This is what you are thinking. So that in the future you could do something to help our family so that they will suffer less*. Rather than being uninterested, parts of the youth might aspire for a secure future that differs from a more traditional life in agriculture. Many girls were encouraged to take education and were thus supported in a choice for an alternative future. Yet, there might not be a contradiction between supporting education and being disappointed by the youth, as suggested by the mother whose children showed little interest in agriculture. A negative perception of the youth is not unique for this area, and Tetzchner (2012) attributes such negative focus by adults to the inversion that often appears between parents and youth in the youth’s detachment from parents and search for their own identity.

In response to critique of the emigrating youth a clergyman stated: *The youth are frustrated because their potential gets turned off*. He further described a youth group working with reforestation; *There is consciousness, but it needs to be followed up [by the rest of the society/adults]*. This concern for- and desire to support the youth was expressed at the “Day of the Youth,” a festivity arranged in the municipality of Nueva Trinidad. The event consisted of several speeches from important adult society members, with a few performances by young

people. Important themes, such as violence, the environment and gender issues were treated, and the public repeated slogans about what to do and not do as *Las familias que se hablan y comunican, todo lo logran!* (“families that talk and communicate will achieve everything”). A girl from the low-lying community sums up the day: *They also had the football tournament. In that way the youth could take part in something they like; to play. Because when playing they feel freer and happier.* She suggested that the speeches were not what the youth preferred, in fact perhaps they did not like it very much, not feeling free as during the football matches. The Day of the Youth did to a large degree fail to involve the youth on their own terms, or above the third level on Hart’s (1992) “ladder of participation”. Iyengar and Jackman (cited in Mitchell et al. 2009:15) note that “children and youth are often expected to be engaged in processes conceived by adults”, and it can be questioned how much of the youth’s views were actually expressed at the day dedicated to them. It may be that many of the youth’s thoughts and plans for the future are not well understood by adults. Though the girls were aware of channels of participation, and some assisted meetings on occasions, some also felt that voices of the youth were not heard. *It’s like the adults never listen!* one girl commented. A boy in the high-lying community stated: *Sometimes they don’t think much of you, it’s like they think of you as less. They don’t pay much attention to you now.* A female student in her twenties from the low-lying community explained that the youth did not take much initiative in the community because they were probably not going to be taken seriously if they did. Although the communities desired the participation of youth, these experiences reveal a position where the youth are not actually listened to. Hart (1992) argues that a participation based on manipulation and tokenism should be avoided, and from the stories of the youth and the experience at the Day of the Youth these types of participation seem to be occurring. Such participation will not encourage a critical consciousness based on the reflections of the youth themselves, so important for their agency. Engagement and innovative ideas can be limited by the expectation that they will not be taken seriously.

### **7.2.2 Perceptions about girls: “You have to take a bit of care”**

One significant aspect when looking at social norms for girls was the virtue of virginity. Teenage pregnancy was an issue discussed all over El Salvador, with stories of girls as young as 12 years getting pregnant, and adolescents account for 89 of 1000 pregnancies in the country (ISDEMU in Alonso and Acosta 2011). The low-lying community had experienced cases of teenage pregnancy, and the local teacher expressed great concern. Tales about

pregnant girls that met the devil and died shamefully contributed to the tendency to put the blame for pregnancy on the girls, as they had not *taken care of their bodies*.

The risk of pregnancy and the virtuous concept of virginity and chastity had several implications for the girls. First, pregnancy in itself would most likely prevent a girl from continuing her studies as her role would change and she would have to take care of the child. Second, she would get little help from the father, according to one mother: *No, they don't help. It's like I'm telling you, because of the same machismo that they have. They only do it for fun*. Men's low responsibility in such cases have also been noted in other places in El Salvador (Hume 2009). Though the situation for girls nowadays has improved as they were usually permitted to continue to stay with their parents in the case of pregnancy before they were settled. Earlier, girls had left the low-lying community because of pregnancy.

The risk of early pregnancy was noted by several mothers and other adults, and could be a factor that made parents hesitate to send the girls away to study, as they would lack the social control of the community. A mother from the high-lying community named the risk of boys as the explanation to why she did not want her daughter to go to school in Arcatao without the company of four or five other girls: *Because in the village there are always boys with bad faith. And you are scared that something will happen to them [the girls]*.

Sexual activity is one of the choices that girls can make without realizing the consequences. However, how society perceives girls, boys and the responsibility for sexual activity or pregnancy, constitute social aspects of their vulnerability. A choice is not made separate from the culture and discourses, rather, choices are socially shaped and part of the social structures (Hays 1994). There were different views on how to handle early and unwanted pregnancy. The teacher in the low-lying community was frustrated with the way NGO's were trying to solve this by handing out condoms, which she feared could be interpreted as an encouragement to engage in sexual activity. It is worth noting that this is a catholic society, and that the use of condoms is still not approved by the pope. A mother in the high-lying community encouraged communication on the subject: *If they don't trust their mothers then they will ask another girl, and then the girl can say "let's do it to find out." And then they go and find it out*. More conservative attitudes were also held in this community and the teacher here explained that she had stopped giving classes about family planning. *Before I talked [in class] about how to plan [families] but as the mothers are so delicate and they say that if someone teaches them how to do this, then they can go and do it. And so I limit myself*. The

teacher suggests a change in attitude towards education in family planning, as she changed her classes to accommodate to the more conservative perspective held by the mothers.

The conception of the need to protect girls contributed to a restriction in their freedom of movement in the village. Girls always asked for permission to leave the house, while boys *can come in the night, at whatever time, from another village, and no one says anything*, as one girl explained. In the case of an eighteen year old girl that went to Sunday school, her brothers of 13 and 15 followed her large parts of the way to Arcatao, an hour from the community. She explained the background for why she can't walk alone, as well as the gendered differences in the way they could move:

***Girl 18:*** *Well, for me I'd walk alone, but later they would scold me. My parents don't want me to go alone. (...) They don't like it. No one likes it, they all say that "no, no, don't walk alone it is very dangerous for you".*

***Interviewer:*** *And what are the dangers that they see?*

***Girl 18:*** *I don't know, that a snake may come onto the road, and there is also the time when animals as the coyote appear. (...) They also don't like it because later people will talk about you. (...) [say]that if you like to walk alone it's because someone from the other side [another community] is coming here, or something like that. There are people who are strange like that, they start to gossip about you. If you walk alone, you know that you walk alone, but then they start to say that you don't walk alone, but with more people, with someone else. Yes, you have to take a bit of care.*

This girl explains how it is not only the parents who limit how a girl can move around by giving permission to leave the house. The wider community contribute to this constraint by exercising social control through gossip and rumors. Based on norms about girls' responsibility to maintain their virginity, adults in the community guided the behavior of girls, limiting who they could talk with and where to go alone. Girls' agency and range of options for action can be limited by their lack of freedom of movement, restricting their social network and limiting where they could go without company or in some cases the education they could take.

Dangers on route appear to be largely social, as animals, mentioned by this girl, could be of equal danger to boys. In addition to the risk of gossip, harassment could also be a risk. A girl in this community also told of discomfort with *bolos*, drunkards, who followed her and

wanted to touch her. In the 8 weeks of walking alone during the fieldwork, the only uncomfortable episode I had could be categorized as social, as a very drunk man with his machete was crossing me on the path. Fortunately a car that had passed stopped to wait for me, as they got alert. Hume (2009) describes how the protection of girls from men could be conceived the responsibility for the mothers, and so, although I was constantly told that there were no dangers in the area, walking alone could be perceived to put a girl at risk.

The teacher in the high-lying community explained the excessive strictness of some parents as one of the causes of *la pena*, the shyness, as some girls didn't get to meet many people; *They only stay in the house, and so the girls don't relate to other people*. The degree of freedom differed between the families, and it could deprive girls from experiences. The girl quoted above explained why a friend could not participate in the focus group:

*A challenge for the youth is that they perhaps can't develop as they would like to, because perhaps they can't permit it, or their parents won't permit it. Here there is a girl that's 20 years old, or something like that, and she likes to participate in everything. But her mother won't let her. She even wanted to come where we were yesterday [at the focus group], but her mother didn't let her go. I don't know, she [the mother] has a very old mindset. She plays football with us, but when another team comes to play, or when we go to a match in another place, she never comes. They don't let her go. And she is 20 years old!*

The football team in the high-lying community was an important part of the girls' daily life. A young woman in her twenties had put together the team a few years ago, and now almost all the girls played football. Although the girl described was not allowed to join when the team went away to play, the football team created a space where she was allowed to go out with friends. This was an activity that felt safe for the mothers as the girls were together, often with the trusted young woman. The teacher also noted this when she talked about how the parents keep the girls in the houses: *They [the girls] have invented this thing about playing football, so they can go out like that. It makes them feel freer*. The football pitch also became a space where they could learn to cooperate. The difference in the ability to cooperate in the two focus groups was striking. The girls in the focus group from the high-lying community were so coordinated that they finished each other's sentences, while the girls in the low-lying community got awkward talking and working in the group. Though this could have several explanations, as lined out in the method chapter, the habit of collaboration could be a part of it. The girls from the high-lying community also described how they often played football or



other ball games with the boys. In contrast, girls from the low-lying community commented that they talked little with the boys. One girl explained: *Like here the boys hardly talk with the girls. They go for themselves, and we also do that. They are playing all the time.*

Conceptions of girls can, as seen above, constrain where girls' can go, and who they can talk to. Still, within these frames also lies a potential for change in the structures, as the football team could be an example of, expanding girls' freedom of movement.

### **7.3 What do the social frames mean?**

Girls' vulnerability is complex and can be said to lie partly in their role as standing outside of production, leading to a dependency on men. In addition, alternative future possibilities in the community were limited. Climate variability and change can be conceived as an indirect risk to the vulnerability particular to the girls, or as an added layer of vulnerability in a relationship of dependence. In the previous chapter structured issues such as girls' position outside the production were treated as making them less vulnerable in relation to climate risks as they did not work in the sun and most of them had time to go to school. They were thus not considered to necessarily be more vulnerable than other community members towards climate risks. However, in a wider contextual perspective this same factor was conceived to create vulnerability as they become dependent on men. Their position outside of agricultural production was culturally learned by the girls, and examples show that they did not see their possible contribution to the food provision as relevant. Further, one girl reported that while boys started to save money for the future to buy a house and support a family, this was not something girls did, and thus the bias of dependency starts as early as in adolescence.

In a situation with economic dependency, women become vulnerable to potential injuries or accidents of their husband and they can have a weaker bargaining position with their husband. For instance, it limited bargaining power over money can push women and children into secondary poverty if the family's money is spent on alcohol, and it can limit the range of choices for women in a violent partnership. Climate risks could be an additional layer of vulnerability in circumstances where the woman needed to be in charge of the agriculture, as was exemplified by a female headed household that depended on rented laborers. A loss of crops would also mean a loss of the input in agriculture such as pesticides, fertilizer and of salary in the case of hired laborers, further affecting a marginalized economy. In the previous chapter the girls' position outside of the production system was understood as a factor that

protected them from some possible effects of climate risks. This shows the importance of a context vulnerability approach to understand girls' vulnerability, as what might be perceived as a relief when focusing on climate risks, and can be a theme of vulnerability in the wider social context. As "reducing vulnerability involves altering the context in which climate change occurs, so that individuals and groups can better respond to changing conditions" (O'Brien et al. 2007:76), such a wider approach to specific groups should be taken into account. A failure to take the wider context in which girls' live into account can intensify existing gender inequalities and reinforce traditional roles and relationships (Clifton and Gell 2001).

Alternatives to a dependent relationship with a man could be found in education and work outside the community. The girls received social support from home for continuing their education, which illustrates a perception that girls do not necessarily need to be dependent, they can also be income earners. This again contrasts the role of the dependent woman and shows that such roles, though integrated in systems and culture, have potential for change. There are barriers to education, such as distance and money in the high-lying community, as well as dependency on money or a scholarship for a university career in both communities. A girl in a marginalized household that depended heavily on the workforce of the girl, reported this to be a factor preventing her from continuing her education. Paradoxically, future opportunities were perceived to be found outside the community, often urban places, that were also associated with higher risk levels, both in terms of violence and lack of social control. A second paradox is that while emigration drains the communities of resourceful youth, the communities do not have the capacity to use this resource when they have it, due to lack of employment. This was commented on by a local politician; *What will I do with 40 new students?* Still, money generated by opportunities in other places would be expected to come to the community in the form of remittances.

Conceptions of age and gender were decisive in influencing the space where the girls could operate. The youth was on the one hand conceived as a disappointment. On the other hand, there was a sense of concern and care for the youth, and a desire to support them. Adult support for children in building up their agency is seen as a key factor by Hayward (2012). However, some of the ways in which this was done, was through an adult-youth relationship with the adult telling the youth what to do. According to the ladder of participation discussed in chapter three, the three lower steps- manipulation, decoration and tokenism, should be

avoided (Hart 1992), and based the examples discussed, one can question to what degree the youth were understood and had felt free to express themselves. The literature suggests that youth should participate not only by expressing their opinions, but that their voices should also be involved in decision-making (Mitchell et al. 2009). This might seem too high an expectation. The youth commented that they were not being taken seriously, which was thought to prevent them from taking initiatives. This indicates a limited space for the youth to develop initiatives, new ideas and innovations, important parts of adaptive capacities. A valuable first step towards increased integration of young voices in decision-making could be to go from participation based on repetition of slogans to a fostering of the critical mindsets of the youth, to enable them to analyze and tackle the world themselves. Next chapter will discuss the importance of trusted key actors that the girls could turn to.

Girls were considered vulnerable towards the risk of boys, and therefore in need of protection. Thus the girls experienced restricted freedom of movement compared to the boys, controlled directly by the parents, and indirectly by the wider community, as gossip enforced social norms. The strictness of the parents varied and some girls were barely allowed to leave the house alone, whereas others were limited in school or study opportunities, and still others traveled parts of the road alone to schools in other villages. Delica- Willison and Willison (2004:145) describe how people perceived as vulnerable are often understood as weak and incapable and become the “object of development.” In this case, the perception of girls as vulnerable towards the risk of boys and pregnancy, in the context of the idea of female purity, could contribute to a “need for protection.” This could constrain girls, and perhaps lead to vulnerability in other parts of life, as it could lead to less education, girls being less accustomed to relating to people, giving their opinion and making their own decisions.

However, what might seem as fixed structures can be bent and changed. The football team was one arena of capacity building as it created a learning space for cooperation and organization. It gave the girls social practice, made them go out of their houses in a way that felt comfortable to their mothers, and it enabled them to enlarge their social network to include boys as well, as boys and girls often played football together. The team is an example of how social structures can be changed as exceptions to norms that constrained the girls’ freedom to move and go out and play where made.

## **8 The individuals and their capacities**

The previous sections have discussed systemic and cultural features as social frames under which girls can develop. These structures affect girls' vulnerability, and have both facilitating and limiting factors influencing their possibility to be agents of change. This section will deal with the individual dimensions of behavior and experiences of girls as it discusses agency and capacities. As emphasized in the beginning of chapter seven, such a separation between features into categories mainly has a structural and analytical function, as the factors within the different domains intersect, influence and interact with each other. Many are difficult to separate. This chapter will first look into behavior, discussing manifestations of girls' agency and later discuss different experiences by the girls. The perspective of children as agents of change emphasize children's capacities to be drivers of change in their communities (Children in a Changing Climate), and so special attention will be put on the capacity of agency in order to understand how girls' -are and are not- taking intentional actions.

Capacities are closely related to vulnerability as they can be understood as a dimension- or mediating factor of vulnerability (Eriksen and O'Brien 2007, Davis 2004). In chapter three adaptive capacities were understood as factors that create and open up the range of possibilities for action. What capacities the girls hold are therefore central both to understand their vulnerability, their potential contributions to the communities, and for the possibilities of using their agency.

### **8.1 Acts of agency**

Agency was understood as intentional actions (Prinz 2012), and in the following I will discuss two ways in which the girls manifested their agency; through taking initiatives and through opposition.

#### **8.1.1 Initiatives: "Here, we tell it to a friend"**

Manifestations of agency can be observed as initiatives taken by girls or lack of such in cases where girls did not take initiatives. The first section of this chapter discussed how girls stand outside the agricultural production system, and although they could work in the field in the harvesting seasons, the cultivation was the men's job and thus outside the girls' field of responsibility. Some girls did not recognize their own potential to contribute to their family's food provision even though they had the opportunity. A girl from the high-lying community

recalls how her family was better off when tomatoes were grown by her brother before he emigrated to the United States:

***Girl 18:** When my brother lived here, around this time we had tomatoes and cucumbers. Cucumbers for selling and tomatoes for the house. But now we don't, we don't do anything. I don't know why. He was sowing around this time of year now that it is raining and everything, and then we had a lot to eat. Now we have less. I'm not sure if it is because we don't get started [to grow tomatoes].*

The kitchen gardens were typically located around the houses, being physical accessible for girls, and both men and women took care of the gardens. In the case of this girl, her family had a small stream close to the garden so that unpredictable rain would not necessarily be a problem. Even though both men and women worked in these gardens, the girl was surprised when I asked her whether she would like to sow the vegetables: *Me? (surprised) Well, no... No, because.. I don't have time to keep an eye on them all the time, but perhaps my parents [would].* Earlier we saw how other girls did not relate to the agriculture as it was the men's work, even though they considered women capable of doing the same work as men. Examples as the one above show how the thought of contributing to the food production could be remote for some girls even if they noticed food shortages. This makes instances where girls have taken initiatives in the food supply even more worthy of attention. A girl from the low-lying community tells her initiative in planting what she wanted to eat.

***Interviewer:** Have you ever had an idea on how to do things with the crops or the vegetables?*

***Girl 15:** Yes I have. I have sowed. (...) This one time that we had vegetables here, no one was going to do anything. And so I said; "let's put them here," or something like that. (...) We grow cucumbers, and I sowed one. And some peppers, green ones, like they are selling. I asked my uncle to get me some seeds, he did and we grew them.*

This exemplifies how, although outside the food production, there are spaces where the girls had the possibility to influence the food provision of their family. Not only did this girl take care of the plants that no one else took care of, she actively sought ways to obtain seeds and grow new vegetables. This shows that there are differences between girls also when it comes to initiatives and perceived domains of action.

Initiatives were also taken outside the food production. In the low-lying community several of the girls had gotten together to start selling a type of grated ice with flavor, *minutas*, at the

local football matches to collect funds so they could attend a catechist meeting in a nearby village. A timid girl explained how the girls would go about if they had an idea about something that could be done in the community:

*Girl 15: Here we tell it to a friend, and we agree, and then we tell the ones in charge.*

*Interviewer: Yes? And who are they?*

*Girl 15: We can say everything to our teacher.*

*Interviewer: And have you ever come up with an idea that you have told your teacher?*

*Girl 15: Like this.. to raise funds [by selling grated ice] to go to meetings with other children.*

These girls do not simply depend on their parents for money but take action themselves to be able to attend the meeting. Selling grated ice was a small, but creative business idea showing the potential of girls to see opportunities in the community, which the last chapter considered rather limited. Innovation is an important aspect of adaptive capacity as it can open up for new possibilities and ranges of action. This girl, as many of the other girls, expressed trust in her teacher who was: *in charge of what things to do in the community*, as another girl describes her. The girls in the high-lying community also had a trusted leading figure in the community. Though initiatives as the grated ice selling were not reported here, the girls equally expressed trust in the 23 year old woman in charge of the football team. She was an important figure in the community and had been in charge of the project of getting running water in the houses. It was earlier suggested that the culture left limited room for the voice of the youth, this however shows that the girls had key persons of trust that could support their initiatives.

A supportive environment has been regarded as central to youth and child participation (Hayward 2012, Mitchell et al. 2009) . Guidance and the ability to listen are also considered vital (Hart 1992). At the same time, as the youth might not have the opportunity for participation that goes beyond tokenism in some spaces, safe and supportive figures can facilitate participation that are initiated or directed by the youth. They might also function as role models of active female citizens for the girls. One girl noted that she hoped the community always would have active people like her teacher in the community. The girl that talked about the grated ice idea, also commented how the first step to get anything done is to tell her friends. This illustrates the importance of what Kroemker and Mosler (2002) call

know-how knowledge, the knowledge of how to go about to get through wanted action. It further accentuates peer support and an agency of a collective of girls. Rather than individual agency put together, collective agency is the ability of a group to produce an outcome (Bandura 1998), and the ice-cream selling could be such an example. Still, several girls also reported that if they had an idea they would not tell anyone. Others said that they simply did not have any ideas about things they could do in the community.

The catechist girls illustrate how the church, as an important element in the lives of many of the girls, can be an actor in mobilizing girls and facilitate their participation. This could also be the case with other institutions, such as schools.

### **8.1.2 Opposition: “Me and my friend we said NO”.**

Another way in which the girls showed agency was in opposing events or norms in society. Some of the girls acted out of line with expectations and social norms. For instance, one girl said that she did not want to get married because she felt it would narrow her freedom.

*Girl 17: To get settled [with a man] is a bit nasty. Because you have to be a bit tight. They hold you quite tight.*

*Interviewer: Like there is less freedom?*

*Girl 17: Yes! A person like me can go out whenever they want to.*

*Interviewer: And if you have a man you can't?*

*Girl 17: No... (...) It is better, like this to be alone, right?*

The girl who felt bothered by the gossiping in her community also opposed common ideas of adults as she criticize them for gossiping. She stated that one can have both female and male friends without it being something more. Relating to environmental issues, some girls could tell stories of agency as they confronted parents and friends. Several girls expressed care for the environment and worry about practices in the community, and two girls told how they approached their parents. However, this could result in them being considered bothersome, as indicated by a girl from the low-lying community who asked her father why he cleared the field by burning, a practice that had received attention in the communities for damaging the environment: *Well, I've asked him why he burns, because sometimes he burns. And, I don't know, like he'd be thinking that it wasn't my business.*

Girls' sphere of influence could also include their peers, and one girl told me how she and a friend prevented friends from lighting a fire in the bush: *One time we went to a nearby hill with some boys. And they wanted to throw a match on a pile of twigs, and there we wouldn't be able to extinguish it [the fire] if they did it, because there wasn't any water close so we wouldn't have been able to extinguish it. And me and my friend we said "no", that they shouldn't do it. And we took away the matches.*

However, in many spheres the girls did not oppose. The girls expressed that there was limited space for discussion on their parents' decisions, and most saw few possibilities to argue: *I'd say my mother would take it bad [if I started argue].* Another said that she could try to argue, but *you almost always obey.* Further, many girls were reluctant to criticize their community (and by this oppose the features within it). Even when the questions asked only indirectly implied criticism, as what they would like to improve in the community or what they would want to be different when they would be adults. There could be several explanations for this, but whether it is a form of cherishing the community or an accepting attitude where *everything is fine*, it presents the community as a sphere where several girls did not oppose.

The examples above demonstrate that girls were both willing and able to take action and oppose practices they disagreed with. It shows that several girls had a sense of agency when it came to the environment and that they were able to act upon this to influence their parents or peers. However, opposing adults was not always easy in the hierarchical relationship between adults and youth, and trying to argue about decisions or correct them on environmentally damaging behavior was not always taken well by the adults.

## **8.2 Experiences**

The dimension of experiences provides insight into the way individuals understand and conceive the world. Personal change has been considered vital for social change as "people's way of thinking about themselves and their world, their behavior and ways of living also change" (Hochachka 2010:48). This section will look at understandings, values, self-esteem and knowledge, as personal interior features that can contribute or limit the possibilities to act as agents.



### **8.2.1 Awareness and Understanding-“We’d contaminate less”**

Awareness and understanding of problems and risks have been considered central for taking action and responding and adapting to risks (Moser and Ekstrom 2010, Grothmann and Patt 2005). The examples above of girls’ environmental protection, show girls’ agency to mitigate risks based on an understanding of practices posing threats to the environment. One girl from the low-lying community stood out in her critique by worrying about the extensive use of pesticides in the region, displaying both a broad and deep understanding the problem. This girl explained why she wants to study ecological agriculture: *So there won’t be so much fruit with so many chemicals that hurt people and organisms. That’s why it interests me, because we’d contaminate less.* This critique is extraordinary, as other members of the society accepted the use of pesticides as a necessary evil, though they were aware of its potential dangers. Of the girls interviewed, this was the only girl reflecting on pesticides, which in daily conversation were referred to as “poison.” The girl continued to explain the background of her concern: *[On the radio]I have heard a lot about how the water can become. The drinking water, with the oxygen or something, and I get filled with this fear. And I don’t know from what the people will live off in the future.* The fear about the future risk of environmental problems expressed by this girl illustrates a problematic side of expecting agency from young people. Anxiety around environmental problems are found among adolescents in other places as well (Szagun and Pavlov 1995). If action is encouraged and expected on such issues, it is important that these expectations come with adult support, as encouraging agency could lead to a sense of greater responsibility.

Not all environmental issues were equally acted upon even though the effects of proper action were clear and awareness about the issue was present. In the high-lying community, the focus group perceived littering to contaminate, make the rivers dirty, and it was associated with illnesses such as dengue fever. Still, a learned awareness was not enough, and no one took their litter with them after a meeting in their football field, where we had generated lot of plastic waste from eating cookies and making kites from plastic bags.

### **8.2.2 Values: “if it wasn’t for the environment we wouldn’t live”**

In order to take action towards a risk, something of value must be perceived threatened by this risk that will motivate for action (Kroemker and Mosler 2002). The preoccupation with the environment expressed by several girls showed direct links between the environment and their well-being: *If it wasn’t for the environment we wouldn’t live,* one girl expressed.

Girls also expressed how important a sense of community was for them. On the question of what she would like to preserve in the community when she was an adult, a girl from the high-lying community answered: *Well, perhaps that all of the youth that are here now think like they do now, that we think it is important to do things well with the community. Participate in all the things of the community.* Other answers to this question were: *The parties, and that everybody participate in activities.*

Values are an important foundation for capacities as it is “informs problem solving and generates, in optimal contexts, new possibilities for human action”(Bussey et al. 2012:389). The statements of the girls suggested that a sense of community and participation were highly valued, and this can motivate the girls to participate actively in the community, and work for the community’s interest. A local clergyman portrayed women as *the thread of the culture*, arguing that they were *the ones conserving the value*. He suggests that there is space within the female identity to value the community unity. Women’s social role in the communities was not only as caretakers, but also as social organizers. “Festive afternoons” were popular community parties arranged in the low-lying community and were to a large extent organized by women. Thus, though their influence over many issues was seen as lesser than men’s, through tasks like these, women had a great impact on several aspects of the social life in the communities. Girls were socialized into this as they were included in the selling of traditional food, *pupusas*, on Sundays, allowing them to earn some money as well.

### **8.2.3 Participation and self-esteem: “I think it was good how absolutely all of us gave our opinion”**

Although participation was being valued by the girls, it had its barriers. For the girls in one focus group, to participate was defined as simply being present at reunions, though they emphasized that it often included taking an active role, as to talk in reunions or help out. Giving their opinion was not always easy, because even in spaces that facilitated youth expression, due to interior barriers that limited them. An active girl that went to youth reunions could tell that they often asked for the opinions of the youth, but that she had never given her opinion. The girls would speak of personal and circumstantial barriers that were interrelated. In the focus group in the high-lying community, *la pena*, or shyness, was expressed to be the biggest obstacle for participation by some of the girls. *La pena* was used by the girls as a valid excuse for not wanting to be interviewed, speak up or participate, reinforcing the acceptance of the role of girls as shy. Other girls said that they were afraid not

to say the correct things, or that they would get questions that they could not answer. This suggests low self-esteem as a barrier to participation. They also described fear of gossip and a tendency that people would interrupt, not pay attention, or laugh at them as factors that made them hold back. At the same time social support was experienced to facilitate their participation, and they emphasized peer support as friends saying: *thank you, yes, this is good, this is cool*. Safe and trusted surroundings seemed important for these girls. In focus group in the high-lying community, such an environment was successfully created and at the end of the session one girl expressed her appreciation by saying: *I think it was good how absolutely all of us gave our opinion*. While they expressed a certain degree of insecurity, they also expressed confidence, stating that they enjoyed participating and making new friends. They also said asserting their voice was important.

Sense of agency was also found talking with a fifteen year old girl in the low-lying community about her future plans. The girl in the low-lying community who saw future opportunities for girls and who was part of the ice-selling team, also expressed belief in self-efficacy, in getting the future she desired. While many girls saw their parents lack of money as an obstacle for pursuing a career, this girl commented that if her parents did not have enough money, she would have to work while studying. Within the frames of men and parents as providers, this girl displayed a proactive attitude to act and take responsibility in order to get what she wants.

This section suggests that limits and possibilities to take initiatives and participate are also subjective such as personal insecurity and confidence. This is closely connected to the wider culture, for example through the social support for participation and the possibility of being the subject of gossip or ridicule.

#### **8.2.4 Knowledge and information: “The climate is a bit disordered”**

Unexpectedly, three girls showed to have knowledge about climate change, each with different sources of information. Family members of a 13-year old girl had participated in Centro Bartolomé de Las Casa’s research project about climate change. She connected what she had heard about climate change from her family to her personal experiences with heat. *The heat is increasing, and it doesn’t matter what season we are in because it is always hotter*, she explained. Another girl from the low-lying community could tell that the *climate is a bit disordered* because of *all that contamination*. This girl said she got most of the

information from watching TV or listening to the radio news. In the area, technology to a large degree had negative associations; mobile phones were linked to downloading pornography and TV was associated to carelessness and getting dumb. However, the example of the girl receiving information through radio and TV shows that technology can be a potential source of valuable information. Kroemker and Mosler (2002) explain how knowledge is an important aspect of risk and capacity perceptions as it helps constitute a local reality of what is at stake. These two girls in the low-lying community are the ones that reported to have asked their fathers not to burn the field or cut down trees. This suggests the importance of knowledge, understanding and concern as basis for action, though information and preoccupation will not necessarily lead to action (Norgaard 2011).

As discussed in the theory chapter, availability of information does not mean that this information will be used. What is remarkable with the two girls above is that they have actively accessed the information- one girl by listening to, and participating with, her family, and the other by listening to specific programs on the radio, such as the news. This information was available to other girls as well, as all had a TV, and the family of at least one other girl had also participated in the same NGO project. Actively seeking out information shows interest and can be considered an act of agency.

In the high-lying community only the informant that went to high school was familiar with climate change, which she had learned about in school. Though there appeared to be some confusion about climate change and damage to the ozone layer from the school's side, the school passed on information about climate change to the community through the pupils as they conducted small investigations interviewing people in the community about global warming, informing alongside the questions they were asking. This shows the potential of the youth as communicators of information to the communities, as school provides them access to information their parents might not have.

The girls could also act as interpreters. As many of the adults had not gone to school, their children frequently had more education than their parents and could assist them in reading. Also in other aspects the children could interpret for their parents. When I started to ask less concrete questions in an interview with one of the mothers, for instance, about the capacities of the family, she got insecure and turned to her daughter for help to understand and respond the question. Girls can thus be of help both to the community and the family as they can act as both communicators and interpreters based on their capacities to express themselves and

understand and access information. There are multiple sources of information that can reach the girls.

### **8.3 Discussion**

The discussion above depicts a society going through several changes as traditional living forms are meeting with modernity in many ways. The young generation is sometimes associated with this, for instance the technology and consumerism condemned by several key actors in society. The way sexuality and related problems are fronted in the communities might also be in a process of change. A more liberal approach to this could seem natural as influences from media and NGOs makes sexuality a more articulated subject in the communities. However, there are indications that suggest a tendency towards a more conservative attitude. A clergyman expressed what he saw as a crisis of values in the family, the community and the world, and a local politician noted: *The changes aren't only in the climate, they are also in the culture.* The communities lie protected from the frequent crime and violence incidents that the rest of the country is suffering from. Nevertheless, there were rumors that some *maras* were entering the localities. One girl in the low-lying community noted: *But thank God we don't have that [the maras] here at the moment. But at the moment* She underlines the possibility that the *maras* might be in the community someday soon. Climate change is the bigger frame in which more changes are happening in the communities. The range of roles available for the girls in the communities facing these changes is affected by social structures and their different experiences.

There are both factors that can facilitate and limit the possibility of girls to act as agents of change in the case of adolescent girls in the two communities in Arcatao and Nueva Trinidad. In their social frames they meet obstacles: adults that do not listen to youth and a participation that imposes views and norms on youth rather than support them in developing a critical consciousness and understanding of the world. Girls experienced that their freedom to move around was restricted, which for some also meant limited possibilities for participation (for example in the focus group). Importantly, within the social frames there were also enabling aspects that encouraged agency and capacity building. The mothers' encouragement of the girls' education is an important facilitating factor of girls capacity, as the girls were enabled to learn, and become income earners in the future, changing the circle of dependency. Still, the macro economic factors of scarce employment inside the communities led the youth to leave

the communities in order to seek a more economically independent and secure future. The resource of girls' agency could be drained from the community if they sought a future with education or paid work. It was considered important to have a secure social environment and the support from friends to be able to participate and give opinions. One girl reported that both trusted family members and peers had left the community in order to find jobs, depriving her of social peer support. Common for girls in both communities were difficulties with planning their own time and making decisions, as they were mostly told what to do with little possibility to disagree. This again made it more probable that decisions would be made on their behalf.

The youth were not only looked at as a disappointment, there was also a sense of concern and care for the youth among the adult population that put focus on youth development through organizations and initiatives directed towards the youth. The girls also had key persons in the communities that they trusted and that could help them with initiatives, and functioned as role models.

Some girls opposed the practices of family members or friends, and these spheres seemed the most likely for the girls to try to influence. Some girls tried to influence practices that went against their values and understandings, such as parents or peers that damaged the environment. The girls expressed to value a strong sense of community which in itself could be viewed as a capacity, as agency is ultimately based on values and goals.

Factors limiting agency were also to be found in the dimension of girls' personal experiences. Shyness, and low self-esteem were reported to limit their participation. Shyness was an accepted feature of girls' psychology, and it was, amongst other things, associated with girls that were restricted from leaving the house, which could result in limited social training. Some girls said that they never had ideas about things they could do in the community, or things that could be changed, or if they had, they would not tell them to anyone. At the same time, these, and other girls, showed self-confidence and believed that their voices were important. One focus group put emphasis on a safe environment and peer support to enable participation. Hart (1992) argues that self-esteem is the most critical variable for successful participation, and in accordance with the experiences of the girls, he further points out social support from peers as a facilitating factor. It is also suggested that this can be important for collective agency, as possible initiatives were first discussed among friends.

Three girls showed knowledge about global warming, all getting it from different channels this suggests that there are multiple ways of reaching girls with information. They also showed the potential to act as communicators of knowledge through school projects. Further, they could support parents in interpreting both written sources and in understanding due to increased capacities to express themselves and abilities to access and understand information. Girls also expressed that they valued participation and a sense of community and the environment, and they can be understood as valuable resources for the community and the family, concerned about the well-being of the community.

Girls in this study have shown that they possess agency and the capacity to act upon different issues. There are both personal factors as values, self-belief, capacities to access information and understandings, and societal factors as role models, societal care for the youth and possibilities for education, that enable this. However, girls' possibilities to act with agency had several limiting factors as well, such as low self-esteem, at times a dictating participative approach, limited freedom of movement and participation, and a disregarding of the voices of the young by adults.

In the theory section, the two perspectives of “vulnerable victims” and “agents of change,” were placed in a certain tension. The traditional perspective of “vulnerable victims” has focused on the essential vulnerability of these groups and the emerging perspective of “children as agents of change” on the inherent capacities that children have to actively take part in and change communities. Based on the findings of this study it seems difficult to reject either one of the perspectives. On one side the discussion showed how girls could be vulnerable as they were restricted in their movement, which could affect their education possibilities and participation. They also had limited future possibilities inside the community where they were most likely to become economically dependent on a man, and there was also reported frustration about the inability to contribute to the family in times of crisis. However, the girls were also found to have capacities and agency. Some girls were accessing information, interpreting for their family, initiating small business ideas, collaborating, building networks and opposing environmentally damaging practices. The girls in this study seem to be both vulnerable and capable at the same time. This “both/and” conception is used when understanding issues as polarities, where not one, but several answers can be correct at the same time.





## **9 Viewing girls' vulnerability and capacities as a polarity**

This study provides evidence for the usefulness of both the traditional “vulnerable victims” perspective and the “agents of change” perspective when discussing vulnerability of adolescent girls. Where both perspectives seem to contain elements of truth within them, neither can fully describe the situation of the girls in the high-lying- and low-lying communities. For example, girls were not found to be especially vulnerable to climate risk in relation to the rest of their communities, and there were several examples of constraints on girls' agency and development of capacities. Instead of portraying girls' as either vulnerable or possessing capacities, it seems suitable to attribute both characteristics to them at the same time. The girls in this study have shown to be both vulnerable and capable.

The two perspectives on vulnerability stand in contrast to each other as two opposing ideas. While one underlines the specialness and the greater vulnerability of groups as women and children, the other emphasizes the capacities of these groups and the potential for agency that they possess. Opposition between interrelated ideas that have no clear conclusion of what is the right answer, but rather require consideration of balance to resolve the tension between the parts, are features of a polarity (Hayward 2010).

At a more fundamental level both perspectives understand the groups as vulnerable (Back et al. 2009). The very effort to work with girls is a manifestation of this; we seldom hear of NGO's working on the capacity building of white middle class and middle age men in the global north. Common goals and common fears unite the contrasting elements of polarities (Johnston 1998). The two perspectives share the same overarching goal; to reduce vulnerable groups' vulnerability. They also share the same underlying fear; increased powerlessness, marginalization, and exposure and susceptibility to risk for these groups. However, the understandings and entry points on action differ between the perspectives. Work on polarities has to a large extent focused on the business and organizational world where polarities as teamwork-individual work, or centralization-decentralization of businesses are typical examples (Johnston 1998, Johnson 1996). However, polarities exist and must be managed in other spheres as well, and I suggest that a useful way to understand girls' vulnerability is to view the relationship between the two elements of vulnerability and capacities as a polarity. Rather than being the actual perspective in itself, vulnerability and capacities represent the poles of understanding that the perspectives belong to and those poles stand in opposition. As in all discussions, writers and promoters of a certain view do not necessarily let the pendulum

swing all the way towards the extreme of that view, they are often more nuanced. However, their position might fall within the realm one pole, which can include blind spots through disregarding the possible disadvantages of their preferred pole or the advantages with the opposite pole. As I discuss the polarity of vulnerability and capacities below, this should be understood more as abstract ideas, or positions within which the concrete perspectives fall, rather than the actual views of the perspectives’ promoters.

Polarities have both positive and negative sides to them. If there is a disproportionate focus on the positive sides of one polarity, while neglecting the other side, the downsides of the preferred pole will eventually surface (Johnson 1996). Figure 3, explains vulnerability and capacities as a polarity, where the upper boxes describe advantages of understanding girls’ as vulnerable and capable, and the lower boxes the weaknesses. Johnston (in Hayward 2010) explains that it is possible to build strategies to balance the aspects of a polarity by deliberately inquiring into its different sides.

<p>+</p> <ul style="list-style-type: none"> <li>▪ Get international focus on the groups</li> <li>▪ Identify the specialness of the groups’ situation → nuancing needs → enabling focused interventions</li> <li>▪ Analyze underlying causes</li> </ul>	<p>+</p> <ul style="list-style-type: none"> <li>▪ Recognize the importance and value of people as resources→ develop resources</li> <li>▪ Active part of own process</li> <li>▪ General capacity building→ spillover effects</li> <li>▪ Creating self-support and independence from NGOs in the long term</li> </ul>
<p>÷</p> <ul style="list-style-type: none"> <li>▪ Pacify victims</li> <li>▪ Overrule the vulnerable</li> <li>▪ Disregard for peoples’ potential</li> <li>▪ Overgeneralization</li> <li>▪ Top-down/expert focus</li> </ul>	<p>÷</p> <ul style="list-style-type: none"> <li>▪ Disregard for constraining factors</li> <li>▪ More responsibility on vulnerable groups, possibility of creating additional stress.</li> <li>▪ General and little targeted</li> <li>▪ Bottom-up – little work on deeper causes of the situation by “experts”</li> <li>▪ Vulnerability is tackled by the people themselves, lack of demands for government assistance.</li> </ul>

**Figure 3:** The benefits and disadvantages within the two poles of the vulnerability-capacity polarity. Adaption of the Polarity Management Map template by Johnston (1998).

## **9.1 Exploring vulnerability and capacity as a polarity**

### **9.1.1 Vulnerability**

The traditional way of viewing women and children has been as essentially vulnerable. The idea of some groups' special vulnerability have made international society highlight action directed at these groups (World Bank 2013). Voices of children and other groups are often not heard in international debates, and advocates for children and women's vulnerability create sympathy for these groups and ensure that they are not forgotten in the debate. In El Salvador, increased focus on women's exposure to domestic violence has resulted in different legislative initiatives to support them.

A vulnerability focus enables analysis to center efforts on specific matters where it is needed. That is to say, a vulnerability focus can enable investigations to identify particular needs and challenges. For the girls in the communities studied, the specialness of girls' vulnerability consisted of school fees, the distance from school, the risk of pregnancy, a lack of freedom of movement and challenges for participation. In addition, earlier chapters discussed how food security and economic difficulties were a big issue for many girls, but also how special features of the situations of some girls made them especially vulnerable, such as living in an only-female household or with alcoholism in the family. Identifying vulnerabilities permits targeting of these factors. Providing safe spaces for girls to enable them to participate and leave the house, information to both parents and youth about family planning, and flexible arrangements on school fees are measures that could target the special situations of girls. The project of getting running water in the houses in the high-lying community is an example of a project that addressed an issue that specifically benefitted women in relation to the climate risk of drought. Another advantage with a vulnerability focus is that the researcher can shed light on underlying causes of vulnerability for these groups, as unemployment and economic dependency on men, which can be taken into account when working with girls or development planning.

The vulnerability pole does not only have advantages, it also has disadvantages, as is the case with all polarities (Hayward 2010). When a group is being portrayed as vulnerable, its members may easily be perceived as victims, as passive sufferers who have to be taken care of and are incapable of making their own decisions (Tanner 2010b). As girls were viewed as vulnerable to the advances of boys, some parents were reluctant to send their daughters alone to study or walk to school. Some mothers also argued that information about family planning

should not be given to girls as this could encourage them to become sexually active. Instead of including the girls in decision-making, parents and teachers made choices on their behalf, as a result of viewing them as vulnerable.

If girls are only recognized as vulnerable, the potential that lies within girls can be disregarded. As seen in the study several girls acted on issues that were important to them, as going to catechist meetings, planting their own vegetables, opposing fathers or peers damaging the environment. Recognizing girls only as vulnerable can lead to disregard of their potential to be a resource in the families and communities. Girls in the study accessed important information from various channels, some passed this information on to others, and some acted as interpreters in their families, and as innovators in business and family food supply. Some girls also showed great engagement, expressed through one girl's concern and desire to help when her family was in crisis, and other girls' desire to change the damaging practice of pesticide use in the community.

Understanding girls as essentially vulnerable can also lead to an over generalized conception of them. Women and children are claimed to be the most vulnerable to climate change. While this may be true in many contexts, girls in the two communities were not found to be more vulnerable to climate risks than other community members.

The last disadvantage I will point out is the possibility for a top-down expert approach where experts analyze the vulnerability and solutions while the vulnerable people are viewed as passive victims or objects of development that stand on the side in their own process (Delica-Willison and Willison 2004). In this study the girls told me that there was no difference in the opportunities for boys and girls, while I as the expert have claimed that it is so, superseding their opinion. The top-down - bottom-up question is in itself a polarity to be managed in climate change and development matters.

### **9.1.2 Capacities**

As a capacity approach has its starting point in the capacities and resources that vulnerable people themselves possess. They are, instead of being conceived as victims in need of help, perceived as resources for their families and communities, potential that needs to be realized. The girls indeed have potentials and capacities; capacities to organize, take initiatives, capacities in expressing themselves, they read and write, and access and understand information. They also completed important social functions through babysitting, contributing

in domestic work, and the girls in the low-lying community took part in organizing the Sunday *pupusas*. The study showed that girls have opinions and wishes, and an advantage of a capacity perspective is that their voices become central. The vulnerable group can be an active part of the process of empowering and capacity building. Engagement, opinions and desires are capacities that can be supported, and commitment that can be used to the benefit the communities as well as the girls themselves.

Channeling efforts to develop capacities of people can be a sustainable approach to work with vulnerable groups and communities, avoiding the creation of dependency on NGOs as the capacities are developed from within the communities themselves. The girls in the study enjoyed giving their opinion and expressed that their voices were important, while at the same time showing personal constraints, as fear, in giving their opinion. Supporting the girls' self-esteem to participate and speak up could be to strengthen a capacity the girls already possessed, and such a psychological and social empowerment could be sustained after the engagement of an NGO. The girls' football team supplied girls with social ties and organizational and mobilization skills. Supporting this could enable further development of important skills while not making the community dependent on the supporting organization, opposed to, for example, assistance in raising school fees in times of crisis. Fostering and developing the capacity of a group, or empowerment within one domain, can often have spillover effects on other domains and capacities (Friedmann 1992). One can imagine that strengthening the capacity of meaningful participation by the girls could also increase their social empowerment by relating more to other people and expanding and strengthening their social network, a feature also regarded as an important adaptive capacity (Ensor and Berger 2009b).

However, only paying attention to the capacities that already exist could lead to a disregard of the constraints on those capacities. Though girls showed some opposition towards norms and practices in the communities, norms and practices were also constraining them. One girl explained that when she questioned her fathers' burning practices, this was seen by society to be outside the sphere appropriate for her to meddle in, and the father made it clear that it was none of her business. The idea of girls' role separated from the production, as well as the notion that youth was often not listened to, could constrain the issues on which it was accepted that they gave their opinion on, and what issues girls would see as relevant for them. Although many girls took part in events, and football practices in the high-lying community, some girls in particular were prevented from participating due to strict control of movement

by the parents. In addition, social control influenced the social network of girls, as talking to boys could result in gossip.

A sole focus on girl's capacities can also be in danger of disregarding underlying causes of vulnerability, with the possible result of neglecting these in development work. Davis (2004) shows how root causes can be at a different level than the immediate unsafe conditions, and the importance of working on different scales, global, national and local, to work on patterns of vulnerability. While girls' that got settled with a man in the community would become dependent on the man's work in the agriculture, which by several mothers was viewed as an insecure source of income, some deeper causes of vulnerability were few possibilities of income earning of the girl and limited future possibilities based on macro-scale high unemployment, local-scale difficulties of access to education, and cultural narratives about what a woman could and could not do. Working on such causes of vulnerability can be difficult without a vulnerability analysis that can identify underlying causes. Disregarding vulnerability can also impede a focused targeting of important issues affecting the girls. If future possibilities are identified as an issue, with the obstacles of long distance and an unsafe road to school affecting this, specific measures could be worked on as a car service that could take the girls safely and with little loss of time to the nearest school, or parents organizing to follow the girls, and small economic support to buy lunch in the village. Targeted focus could decrease future vulnerability and increase capacity, for example by means that facilitate education.

A focus on the capacities and empowerment of a vulnerable group could also lead to an increased feeling of responsibility among this group. One girl that expressed particularly care and worry for the environment, told of fear for the future as she referred to what she had learned about contamination of the water. While access to, and understanding of, information and knowledge have been considered capacities that can empower and contribute to agency, this example shows the potential of putting extra weight and sensation of responsibility on groups that might not feel or be capable of acting on what they find as problematic. Other studies have also reported that problems that seems too big for the individual to handle or affect can lead to feelings of helplessness and fear by young citizens (Hayward 2012).

Finally, Davis (2004:136) warns about the inherent danger of "cynical government officials" that become aware of the strength and capacities of local population and thus pay even less attention to the vulnerability of people. This can also be applied to girls,' as the possibility of

them being viewed as capable could decrease government focus on this group if they are conceived to be able to take care of their own situation.

## **9.2 Balancing vulnerability and capacities**

Johnston (1998) explains that people often have a tendency to favor one polarity over the other. If we shift too far to one polarity, he suggests that we fail to recognize the benefits of the other, and that by this, the disadvantages of the current strategy or understanding will surface (in Hayward 2010).

Tanner (2012) might very well be right in that a “race to the bottom” of who is the most vulnerable will not necessarily make more resources available to adolescent girls, and in fact, as suggested by Arora-Jonsson (2011) in the case of women, might actually work contrary to the intention of putting women in the debate of climate change, as the problem is already identified as women’s vulnerability. But by letting the pendulum go too far to this direction one might miss important features of girls’ situations and fail to take these into account when working with girls, and might miss those issues where support is most needed. Freire (1999) points to the importance of seeing the structural vulnerability and problems in order to be able to act on them. A good start is to let the groups’ identify vulnerabilities themselves, as Mitchell et al. (2009) did in their study of children and disaster risk reduction in El Salvador and the Philippines, that showed that children had good concepts of risks that could complement the adult view. Still, structural issues might be difficult to see if not trained in analytically approaching the surroundings. In working on vulnerability in the focus groups and interviews, girls’ were eager to tell how gender made no difference to vulnerability or future possibilities as this was a subject that belonged to the past. While this may be true when it comes to the distribution of food in the family or the degree of responsibility in crisis, this study has shown some structural gendered vulnerabilities. Working on vulnerabilities can also be a form of capacity building as it can increase the understanding of the surroundings and oneself in society.

While authors in the perspective of “vulnerable victims” recognize that children have capacities (Barlett 2008), and the perspective of “agents of change” recognize their vulnerability (Back et al. 2009), each remain closer to one of the poles. However, the “children as agents of change” perspective represents an intent to shift the pendulum from the disproportional weight on children as vulnerable by recognizing their capacities and including

children as active citizens in work on climate change and disasters. Balancing a polarity does not mean to find a middle-way between the poles. Rather the art is to “operate and value two extremes at the same time” (Lewis and Dehler 2000:715). Hayward (2010) shows in his discussion of roles of local governments how a balance in a polarity does not have to mean to centralize one’s position between the two elements, but the ability to value the different elements and use them when it is suited. Instead of arguing for a middle-way perspective between vulnerability and capacities, I suggest a consideration of adolescent girl’s vulnerability as a polarity where they can be viewed as vulnerable and with capacities simultaneously, and that this will be balanced and contemplated in relation to concrete contexts.



## 10 Conclusion

This thesis has investigated the question of how to understand adolescent girls' vulnerability to climate risks. The case from two rural communities in northern El Salvador, affected by climate variability through food insecurity and economic stressors, has shown that adolescent girls have both vulnerabilities and capacities.

First, this study provides an argument for understanding girls' vulnerability as contextual rather than only as the outcome of climate impacts. Although several girls experienced food insecurity and economic problems, the analysis of vulnerability to climate risk did not find them to be more vulnerable to climate risk than other members of society. However, the girls' contextual vulnerability was linked to their dependency on men, few future possibilities, constrained freedom of movement and risk of pregnancy. The role of girls outside of agricultural production was considered to protect them in relation to climate risks, but when expanding the context, this same feature made them vulnerable, as it created a dependency on men. This shows that the social context is crucial to understanding the girls' vulnerability.

Climate risks affected girls' particular vulnerability in a more indirect way. Dependency on men made girls vulnerable to a future husband's injury, death or maltreatment, as a woman was likely to struggle with economic- and food security issues without the man. Climate risks thus represent an extra layer of insecurity for girls.

If adaptation initiatives are taken in communities, these can influence the gender relations and the situations of girls, either by reaffirming existing states or by altering relations and situations. If agricultural practices were to be carried out in these communities without including girls, this would not alter the situations that make girls vulnerable, as they would continue to stand outside the production system. An alternative approach would be to include girls in agricultural training or to develop other employment possibilities or education. Excluding girls from adaptation processes can exclude their voices further in the communities. As shown, several girls showed interest, knowledge and worry about the environment, in addition to other capacities. Not including girls will also mean not taking advantage of important capacities in the society.

The findings of this study show that adolescent girls are a differentiated group. Their vulnerability to food security and poverty varies in accordance with the vulnerability of their household. Girls that reported to have experienced an economic- or food crisis showed more

preoccupation towards economic worries and food security. There were also differences between the girls' engagement and agency towards food production, the community and the environment. While the idea of "girls as vulnerable" might resonate with the self-conception of some girls, it may not feel apt for others, as might also be the case of "girls as agents". Even in small, quite homogenous communities, such generalizations can be questioned.

Second, this analysis suggests that a productive way to understand girls' vulnerability can be as a polarity between vulnerability and capacity. While the perspective of "children as agents of change" represents a more balanced understanding of girls' vulnerability by challenging the "vulnerability" stereotype and acknowledging girls' potential, it is important to be aware of a general tendency to favor one side of a polarity. To gain benefits from the capacity element of the polarity, it is important also to recognize the benefits of the vulnerability element, as well as to be aware of the disadvantages of the favored polarity element. Instead of understanding the equilibrium of the polarity as a need to centralize the viewpoint on a continuum, a more useful approach can be to recognize the benefits and disadvantages with both elements of vulnerability and capacity, and balance these in relation to specific contexts.

In sum, this study proposes an understanding of adolescent girls in a climate risk context as both vulnerable and capable, with both sides of the polarity influenced by social, economic, and cultural conditions. The study suggests that the emerging perspective of "children as agents of change" contribute to a more balanced view of this polarity, but warns about letting the pendulum swing too far and disregarding the benefits of a vulnerability approach. It also encourages a contextual approach to vulnerability, as girls' special vulnerability might not be easily spotted if only focusing on the outcome of a specific risk. Girls' vulnerability to climate risks can be indirect and it can continue unchanged if girls are not included in development and adaptation processes.

No generation has been promised a future that is entirely safe and secure. Still, for the young generation of today the future seem more insecure than in the past, as this generation is receiving an environmentally degraded world that includes changes in the climate system. It is, for example, estimated that 175 million persons under the age of 18 will be affected by the kind of natural disasters provoked by climate change every year the next decade (Save the Children 2007). Much of the foundation of the youth's future is created during adolescence, as important life choices are made in this transition from childhood to adulthood. Deprivation of opportunities in this period of life can have long-term consequences and affect future

vulnerability (Tavares da Silva 2012). A large majority of young people live in developing countries, and they have to cope with a variety of challenges in addition to the threat of climate change, which will affect developing countries the most (Huq et al. 2004). Due to the vulnerable position of this group, and especially that of girls, adolescents have been receiving increased attention lately (Perisic, Komarecki and Minujin 2012, Tanner 2012, Plan International 2011, Baker and Kyazze 2008).

Mahatma Gandhi once said that “the measure of a country's greatness should be based on how well it cares for its most vulnerable populations.” Yet, how we conceive vulnerable groups can have implications for how the care is processed. When essentialism in either form, vulnerable or capable, is used to describe young girls, it bears with it pre-conceived stereotypes that might not fit the reality of girls, and can lead to blind spots in policies and work with such a group. This might be the case for any group considered vulnerable. A better understanding of the concepts of vulnerability and capacities is needed, particularly as the use of the "resilience" concept becomes more and more widespread in disaster risk management (IPCC 2012). Being able to understand girls as a diverse group, with their vulnerability as part of a polarity, can enable policies to balance the nuances of girls' situations in different contexts, and benefit from the advantages of both the vulnerability and capacity elements. A contextual understanding of vulnerability should be central in work with vulnerable groups, because the social context can influence vulnerability, and also enable capacities. Girls are important members of households, communities and society, and while they may in some circumstances and at some times be vulnerable, they also have the capacity to influence the very social and cultural structures and norms that contribute to that vulnerability. Recognizing children and youth as “agents of change” is important, but recognizing and addressing the factors that make them vulnerable is still critical to promoting change.

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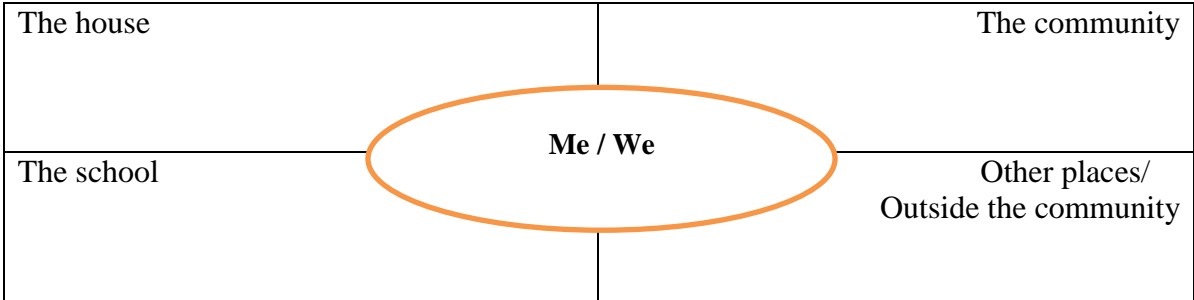
## Appendix

### Appendix 1: Exemplar interview guide for girls

Theme	Examples of questions / key themes
1. Introduction/ family and life situation	<ul style="list-style-type: none"> <li>- <i>How many persons live in your house?</i></li> <li>- School/education</li> <li>- Age</li> <li>- Responsibilities at home</li> <li>- Free time activities/preferences</li> <li>- Earlier participation in organizations/church/school projects?</li> <li>- Occupation of the parents, income, crops grown, vegetables ect.</li> <li>- Ideas about what to grow/ the girls' part in the food provision.</li> </ul>
2. Vulnerability and capacity	<ul style="list-style-type: none"> <li>- <i>What is your family's biggest problem?</i></li> <li>- Feelings about the problem.</li> <li>- Strategies to meet the problem.</li> <li>- Problem of the girl as an individual.</li> <li>- What things do you/your family do really well?</li> </ul>
3. Weather and climate change – perceptions and experiences	<ul style="list-style-type: none"> <li>- <i>How has the weather been lately?</i></li> <li>- Communication about weather in family/school/ect.</li> <li>- Are there any problems with the weather?</li> <li>- <i>How does the weather affect you?</i></li> <li>- Family's coping/adaptation with the weather/strategies in times of crisis</li> <li>- The girl's role in times of crisis</li> <li>- Possibilities for changing coping strategies</li> <li>- <i>What do you do when X hazard strikes?</i></li> <li>- For example, the drought in 2011, flood/heavy rain 2010?</li> <li>- How did you notice this? Anything changed in your day? Do you get more work? Feel like you manage it?</li> </ul>
4. Environment	<ul style="list-style-type: none"> <li>- <i>What do you think of when you hear the word "the environment"?</i></li> <li>- Environmental problems</li> <li>- What can be done about environmental problems?</li> <li>- Have you ever seen someone do something bad to the environment? Did you say something to him/her?</li> <li>- Have you ever heard the words "climate change" or "global warming"?</li> </ul>
4. Community and future	<ul style="list-style-type: none"> <li>- <i>What do you like about your community?</i></li> <li>- What things do you hope stay the same/change when you become adult?</li> <li>- Youth: problems, participation, gender relations, future plans.</li> <li>- What things do boys/girls think is important?</li> <li>- Hopes and plans for the future, the future of the community.</li> </ul>

**Appendix 2: Focus group exercises**

**Exercise 1: Me/We diagram**



*Explanation:* The diagram depicts places where the informants move.

*Questions to the focus group:* Who do we interact with in these different areas? Who do you speak to in your home? What other persons affect your lives and where do we meet them?

*Follow up:* Separate into two groups. One group underlines the names of the persons they feel have the most influence in their lives, the other the ones they communicate with the most. Later the two groups will guess the “task” of the other group.

*Inspiration:* Molina et al. (2009)

**Exercise 2: Risk mapping 1.**

Risk component	Examples of identified risks
Hazard-based	
Human vulnerability-based	
Socially generated	

*Explanation:* Write down risks in the society on cardboards. Identify whether the risks are hazard-based (cyclone), a mixture of natural hazards and socially generated (danger of destruction of house during cyclones) or only socially generated (cars driving fast).

*Question:* What are the things that in your community that can make us feel nervous, or put us in danger? In which category would you place the risks of...?

*Variation:* Use domains as “economy,” “health,” “social,” “nature,” instead of the diagram, as it may trigger thoughts about risks in different domains and is more intuitive.

*Inspiration:* Molina et al. (2009)

### Exercise 3: Mapping Risks 2

<b>Impact</b>	High	Medium/low
<b>Frequency</b>		
High		
Medium		
Low		

*Explanation:* The risks identified in Exercise 2 is being placed into the diagram above, according to frequency and impact, based on consensus in the group.

*Follow up:* Each participant get two votes to vote on what is most important to them.

*Questions for discussion:* What is being done to decrease the different risks? What could be done? How do you think it could be acted upon?

*Inspiration:* Molina et al. (2009)

### Exercise 4: Storytelling

*Explanation:* Based on a photography of a girl, a story is told about a girl whose family is in crisis due to crop failure. The participants continue the story of how the girl feels and think, and possible risks and opportunities they see. A picture of a boy is introduced to continue a discussion of gender differences. The facilitator finishes the story in a positive way and asks what factors could have contributed to the happy ending.

*Inspiration:* Veale (2005)

### Exercise 5: Benefits race

*Explanation:* Different measures beneficial for the environment are put up on card boards on a wall. Two teams are competing to come up with as many benefits of each measure as possible, for example, not littering, write it on cardboards and tape them on the wall under the measure. Timeframe of 5-10 minutes. Possibility of discussing the benefits later.

*Inspiration:* Molina et al. (2009)



**Exercise 6: What limits and enable us?**

*Explanation:* Factors that can limit and enable participation of the informants, identified earlier in the research, is by the facilitator written down on cardboards. The factors are ranged by the participants in two teams due to their importance in affecting them. They are free to remove factors or add new ones.

*Inspiration:* Molina et al. (2009)