

Weathering the storm: Adolescent girls and climate change



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We also acknowledge the contribution from Nick Hall, Michael O'Donnell and Roger Yates in editorial input, as well as the technical support provided by Plan's Country Offices in Bangladesh and Ethiopia, in particular: Runia Mowla, Shahnawaz Whara, Michiel Slotema, Fasil Tsegaye, Abedel Mengistu, Getachew Demesa, Lishan Woldemedhin and David Throp. Thanks also to Dr Alyson Brody at BRIDGE for peer reviewing this publication.

With thanks to the Bangladeshi and Ethiopian girls who enthusiastically offered their views about the challenges they are facing in adapting to climate change in their countries.

June 2011

This publication is also available online at www.plan-uk.org
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The report was co-founded by



the Plan: to work with the world's poorest children so they can move themselves from a life of poverty to a future with opportunity

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Photo: Plan

List of acronyms

ANPPCAN	African Network for the Prevention and Protection of Child Abuse and Neglect
CCA	Climate Change Adaptation
CEDAW	Committee on the Elimination of Discrimination Against Women
CGD	Centre for Global Development
COP	Conference of Parties
CRC	Convention on the Rights of the Child
CRED	Centre for Research on the Epidemiology of Disaster
DFID	Department for International Development
DRR	Disaster Risk Reduction
EM-DAT	The International Disaster Database
FCCC	Framework Convention on Climate Change
GEF	Global Environment Facility
GIRRL	Girls in Risk Reduction Leadership
GTZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
HIV	Human Immunodeficiency Virus
IASC	Inter-Agency Standing Committee
IPCC	Intergovernmental Panel on Climate Change
LSE	London School of Economics
MISP	Minimum Initial Services Package (for Reproductive Health)
NAPAs	National Adaptation Programmes of Action
NGO	Non Government Organisation
PDNA	Post Disaster Needs Assessment
SAP	South Asia Partnership
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNISDR	United Nations International Strategy for Disaster Reduction
UNOCHA	Office for the Coordination of Humanitarian Affairs
US	United States
USAID	United States Agency for International Development
USD	United States Dollar
WAGGGS	The World Association of Girl Guides & Girl Scouts
WEDO	World Environment Development Organisation
WHO	World Health Organisation

Foreword

I am pleased to welcome this new report 'Weathering the Storm: Adolescent Girls and Climate Change' from Plan International. It emphasises that we will not achieve any form of climate justice unless we address the needs and rights of all the different groups of people affected by climate change. It also underlines the need for a human-centred approach, one that safeguards the rights of the most vulnerable and shares the burdens and resolutions equally and fairly.

The impacts of climate change, whether they are gradual changes in agriculture and living conditions or the more cataclysmic effects of a cyclone or flood, are different for different populations. But inevitably children everywhere are badly affected, and girls in particular bear the greater burden. Their lives, prospects and human rights must be better protected. We will never achieve climate justice without addressing the gender dimensions of climate change, and girls themselves, their skills, knowledge and energy, must be part of the search for solutions.

During UNFCCC's COP-16 in Cancún, Mexico, in December 2010 the girls who attended demonstrated their critical awareness of the importance of climate justice in contributing to the right to sustainable development. They spoke out about the impacts of climate change on their lives; they discussed their needs, their fears and their dreams. Their words should inspire us to take action. However, in many national and international fora and in planning at more local levels children's voices are still absent. Decisions on climate change must be inclusive and participatory if they are to work.

Climate justice requires effective action and the sharing of skills across the globe; we must involve girls from different regions of the world. In this report, a group of young women from Ethiopia and Bangladesh, who live on the frontlines of climate change, have been given the opportunity to tell us their story and what they want us all to do about it.

We need to listen to such voices – if we fail to do so we may well fail to tackle successfully the many challenges that climate change presents us with and we will also fail to achieve climate justice.



Mary Robinson

President of the Mary Robinson Foundation – Climate Justice
Former United Nations High Commissioner for Human Rights (1997-2002)
First woman President of Ireland (1990-1997)
Dublin 2011

Photo: Mary Robinson Foundation



Executive summary

“(Climate change and local environmental change may destroy all my dreams and aspirations.”

Girl, 15, Philippines



Photo: Plan

The gender dimension of climate change is gaining a greater profile in the global debate. Yet the double jeopardy brought by gender and age remains largely ignored. The young woman quoted above speaks for countless others living on the frontline of climate change in many countries across the world.

But her concerns are not yet the concerns of those who wield power and make decisions. In raising awareness of the realities facing girls exposed to climate risks, this report seeks to inform decision-makers and policy analysts in countries facing the pressures of climate change, as well as those directing policy and determining funding at the international level. The escalation of climate risks we are experiencing affects both developed and developing countries, men, women, the elderly and the young. However it is clear from ongoing research and from the primary evidence collected for this report from girls living in Ethiopia and Bangladesh that increased climate stress is exposing a growing number of girls and young women to very specific risks. More girls and women are dying during disasters, an increasing number are enduring early and forced marriages, and more girls are being exposed to sexual violence and the curtailment of their education.

This report demonstrates not only how climate change disproportionately affects girls, particularly adolescent girls, but also how girls' agency is crucial for tackling future challenges of climate change adaptation. Given the space and voice, girls are capable of identifying and taking actions that will help to protect themselves and their communities. In order for this potential to be realised, organisations working on women's and girls' rights must be given the opportunity to contribute. Acknowledging women and girls as vulnerable groups is not enough. Planners need to allocate climate change adaptation funding to enable girls to be effective agents of change.

According to the Intergovernmental Panel on Climate Change, even if global emissions of greenhouse gases were to be drastically reduced in the coming years, by 2050 the global annual average temperature is expected to increase by two degrees Celsius above pre-industrial levels.¹ Such a world will experience more frequent and intense droughts, floods, storms and cyclones, heat waves and other extreme weather events.² Signatory states to the United Nations Framework Convention on Climate Change (UNFCCC) are now not only negotiating how to mitigate climate change, but also debating how best to support and finance the development of climate adaptation policies which will result in action. This will require an extensive and participatory process for determining appropriate programming which will need to be incorporated into countries' overall development plans.³ Signatories to the UNFCCC have acknowledged the impact of climate change on vulnerable groups⁴, yet what this means for some of the world's most at risk groups – in particular fulfilling the rights and needs of adolescent girls – is barely acknowledged in policies being developed to tackle climate change.

Why adolescent girls?

There are over 500 million adolescent girls (aged 10-19) in the developing world.⁵ Adolescence is a time of key transitions: from girlhood to womanhood; from primary to secondary education; from education to work and family life. Too often these transitions go wrong: with high drop-out rates from secondary school; poor quality and inappropriate education; early and forced marriage; exposure to violence, abuse and to HIV infection and high maternal mortality. Adolescence is also the time when gender roles for girls become more entrenched; in many countries their lives become limited to the domestic sphere. This seclusion brings with it greater exposure to a range of risks. In many societies gender discrimination also means that family poverty has a greater impact on girls who are fed less, are less likely to have access to healthcare and are less likely to go to school. With climate change causing yet more poverty these disadvantages will increase and prevent an even greater number of girls from realising their rights, with particular impact as they reach adolescence.

The state of play – life as an adolescent girl:

- 75 million girls of primary and lower secondary age were out of school in 2008⁶
- Globally 25.3% of girls experience sexual violence⁷
- One in every three girls in the developing world is married by the age of 18⁸, severely limiting girls' rights and decision-making power within her marital household
- Pregnancy is the leading cause of death amongst 15-19 year old girls, and girls under 15 are five times more likely to die in childbirth than women in their twenties⁹
- In sub-Saharan Africa, 76% of young people aged 15-24 years living with HIV are female.¹⁰

¹ IPCC 4th Assessment Report 2007, Forthcoming IPCC SREX Special Report on Extreme Events (2011)

² Ibid

³ Institute of Development Studies (2010) 'Strengthening Climate Resilience, A Climate Smart Disaster Risk Management Approach'

⁴ Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010 FCCC/CP/2010/7/Add.1 (15 March 2011)

⁵ UNFPA (2005) 'The State of the World Population: The Promise of Equality- Gender Equity, Reproductive Health and the MDGs'

⁶ UNESCO (2011) – Global Monitoring Report, Table 5, pg 309

⁷ WHO (2009) – <http://www.who.int/mediacentre/factsheets/fs334/en/index.html>

⁸ UNICEF (2011), "The State of the World's Children 2011, Adolescence: An Age of Opportunity", New York: UNICEF

⁹ World Population Foundation website (2011) – http://www.wpf.org/reproductive_rights_article/facts

¹⁰ UNFPA website (2010): <http://www.unfpa.org/hiv/women.htm>

Impact of disasters on girls and young women

- Women and girls are recorded as 90% of those killed by the 1991 cyclone in Bangladesh¹¹ and up to 80% of the loss of lives in the 2004 Asian Tsunami.¹² In 2007, an estimated 1.5 million people were left homeless due to rains and flooding in 18 African countries with women and children representing more than three quarters of those displaced by natural disasters¹³
- A study by the London School of Economics (LSE) analysed disasters in 141 countries and concluded that gender differences in loss of lives due to natural disasters are directly linked to women's economic and social rights. The study also found that in societies where women and men enjoy equal rights, losses in lives due to natural disasters were more gender balanced¹⁴
- The LSE study found that boys are likely to receive preferential treatment in rescue efforts, and in the aftermath of disasters both women and girls suffer more from the shortages of food, and from the lack of privacy and safety of toilet and bathing facilities, and sleeping arrangements. In addition, in many countries, girls are discouraged from learning survival skills such as swimming or climbing.

Other factors challenging the wellbeing of adolescent girls include:

- demanding household and family tasks and responsibilities
- lack of access to information and resources
- lack of knowledge of their rights and of life-saving skills
- lack of power in decision-making.

The way forward

Ensuring that adolescent girls have access to relevant quality education is a major priority for the climate change agenda. Better educated adolescent girls who have the support of those around them to realise their rights are more likely to challenge gender discrimination. They are also more likely to complete their education, find paid work, support the education of their own children and potentially build more resilient families. This in turn will help to reduce vulnerability to disaster and climate risks. Quality education, which also fosters a better understanding and knowledge of climate change and its impact on our social and economic lives, is one of the strongest forms of climate insurance.

Programmes and policies that do not recognise the different ways in which girls and boys are affected by climate change are exacerbating pre-existing gender inequalities and failing to tackle one of the root causes of vulnerability to climate risk. It is hard to see how this situation can improve when women and girls remain systematically neglected and under-represented in global, national and local decision-making on how the climate crisis should be addressed. At the United Nations Framework Convention on Climate Change's (UNFCCC) COP16 in 2010, developed countries committed to jointly raising US\$100 billion per year for climate change by 2020.¹⁵ This commitment needs to be adhered to and the funds used effectively. There are two key priorities:

1. To prescribe gender sensitive strategies for climate change adaptation.
2. To address gender inequality as a root cause of vulnerability to the impact of climate change.

¹¹ Ikeda, Keiko (1995) "Gender Differences in Human Loss and Vulnerability in Natural Disasters: A Case Study From Bangladesh." *Indian Journal of Gender Studies*. 2(2):171-93.

¹² APWLD (2005) "Why are women more vulnerable during disasters?" Asia Pacific Forum on Women, Law and Development, NGO in consultative status at UN ECOSOC

¹³ UNICEF (2008) "Our Climate, Our Future, Our Responsibility", pg 22

¹⁴ <http://www2.lse.ac.uk/geographyAndEnvironment/whosWho/profiles/neumayer/pdf/Disastersarticle.pdf> -

Neumayer E & Plumper T: 'The Gendered Nature of Natural Disasters: the impact of catastrophic events on the gender gap in life expectancy, 1981-2002': LSE

¹⁵ Report of the Conference of the Parties to its sixteenth session, held in Cancun from 29 November to 10 December 2010 FCCC/CP/2010/7/Add.1 (15 March 2011) – paragraph 98

2 The gender dimension of climate change – listening to girls on the frontline of climate risks



Photo: G.M.B. Akesh/Panos Pictures

The impact of climate change is often perceived to be non-discriminatory, affecting everyone: those living in the Global North and South, whether living in rural or urban areas. In reality, climate change accentuates inequalities, in particular gender inequality.

Compared to men and boys, women and girls are differently – and disproportionately – affected by the consequences of climate change. Women and girls constitute 70% of the global poor¹⁶ and the combination of poverty and prescribed gender roles means that they are increasingly being affected by climate risks. However, women and girls are not a homogeneous group; a range of factors such as poverty, age, ethnicity, caste, disability, geographical location and HIV status will play their part alongside gender. It is important to recognise, if we want to implement effective coping strategies, that climate change intensifies all existing inequalities.

In order to improve our ability to deal with the impact of climate change, we must start with a clear understanding of the complexities of the impact of disasters on those most at risk. Both rapid onset disasters and more subtle erosions of daily life in many communities and households are becoming increasingly detrimental to family incomes and to domestic routines.

¹⁶ Haigh, C. and Vallely, B. (2010) 'Gender and the Climate Change Agenda: The impacts of climate change on women and public policy,' Women's Environmental Network, UK

Unless policy-makers acknowledge how gender, poverty and climate change are interrelated and how climate change can aggravate existing inequalities, they will fail to support the most vulnerable. The rights of adolescent girls in particular will be jeopardised and policy-makers will miss the opportunity to redress inequalities through climate change adaptation strategies.

Giving girls a voice: primary research in Bangladesh and Ethiopia

This report presents primary research conducted in 2010 by Plan International with girls aged 13 to 18 years in flood and cyclone prone areas of Bangladesh and in drought prone areas in Ethiopia. Being conscious that girls' viewpoints and experiences are missing from the climate change debate, the research sought to document their thoughts on three key questions:

- What are the effects of climate change on their daily lives?
- What do they see as priority measures for adaptation?
- How active a role do they play within their communities?

The study provided girls on the frontline of climate risks with an opportunity to discuss with each other the consequences of climate change on their lives, and provided them with the space to talk about sensitive issues while adults from their communities, in particular men, were not present. Many of the girls are already actively making significant contributions to minimising disaster risks in their homes and communities.

Furthermore the girls interviewed were able to offer possible solutions to the growing challenges they are now facing due to changes in weather patterns. This theme of girls' active engagement with climate change issues is expanded in later sections of the report.

The girls who took part in the research are engaged in Plan International's programme to reduce disaster risk through a child centred approach. In-depth focus group discussions were held with over 60 adolescent girls living in the Barguna region of Bangladesh and the Lalibela region of Ethiopia. They are members of youth groups supported by Plan. These groups, facilitated by adults with strong child participation skills, provide the opportunity for them to develop new skills and to participate in the development of their communities. It is important to note that without this facilitation, in adult and male-dominated societies, the voice and participation of children in climate change would be significantly reduced.

The research sample is relatively small but the voices of these girls and young women provide us with valuable insights which bring to life many of the report's other findings. Despite their different geographical circumstances, the interviews with the focus group participants reveal common themes, concerns and experiences.

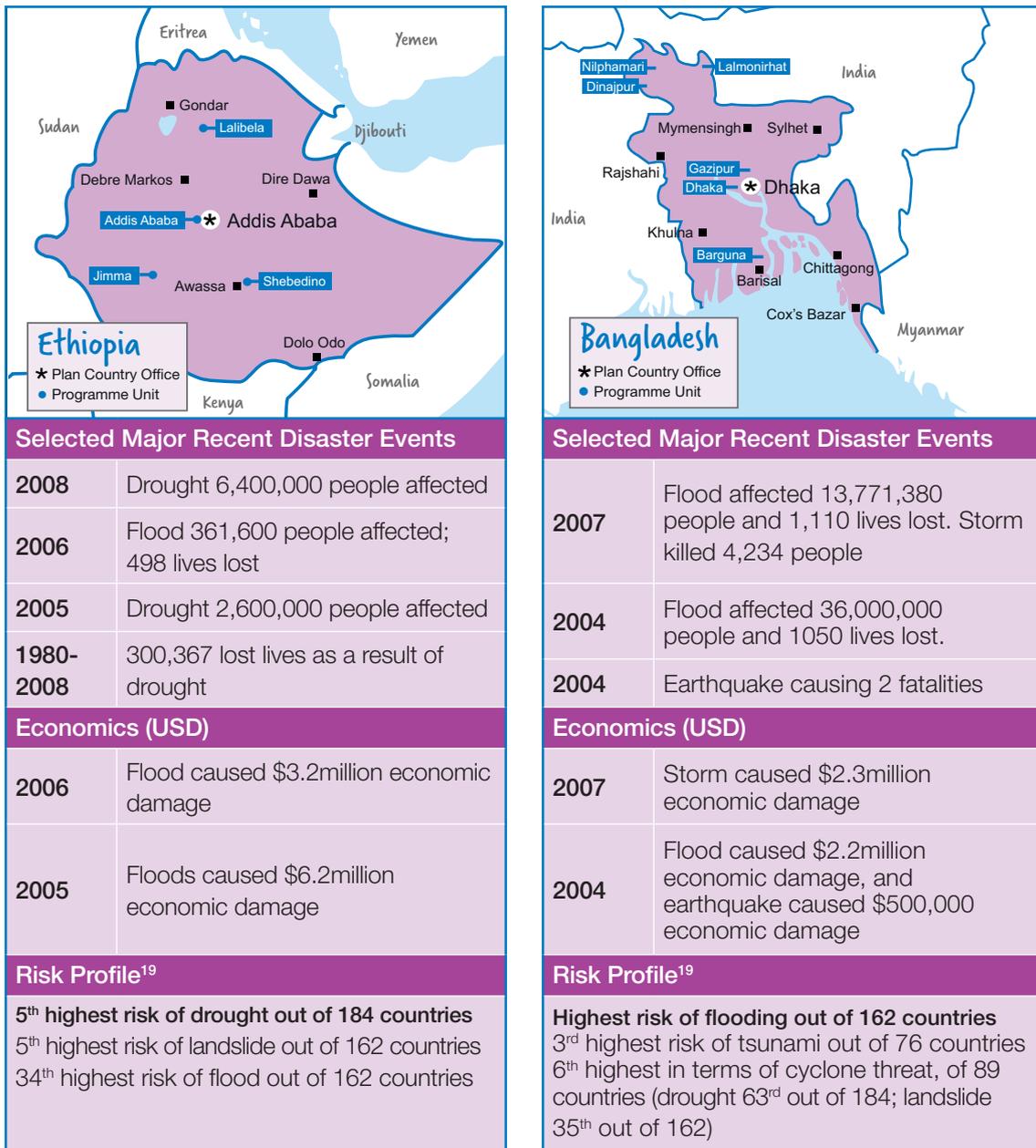
The research was also informed by interviews with 50 adults, representatives of local and national NGOs, including women's organisations, local government departments and representatives from climate-related departments of government, UN agencies, donor agencies as well as Plan staff. A detailed literature review of relevant country documents and reports was also conducted (see Bibliography).

Selection of the research countries

Both Bangladesh and Ethiopia are Least Developed Countries, with low rankings of 129 and 157 respectively (out of 169) on the 2010 Human Development Index.¹⁷ Each country has a large young population¹⁸ facing ongoing development challenges, reflected in their poor rankings for human development indicators. Due to their topography, high rates of environmental degradation and their levels of poverty, both countries are highly vulnerable to disaster risks, facing increased exposure to drought, floods and cyclones. These, compounded by climate variability, are affecting food security and access to clean water.

Each country's high vulnerability to disaster risks is illustrated in the table below.

Major disasters in 5 years (2004-2008 inclusive)*



* Source: UN ISDR and EM-DAT as collated and represented by www.preventionweb.net

¹⁷ UNDP (2010) 'Human Development Report 2010,' UNDP, New York

¹⁸ The total population under 18 years for Ethiopia is 49.63% and for Bangladesh is 37.13% (UNDP Human Development Report, 2009)

¹⁹ A variety of indices of disaster and climate change risk exist. For example, in 2011, a new index from the Center for Global Development ranked Bangladesh 2nd and Ethiopia 6th most vulnerable to climate-change related extreme events on a list of 233 countries.

3 Targeting adolescent girls: planning for resilience

“The men don’t understand the problem of girls, so there is scope to mobilise the community about the needs of the adolescent girls. We need to make a plan for them when there are floods.”

Shanti Ranjan, Sarker Population Services and Training Centre (PSTC), local NGO, Dhaka, Bangladesh



Photo: G.M.B. Akash/Panos Pictures

If programming for climate change adaptation is to be effective, it needs to be strategic and carefully targeted in a way that recognises the reality of people's lives and experiences.

Climate change is set to have different impacts on girls and boys, both directly and indirectly. Girls' productive and reproductive roles and responsibilities, their reduced access to education and to participation in local organisations and decision-making all contribute to their greater exposure to climate risks. As a result, compared to boys, girls' chances of survival are lower, as is their capacity to pursue resilient livelihood options and to realise their rights to protection, and dignity.²⁰

Treating different at-risk populations and segments of society in the same way is unlikely to result in programmes and policies that achieve their stated aims of empowering communities to adapt and survive. Countries at risk need to recognise that vulnerability to climate change is exacerbated by lack of gender equality – by social and institutional barriers that deny girls their rights and make it impossible for them to participate fully in society. In order to take effective action, planners and funders need to recognise the structural causes of vulnerability, to understand the different roles and responsibilities that underpin their communities and to use the skills of the entire population, including girls and young women.

"We need to promote the girls: they won't leave their homes during times of crisis and disaster. It's also difficult for rescue teams to find the girls. Or they leave their homes later than the boys during cyclones since they are primarily responsible for livestock and the household. There is a mass tomb of the victims of Cyclone Sidr nearby and most are women and girls." Sultan Mahamud, KII Chairman of local government office for Noltana Union, Baguna, Bangladesh

It's important to remember that men and boys are also affected by climate change – traditional roles do not only affect women and girls negatively.

Men have specific vulnerabilities that affect their health and safety and that are linked to socialised gender roles, traditional norms and values, and the way in which prevailing ideas of masculinity are constructed. For example, more men than women died when Hurricane Mitch hit Central America in 1998 because of expectations that they should carry out high-risk rescue activities.²¹

²⁰ WEDO (2008) Gender, Climate Change and Human Security: Lessons from Bangladesh, Ghana and Senegal. Women's Environment and Development Organisation, New York

²¹ UNFPA & WEDO (2009) 'Climate Change Connections: Overview 1 – Women at the Forefront'

What's happening at home – more work, less school

"It's only recently that we have begun to distinguish additional burdens that women are facing compared to men. It is not an open society, most things are hidden."

Andualem Sirawleul, Ministry of Women, Children & Youth Affairs, Lalibela City Administration, Ethiopia

At household level girls are expected to take up additional domestic chores and to support income generation. In many cases, if a mother goes out to work, it is the older daughters who are taken out of school to take her place at home. As climate shocks raise the income pressures on vulnerable households, girls' work at home becomes more arduous and it becomes increasingly difficult for them to stay in school. This lack of education, a direct result of the impact of climate change on individual households, will have a detrimental effect on the rest of their lives.²²

What our research tells us

"During drought periods, we sell firewood. It takes an hour to collect the firewood and then another two hours to walk to Lalibela. And we go at 4.00 am, even 3.00 am. And if we don't manage to sell the firewood in the morning, we will have to stay in the market all day and it stops me from going to school. " Melkam, schoolgirl, 14 years, Lalibela, Ethiopia

Melkam's description of selling firewood illustrates just one of the ways the girls we interviewed are spending increasing amounts of time on domestic chores. In the Lasta and Lalibela districts of **Ethiopia**, water sources are being depleted, partly because of the prolonged droughts and partly because of environmental degradation and increased population demands. Between 2009 and 2010, around 20 springs dried up in the Lasta District.²³ Collecting water for drinking, cooking and washing for the family and sometimes the community is considered to be the task of girls and women – and droughts affect the amount of time they have to spend on this activity. Girls interviewed in Lalibela reported that the time they spent fetching water increased substantially each day during drought periods, and that the last few years has seen prolonged periods of drought in the region. Many girls reported that their task of fetching water could take up to six hours a day carrying a jug of about 10-20kg, whereas previously it had taken around two hours. Many girls reported feeling tired and dizzy following the strenuous task of water collection and that they found it difficult to concentrate on their schoolwork as a result.

²²The 2010 report from the Global Campaign for Education states that for each additional year of secondary school, an individual's wages increases by 15-25%, as well as benefits to nutrition and family planning.

²³Plan Ethiopia's Situational Assessment (2010) Lalibela District planning.

Family responsibilities are not the only reason why drought in Ethiopia means that girls miss school. Many of the girls reported that it was difficult to attend school when there was a lack of water for sanitation and hygiene. This problem is particularly acute during girls' monthly menstrual periods. Desta Ayalew, examination expert at the Education Office in Lasta District, Ethiopia, confirmed that when the springs dry up during drought periods, sanitation is a problem and the girls may not always come to school.

Girls in the **Bangladesh** study had similar experiences. They told us that during floods, when wells are flooded, their workloads increase and they have to walk longer distances to collect clean drinking water. In the period following floods, storms or cyclones, they reported an increase in household work such as taking care of those left ill and injured, and looking after their siblings, given their parents' extra responsibilities for restoring livelihoods, and taking on additional tasks such as cleaning the home from mud, water and other damage. They also explained that their parents may travel to towns to collect aid or relief food, and at these times they are responsible for the home and have to take time off school.



Photo: Plan

Making ends meet – girls paying the price

In the aftermath of disasters caused by drought, floods and cyclones, many families are left in poverty, homeless or destitute due to loss of their crops, livestock and other family assets. Changing climate patterns such as rainfall variations may also mean less money coming in, resulting in girls being called on to contribute to the household income.²⁴ They are often sent to work in domestic service, agriculture and textile factories while boys are more likely to be kept in school in the anticipation that they will go on to become the family breadwinner.²⁵

These additional responsibilities are having a substantial effect on girls' right to education. Although in recent years there has been substantial success in improving overall gender parity at primary level, globally there are many countries and areas within countries where girls are unlikely to complete secondary level education – including Bangladesh and Ethiopia. In Ethiopia and Bangladesh around 50% of adolescent girls are out of school, and the situation is worse at secondary level in particular, where the gross secondary enrolment rate is 28% in Ethiopia and 45% in Bangladesh.²⁶

What our research tells us

In **Bangladesh**, the interviewees told us that following Cyclone Sidr in 2007, a significant proportion of girls in their schools migrated to the towns to work as domestic workers and in the garment industry. Most never returned to school.

“Girls also work as domestics with rich local families. Their families think it’s easier to stop their education – which is not the same case with boys. Families want to continue their education.” Jhumu, girl, 18 years, Barguna, Bangladesh



Photo: Alf Berg

²⁴ Björkman, M. (2007) 'Income Shocks and Gender Gaps in Education: Evidence from Uganda,' (unpublished)

²⁵ Plan International (2008) 'Because I am a Girl: Behind the Screen – an inside look at gender inequality in Asia.'

²⁶ UNESCO (2011) 'EFA – Global Monitoring Report' <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/efareport>

Other girls are forced into prostitution, particularly those from the poorest families and households headed by women. According to the Women's rights NGO Jagonari, it is estimated that there are around 300 prostitutes in Barguna:

“Due to poverty, families are breaking up. Often there is no choice for the girls than to become sex workers.”

Our research in **Ethiopia** also highlighted that many girls work for cash during difficult periods of drought. During the drought spells in Lalibela region, the Ministry of Women, Children & Youth Affairs Office reported that school girls, some as young as 11 years old, ended up working as domestic labourers in the local town, where they are exposed to abuse and exploitation. Interviews in Ethiopia also revealed that some girls have few other options but to earn money through prostitution. In early 2010, the Ministry of Women, Children & Youth Affairs Office in Lasta District reported that they helped 11 girls who were about to start work as prostitutes to return to their communities.²⁷

Tigist, a 16 year old girl from Lasta District, makes beer and sells it at the market when her family faces difficult times during droughts. This, she says, is having an impact on her education,

“I've had to miss school at least once or twice a week to make beer. That also made me get low exam results this year.”

Because I am a Girl – bearing the brunt

“Girls are suffering and climate change puts more stress on them. During disasters, girls suffer several types of abuse. On the way to the shelter they may get attacked and in a cyclone shelter they may have to stay with men in the same room. And after disasters when there is a lack of food and water, they are also in a deprived state. If those girls are educated, they will have a voice. We are not equipped to face the challenges that girls face. We need to approach this systematically, we need to empower women through education and break down social barriers and taboos in Bangladesh”

Abu M Kamal Uddin, Comprehensive Disaster Management Programme, Government of Bangladesh and Climate Change Adaptation Specialist

²⁷ Interview with the Ministry of Women, Children & Youth Affairs (September 2010) Lasta District, Ethiopia planning.

Existing inequalities and the lack of opportunity for girls inherent in family and community life mean that a large number of adolescent girls may find that their ability to protect themselves is limited. Their susceptibility to different types of abuse, as recognised in the quote on previous page, increases once disasters strike. Due to their lower status in the family, they are generally the first to suffer during food shortages, as girls often eat last or less in their households.²⁸

Women and girls are also more likely to be discriminated against in the distribution of resources such as medicines or healthcare so the chance of them falling, or remaining, sick is higher than for men and boys.²⁹ They may have been overprotected, kept at home and therefore are less likely to understand early warning systems or have life-saving skills – such as first aid, swimming³⁰ or tree-climbing – which in many at-risk countries are not deemed suitable for girls.

Research indicates that in post-disaster situations, women and girls are more likely to experience violence, including sexual violence. As climate change increases family poverty, domestic violence too is likely to escalate. The role of men as breadwinners comes under pressure and household frustrations escalate.³¹ Violence against girls is expressed in a range of different ways – physical, sexual, emotional or economic.

Sexual exploitation and climate-related disasters

“I know two girls who were raped going to fetch water. When you go far and there are not many people around, it happens.”

Endager, 16 year old, girl, Lasta District, Ethiopia

In the aftermath of a disaster, girls are often more susceptible to sexual exploitation especially if they are separated from their parents or are left orphaned. In emergency situations, many girls face the danger of sexual abuse or rape when staying in temporary shelters, when using unsafe latrine



Photo: Plan

²⁸ Neumayer, Eric and Plümper, Thomas (2007) 'The gendered nature of natural disasters: the impact of catastrophic events on the gender gap in life expectancy, 1981–2002,' *Annals of the Association of American Geographers*, 97 (3). pp. 551-566

²⁹ GTZ (2010) 'The Governance Cluster – Climate change and gender: economic empowerment of women through climate mitigation and adaptation.' Working Paper October 2010

³⁰ Drowning is the leading cause of death among children 1–17 years of age in Bangladesh. Each year, approximately 17,000 children in this age group die in this way. Source: Exploring Childhood Drowning in Bangladesh (USAID and Johns Hopkins Bloomberg School of Public Health)

³¹ GTZ (2010) 'The Governance Cluster – Climate change and gender: economic empowerment of women through climate mitigation and adaptation.' Working Paper October 2010

facilities, or when collecting firewood and water.³² Sexual violence increased in Indonesia after the 2004 tsunami and families in refugee camps turned to child marriage to protect their daughters against rape.³³ In addition, girls in desperate circumstances are sometimes forced to resort to prostitution for food and survival, which together with trauma and social exclusion can lead to risks of sexually transmitted infections including HIV.

What our research tells us

In **Bangladesh**, girls and NGOs reported sexual abuse in shelters as a major challenge both in rural and urban areas. Many girls reported hearing about incidents of boys' 'misbehaviour' in the shelter camps. One of Plan International's local NGO partners in Barguna, the South Asia Partnership (SAP) noted: *"After disasters, children, especially adolescent girls, are the most vulnerable as they are most susceptible to sexual abuse and harassment. But there is reluctance on the part of the government to deal with it as they fear it will lead to additional problems."* These views were echoed by the Women's rights NGO Jagonari, "Girls are often harassed, they have no economic power, no voice and often these incidents are hidden by them and their families. And there is also no structured system for reporting abuse."

Girls who have experienced sexual abuse or rape are often seen as an embarrassment to their families. During our interviews in Bangladesh, many in the community including teachers and local government officials stated that they were either not aware of sexual abuse or did not want to talk openly about the issue. However, the Ministry of Women, Children & Youth Affairs Office in Barguna District admitted that the rate of abuse was high, especially in this coastal belt because of poverty and disasters. Zinnat Afroze, Social Development Officer, Plan Bangladesh, noted: *"Shelters are risky for girls. And when parents die or become separated, girls are at risk. Post disasters are always chaotic and fertile times for abuse"*.

Jagonari in Barguna, also reported that the risk of sexual abuse and harassment in cyclone shelters meant that many families considered them unsafe. Girls were sometimes left at home, unable to benefit from the psycho-social support or the sexual and reproductive health and rights services being offered by relief organisations. Additionally cyclone shelters do not usually provide separate dormitory rooms for men and women, nor access to separate safe sanitation facilities – increasing girls' exposure to potential harm.

In **Ethiopia**, the challenges created by recurring and prolonged droughts, contributing to scarcity of water sources and deforestation, are also exposing a greater number of girls to the risk of gender-based violence. According to the African Network for the Prevention and Protection of Child Abuse and Neglect (ANPPCAN), a local NGO in Lalibela, *"most of the rapes and abduction occur when girls have to walk for firewood or water."* And, as in Bangladesh, gender-based violence in Ethiopia remains a taboo, as the following interviewee confirmed:

"It is difficult to get information and reporting is not very easy in Ethiopia. The girls and women are shy and afraid and not assertive of their rights. They're also afraid that the community would know about it. The cultural influence is high. Often rape and abuse cases are not reported." Endager, 16 year old, girl, Lasta District, Ethiopia

³² UNOCHA Situation Report Haiti Earthquake – Reliefweb Briefing Kit for Haiti Earthquakes – May 2011– http://reliefweb.int/sites/reliefweb.int/files/reliefweb_pdf/briefingkit-4295eae1457bbd25f21b2de45900e896.pdf

³³ Felton Bierman, C, (2006) 'Gender and Natural Disaster: Sexualized violence and the tsunami,' Development 46 (3)

Interviews with NGOs in both Bangladesh and Ethiopia also produced anecdotal evidence of the increase in child trafficking as a result of climate-induced disasters. The South Asia Partnership in Barguna reported an increase in the number of Bangladeshi girls and boys trafficked during times of floods, droughts and cyclones: *“The cyclones are creating another dimension – migration – which creates its own problems such as trafficking. After Cyclones Sidr and Aila, there was a lot more trafficking due to economic problems. It’s a crisis period after cyclones. Indeed most of the sex workers in Dhaka come from this part of Bangladesh.”*

Early and forced marriage as a result of climate-induced disasters

“I am interested in science and I want to be a maths or physics teacher. I want to be self sufficient and live without fear and superstition. I don’t want to be a victim of early marriage.”

Mahmuda, girl, 16 years, Barguna, Bangladesh

There is also emerging evidence of a rise in early and forced marriage. As families struggle to survive, a growing number are resorting to tackling poverty through ‘bride price’. Even in cultures where normally the girl’s family provide a dowry, marriages are arranged through a broker who will negotiate a price. In effect, a growing number of girls are being sold to their future husbands.³⁴ For over-stretched families this means one less mouth to feed.

Early and forced marriage limits a girl’s educational opportunities, and can severely affect her health and her overall wellbeing. Once married, girls are unlikely to continue at school. Instead, they are expected to take on marital duties in their new household, many under the guardianship of their in-laws.³⁵ Early marriage increases the likelihood of early pregnancy. In developing countries, 1 out of every 7 girls marries before the age of 15 and between one-quarter to one-half of girls become mothers before the age of 18.³⁶ Early pregnancy is the leading cause of death amongst 15-19 year old girls – with those under 15 five times as likely to die during childbirth as those in their 20’s.³⁷

What our Research Tells Us

Bangladeshi girls consulted by Plan in this study reported that in the aftermath of Cyclone Sidr in 2007 the number of early marriages increased. One interviewee told us that as many as 50% of the girls in her school dropped out because they got married. Many girls interviewed stated that they did not like the practice of early marriage and where possible, wanted to finish their education and pursue opportunities to earn their own income.

³⁴ Donahue, A. (2011) ‘Adolescent Girls, Cornerstone of Society: Building Evidence and Policies for Inclusive Societies,’ prepared for the 5th UNICEF–GPIA Conference, NYC

³⁵ UNICEF, 2010, State of the World’s Children. UNICEF: New York

³⁶ Levine, R. et al (2009 reprint): ‘Girls Count: A Global Investment and Action Agenda,’ Washington DC: Centre for Global Development

³⁷ http://www.wfp.org/reproductive_rights_article/facts

“After cyclones, families think their condition is worse and send their daughters to get married. Almost 50% of girls drop out of education because of early marriage. In very remote villages, it is probably more 70 to 75%.” Young girl from Barguna, Bangladesh

In **Ethiopia**, the girls taking part in the research were reluctant to talk about early marriage as it is illegal.³⁸ However, they acknowledged that they knew of girls of their age who had recently married. The Ethiopian government is endeavouring to combat early and forced marriage through the passage and implementation of new laws such as the Criminal Code and Family Law, but it is still widely practised in rural areas. In the Lalibela region, early and forced marriage is a serious problem, where some girls as young as nine years old are being forced to get married. National figures are alarming – around 49% of women are married before they are 18.³⁹ Poverty is the main reason given for the high prevalence of early and forced marriage and some of our interviewees raised concerns about how climate risks, by exacerbating poverty levels, will only make things worse. Several NGOs and representatives from the Ministry of Women, Children & Youth Affairs for Lasta and Lalibela City Administration districts acknowledged that this was a serious, though hidden problem, which was difficult to tackle. Tesfa Alemayehu, from the Ethiopian NGO, African Network for the Prevention and Protection of Child Abuse and Neglect (ANPPCAN) noted: *“We need to strengthen the economic capacity of the family so that early marriages don’t happen so often. If the family’s economic situation is good, girls can study properly and won’t have to go into early marriages or sell firewood for cash”*.

The experience of the adolescent girls we surveyed resonates with similar findings in other parts of the world:

- In Kenya, participants in the “Gender, Education and Global Poverty Reduction Initiatives” project noted that increased poverty associated with drought has affected school attendance, with girls being more likely to be withdrawn from school than boys⁴⁰
- In neighbouring Uganda, the food crises associated with climate change have been linked to higher rates of early marriage for girls – or *famine marriages* as they have been labelled – as daughters are exchanged like commodities in return for bride price⁴¹
- Following the 2004 tsunami, girls in Indonesia, India and Sri Lanka were forced into marriages with ‘tsunami widowers’ and in many instances did so to receive state subsidies for marrying and starting a family⁴²
- In 2010 staff from Interact Worldwide and Plan International reported increases in early and forced marriage amongst the communities they were working with in the aftermath of both the earthquake in Haiti and the floods in Pakistan.⁴³

³⁸ Since 2004, the Ethiopian penal code forbids girls to be married before the age of 18, and punishes marriage by abduction with up to 20 years imprisonment. While both abduction and rape are criminal offences under Ethiopian law, if marriage is subsequently agreed, the husband is exempt from criminal responsibility for his crimes.

³⁹ UNICEF (2007) State of the World’s Children

⁴⁰ Deen, T. (webpost 9/3/10 on www.globalchange.me) ‘Famine Marriages – Just one by-product of climate change’

⁴¹ Ibid

⁴² Krishnamurthy, R. (2009) Review of Sexual and Reproductive Health and Rights in the context of Disasters in Asia, Chennai, India: ARROW

⁴³ Interact Worldwide assessments of Adolescent Sexual Health reports in Haiti and Pakistan, July and October 2010 (unpublished)

4 Shouldering the responsibility: global influence, national action



Photo: Bonnie Miller

Climate change is a global phenomenon, no respecter of geographic boundaries or cultural sensitivities. This is reflected in the lives of the girls and young women whose voices come through clearly in the research for this report. What they reveal is a thread of common experience.

It is this, the particular needs and rights of girls and young women, which national and international climate funding must respond to. The time, money and physical resource cost being incurred by girls as agricultural food producers, household guardians and as those who experience gender-based violence, remains unacknowledged. This is likely to continue unless girls themselves can inform both global funding and strategies for adaptation.

This is not happening at present. The voices of girls and young women are seldom heard within global negotiations on climate change. They remain unrepresented under the UNFCCC and within adaptation research by the IPCC, the body tasked with assessing the scientific, technical and socio-economic information relevant for understanding the risk of human-induced climate change. International human rights instruments⁴⁴ provide the legal framework and the analytical tools which should safeguard girls' rights. However, global policy-makers and donors, who dominate country-level decision-making bodies determining climate change adaptation strategies, have yet to insist upon an effective gender analysis in the technical and financial support being provided to countries planning for adaptation.

⁴⁴ These include: the UN Convention on the Elimination of All Forms of Discrimination Against Women and the subsequent Beijing Platform for Action; the UN Convention on the Right of the Child and the UN Humanitarian Charter as well as the Millennium Development Goals, in particular MDG 3

The group of Least Developed Countries has prepared National Adaptation Programmes of Action (NAPAs). These are essential tools which analyse climate vulnerability and identify the priority adaptation projects which need international finance. However, in reviewing existing NAPAs for Ethiopia and Bangladesh, the gap in addressing the needs of girls is evident. The NAPAs make only a few references to children as being amongst the most vulnerable population groups and there is not one adaptation project explicitly targeting adolescent girls in its priority areas.

Policy responses in Bangladesh and Ethiopia

Bangladesh – Bangladesh’s national adaptation plan (see table on page 22) aims to: “mainstream climate change in national, sectoral and spatial development planning and ensure that impacts on vulnerable groups and women are prioritised in plans”.⁴⁵ Yet converting this policy into practice at local level in at-risk communities such as Barguna, requires political will, adequate resourcing and consultation with girls and women themselves.

Ethiopia – Similarly, in the implementation of Ethiopia’s NAPA (see table on page 22), despite the recognition of the importance of integrating gender into all development activities, more needs to be done in terms of targeting women and girls in adaptation programmes and projects aiming to support those at the frontline of climate risks.

Both the local Ethiopian NGOs and national government officials consulted recognise the importance of addressing the needs of girls and women and that more action needs to be taken on this front. Some measures have been put in place towards this: the Government’s Ministry of Women, Children & Youth Affairs has been recently re-organised. As part of its new mandate, it aims to address gender-related climate issues. However, similar efforts to address the specific needs of girls and young women facing growing climate risks have yet to be made by other departments such as education, health, security, planning, and agriculture.

In Ethiopia, the Strategic Climate Institution Programme (SCIP) has been set up with funding from the UK’s Department for International Development (DFID) to assist the Ethiopian government, the private sector and civil society to develop strategies to tackle the challenges brought about by climate change.⁴⁶ DFID’s approach to adaptation, adopted by the country office in Ethiopia, includes the need to place girls at the centre of their thinking. The strategy is being realised by a variety of different measures, including the Girl Hub⁴⁷ – a DFID and Nike Foundation partnership that aims to leverage more development assistance to address the gender dimensions of poverty, and support girls in their endeavours to eradicate it.⁴⁸

⁴⁵ Climate Strategy and Action Plan – Bangladesh (2008)

⁴⁶ <http://projects.dfid.gov.uk/project.aspx?Project=201866>

⁴⁷ www.girlhub.org

⁴⁸ Interview with DFID Country Office (Sept 2010) Addis Ababa, Ethiopia

A look at the NAPAs from Bangladesh and Ethiopia:

	Bangladesh ⁴⁹	Ethiopia
Date NAPA submitted	November 2005	June 2008
Prepared by	Ministry of Environment and Forest (MOEF)	Ministry of Water Resources & National Meteorological Agency
Relevant References related to adolescent girls	<ul style="list-style-type: none"> • The poor (including women, elderly and children) are identified as the most vulnerable • Security of livelihoods with a gender perspective has been ranked as the most important set of criteria for prioritization of adaptation needs and activities • Gender equality is identified as a cross-cutting criteria and there is reference to gender differentiated impacts of climate change 	<ul style="list-style-type: none"> • Integrating gender into all development activities is described as one of the Government's national socio-economic goals • No other references
Number of NAPA projects proposed	15	11
Total cost of proposed NAPA projects	USD 73,000,000	USD 769,000,000
NAPA Projects which could potentially benefit adolescent girls		
Project details (title and costs)	Development of Eco-Specific Adaptive Knowledge (Including Indigenous Knowledge) on Adaptation to Climate Variability to Enhance Adaptive Capacity for Future Climate Change ⁵⁰ (project cost: USD 5,050,000)	Capacity-Building Needs for Climate Change Adaptation in Ethiopia ⁵¹ (project cost: USD 3,100,000)
What about adolescent girls?	<ul style="list-style-type: none"> • Children and women are referred to as beneficiaries 	<ul style="list-style-type: none"> • No reference to primary/secondary education – or girls
Project details (title and costs)	Construction of Flood Shelter, and Information and Assistance Centre to Cope with Enhanced Recurrent Floods in Major Floodplains ⁵² (project cost: USD 5,050,000)	Promotion of Farm and Homestead Forestry and Agro-Forestry in Arid, Semi-Arid and Drysub Humid Parts of Ethiopia ⁵³ (project cost: USD 5,100,000)
What about adolescent girls?	<ul style="list-style-type: none"> • No reference to gender sensitive requirements for shelters 	<ul style="list-style-type: none"> • No reference to the role of children/ girls – and their potential to contribute to management of nursery sites for fruit trees, fodder and legumes
Project details (title and costs)	Inclusion of Climate Change Issues in Curriculum at Secondary and Tertiary Educational Institutions ⁵⁴ (project cost: USD 525,000)	Development of Small Scale Irrigation and Water Harvesting Schemes in Arid, Semi-Arid, and Dry Sub-Humid Areas of Ethiopia ⁵⁵ (project cost: USD 30,500,000)
What about adolescent girls?	<ul style="list-style-type: none"> • Potential long term outcome identified as “future generations of primary and secondary school students will learn about climate change impacts and adaptation” – but only if girls are enrolled in school and climate change curricula promotes gender equality and the individual needs of girls and boys 	<ul style="list-style-type: none"> • The identified objective of increasing domestic water supply can potentially contribute to alleviate girls' burden of fetching water and support their access to education. But no gender dimension is referred to.

To date, the Global Environment Facility (GEF) has approved 11 projects for Bangladesh totalling USD 39,250,565; and 16 projects in Ethiopia totalling USD 45,686,925.⁵⁶ But the gap between the impacts of climate change on adolescent girls and responses to address them remains large.



Photo: Alf Berg

⁴⁹ Bangladesh has since replaced its NAPA with the Bangladesh Climate Change Strategy and Action Plan (2008). The thrust of the strategy is on sustainable development, poverty reduction and increased wellbeing of all vulnerable groups in society with special emphasis on gender sensitivity. The BCCSAP also states that “women and children are expected to be more adversely affected by climate change than men and the analyses will use gender-disaggregated data where possible”. One of the actions of the BCCSAP is to conduct a comprehensive study of the impact of climate change on women and gender relations and the development of recommendations to address these in all actions under the BCCSAP.

⁵⁰ Ministry of Environment and Forest (MOEF) Bangladesh (November 2005) Development Of Eco-Specific Adaptive Knowledge (Including Indigenous Knowledge) On Adaptation To Climate Variability to Enhance Adaptive Capacity for Future Climate Change

⁵¹ Ministry of Water Resources & National Meteorological Agency – Ethiopia (June 2008) Capacity-Building Needs For Climate Change Adaptation in Ethiopia

⁵² Ministry of Environment and Forest (MOEF) Bangladesh NAPA (November 2005) Construction of Flood Shelter, And Information and Assistance Centre to Cope with Enhanced Recurrent Floods in Major Floodplains

⁵³ Ministry of Water Resources & National Meteorological Agency (June 2008) Promotion of On Farm and Homestead Forestry and Agro-Forestry in Arid, Semi-Arid and Drysub Humid Parts of Ethiopia

⁵⁴ Ministry of Environment and Forest (MOEF) Bangladesh NAPA (November 2005) Inclusion Of Climate Change Issues In Curriculum At Secondary And Tertiary Educational Institutions

⁵⁵ Ministry of Water Resources & National Meteorological Agency NAPA – Ethiopia (June 2008) – Development Of Small Scale Irrigation And Water Harvesting Schemes In Arid, Semi-Arid, and Dry Sub-Humid Areas Of Ethiopia

⁵⁶ <http://www.gefonline.org/Country/CountryDetails.cfm>

5 Girls as catalysts for change – beyond vulnerability

“Girls are more vulnerable than boys in terms of climate change and so you need programmes aimed at them. You have to do it in an indirect way – making available safe drinking water or making fuel wood more accessible or the road to the cyclone shelter more women friendly. There need to be education programmes for boys and girls on girls rights.”

Abu M Kamal Uddin, Climate Change Adaptation Specialist, from the Comprehensive Disaster Management Programme, Government of Bangladesh



Photo: G.M.B. Akash/Panos Pictures

Our research findings highlight the challenges being faced by the growing numbers of girls living at the frontline of climate risks.

The girls themselves have clear priorities about what they felt was needed to address these risks:

1. Greater access to quality education

– to enhance their knowledge, skills and capacity to adapt and reduce disaster risks; to enhance their prospects to pursue more resilient livelihoods; and to safeguard their futures.

2. Greater protection from gender-based violence

– to ensure policies and commitments protect girls from the risks exacerbated by climate shock, including child labour, child migration, early and forced marriage and sexual violence.

3. Greater participation in climate change adaptation decision-making and risk reduction activities

– to ensure that the views of girls are listened to and their priorities acted upon in all decision making which affects their wellbeing.

1. Greater access to quality education and skills in relation to climate change

Girls who acquire greater understanding of social and climatic risks will be able to develop the skills and confidence to better protect themselves and their wider community. Plan's programme experience illustrates that girls are valuable outreach agents, in that they have the potential to effectively share risk information and promote behavioural change in support of climate change adaptation within their households and wider communities.⁵⁷ Plan's work illustrates that girls can be particularly influential where they have greater access than their parents to education on issues of risk and vulnerability. Providing girls with greater opportunities to develop knowledge and skills will help them adapt to an uncertain climate future. This includes prioritising programmes for girls on livelihood diversification. It means giving them the opportunity to learn new climate resilience skills and technologies and granting them a greater role in efforts towards community-based disaster risk reduction and the protection of natural resources. These gender-sensitive adaptation initiatives can ensure that previously disadvantaged groups are granted a more equitable future.

⁵⁷ Plan International (2011) Building Resilience through Participation: Lessons Learnt on Child Centred DRR

Child centred disaster risk reduction, Bangladesh

Plan's child-centred DRR programme in Bangladesh has enabled girls to have the space to participate and voice their concerns on a number of issues including education, health and DRR.

Since 2007 Plan has been working in the coastal area of Barguna, following the devastation of Cyclone Sidr which left 3,363 dead, 55,282 injured, and thousands of people displaced. The cyclone caused over \$1.7 billion worth of damage.⁵⁸ Working with the affected communities to restore their lives and ensure greater resilience to future risks proved challenging at first.

Plan supported both girls and boys to learn about the hazards, vulnerabilities and capacities in their communities. They developed the skills to effectively mobilize their community, with awareness-raising activities which targeted individuals, peer groups and households. This included encouraging those in authority to listen to girls and boys and provide them with the opportunity to take part in DRR planning and in decision-making.

"At first, female participation was less active and parents did not allow their girls to attend, but a year on, girls are taking a leading role," Shanawaz Whara, Plan Bangladesh.

The girls and boys in Barguna communicated their new skills and knowledge on early warning and household preparedness to others. They carried out household visits and community assemblies to further promote information on risk management. This work on social mobilisation led to changes in behaviour and practice supporting increased community resilience to disasters.

"After Cyclone Sidr there was still trauma amongst the adolescents. Now, through these activities, we feel more confident to deal with cyclones in the future," Shalia Shialia High School girl.

In Barguna, Plan is strengthening the ability of girls and boys and their communities to take action to address future risks. This work has established greater intergenerational dialogue among the different community members and is also proving very effective in restoring the confidence of children, particularly girls, who were affected by the Cyclone. Future generations are gaining the appropriate knowledge and skills to face climate change.

⁵⁸ Bangladesh Meteorological Department 2007 (stated in final draft of National Plan for Disaster of Government of Bangladesh 2010-2015).

2. Greater protection for girls from violence exacerbated by climate shocks

"I want to give power to women. There is progress but still there are things that need to change. There are some tasks designed for men, but I want to give power to women so they get involved in all kinds of work to empower themselves." Yesheve, 16 year old girl, Lalibela, Ethiopia

Climate-related disasters do not exist in isolation from the social and cultural factors that marginalise girls and women and place them at risk of violence. Evidence shows that violence increases after disasters and that the increased risk is associated with gender inequality and the limited representation of women and girls in disaster responses.⁵⁹ The development and humanitarian communities need to come together to address the specific rights and priorities of adolescent girls, and refrain from further marginalising them within the category of "women and children". Specific interventions that seek to address risks of gender-based violence must be reinforced by climate adaptation programming.

2.1 Sexual violence in humanitarian contexts

The development and financing of climate adaptation policies must reinforce efforts to safeguard and protect the wellbeing of adolescent girls in humanitarian contexts. The specific rights and needs of adolescent girls fall within the humanitarian priorities of saving lives and preventing illness.

Post-Disaster Needs Assessments (PDNAs) should ensure a thorough analysis of the gender dimensions affecting the situation of adolescent girls. This should lead to a strengthened and multi-sectoral response in line with both the Inter-Agency Standing Committee guidelines⁶⁰ on gender-based violence interventions in humanitarian settings and also the Minimum Initial Services Package for Reproductive Health in Crisis Situations.⁶¹

2.2 Early and forced marriage

To tackle the risks of early and forced marriage that are exacerbated by climate shocks, adaptation programmes must support national and local efforts that promote greater access to quality education for adolescent girls. This includes restoration of education and the completion of secondary education for adolescent girls as part of disaster recovery work. Evidence shows that girls who stay in school longer marry later.⁶² Although the correlation is not consistent across every country for which there is data, there is a strong association between age at marriage and education levels: the older a young woman is when she marries the more years of education she is likely to have had – keeping girls in school may in fact be one of the best ways to stop early marriage.⁶³

⁵⁹ Rees, Dr. S. et al (2005) 'Waves of Violence – women in post-tsunami Sri Lanka,' from Australian Journal of Disaster and Trauma Studies, Volume 2005-2

⁶⁰ http://www.humanitarianinfo.org/iasc/pageloader.aspx?page=content-subsidi-tf_gender-gbv

⁶¹ Minimum Initial Services Package for Reproductive Health in Crisis Situations. Reproductive Health Response in Conflict (RHRC) Consortium http://misp.rhrc.org/index.php?option=com_content&task=view&id=26&Itemid=45

⁶² United Nations Population Fund, 2005 http://www.unfpa.org/swp/2005/presskit/factsheets/facts_child_marriage.htm

⁶³ Ibid

Proactive interventions for engendered humanitarian work include:

- Integrating gender-based violence prevention in disaster preparedness plans, for example through the allocation of specialised police units in camps
- Ensuring indicators to identify and monitor violence are part of rapid situation assessments
- Training law enforcement agencies and judiciary in existing child protection legislation and good practice in relation to supporting survivors as well as an increased awareness of girls rights and gender equality
- Incorporating the needs of girls into activities in co-ordination with protection and camp management agencies. Girls need to be consulted on site plans, cooking spaces, lighting for common areas and sanitation facilities and ensuring adequate privacy in camps and collective accommodation
- Ensuring safe access to water and sanitation as well as food security and nutrition programmes
- Training teachers on gender-based violence issues
- Making available multi-sectoral referral networks for girl survivors of gender-based violence, including, for example, legal support, psycho-social support, vocational training and livelihoods opportunities
- Equipping health facilities to provide services that are responsive to adolescent girl survivors of sexual violence and that are open out of school hours. Ensuring that health workers have an understanding of girls' rights and gender equality
- Supporting local efforts for adolescent girls and boys to take part in gender-based violence prevention task forces
- Awareness raising campaigns initiated by adolescent girls at community level about the causes and impact of violence against girls, particularly following climate-related disasters. Prevention strategies must be implemented in conjunction with community power brokers such as elders, religious leaders and traditional rulers
- Supporting girls who have been subjected to violence with access to justice mechanisms as provided for by national legislation, to just and effective remedies for the harm they have suffered and informing girls of their rights in seeking redress through such mechanisms.

In addition, climate adaptation and disaster management programmes must reinforce social protection mechanisms and programmes which support sustainable livelihoods and aim to reduce household poverty, and, in turn, keep girls in school.

3. Greater participation in climate change adaptation decision-making and risk reduction activities

It is widely recognised that the participation of those affected helps to ensure that programmes and policies respond to the concerns and rights of the affected population. This principle – and right – applies equally to adolescent girls in relation to climate change.

“Women need more of a voice in the regional and national conferences. We want our voice to be heard and we also want to hear recommendations to better our lives. (Climate change is a top priority in the area, there has been a lot of deforestation and all the community are concerned about it.”

Tigist, girl, 16 years, Lasta District, Ethiopia

Girls as leaders – In Plan’s programmes as well as in the work of several other agencies, girls have shown their potential as effective agents of change, mobilising action in support of climate change adaptation. From local level community-based disaster risk reduction interventions, to global level engagement in climate change decision-making, girls have demonstrated their ability to perform a valuable role in strengthening resilience to climate risks. Greater engagement by girls in climate change adaptation provides an effective approach to tackle evolving disaster risks and uncertainties, to enhance adaptive capacity and to address both poverty and vulnerability.⁶⁴

“We want to develop ourselves and become educated and go to national and international meetings with our problems. Women and girls can do many things.”

Salina, girl, Dhaka Middle Slum, Ward # 85 Under Dhaka City Corporation, Bangladesh

The research in this report shows that many girls in Bangladesh and Ethiopia are aware of climate change issues, as they are increasingly facing the consequences. The girls interviewed wanted to have their say and be heard regarding appropriate measures to support their safety and wellbeing in relation to climate risks. Given the right environment, girls are able to articulate their views and ambitions. Their voices now need to be heard and acted upon in climate change negotiations and greater effort is needed to put this into place. This includes the need to build the capacity of girls so that they can effectively contribute to adaptation planning and delivery. Legitimate, participatory spaces created for girls to contribute to inclusive Climate Change Adaption programmes and Post-Disaster Needs Assessments must be resourced. In projects facilitated by Plan, girls have already demonstrated their capacity to deliver valuable insight in both of these decision-making spaces.⁶⁵

⁶⁴ Mitchell, T.; Ibrahim, M.; Harris, K.; Hedger, M.; Polack, E.; Ahmed, A.; Hall, N.; Hawrylyshyn, K.; Nightingale, K.; Onyango, M.; Adow, M., and Sajjad Mohammed, S. (2010), *Climate Smart Disaster Risk Management*, Strengthening Climate Resilience, Brighton: IDS

⁶⁵ Plan International (2010) See: *Anticipating the Future: Children’s Voices in Haiti’s PDNA and Child-Centred Disaster Risk Reduction: Building resilience through participation.*

US\$100 billion has been identified as the funding that needs to be raised by the international community per year for climate adaptation by 2020.⁶⁶ If this money is to be transformative it must be spent in line with the principles of gender equality. In at-risk countries like Bangladesh and Ethiopia, girls' rights and gender equality must be fully integrated into the design, delivery and monitoring of policies and interventions for adaptation to climate change. To achieve this, women and girls must be fully involved and must be granted the space and the enabling environment to participate actively, informing climate change decision-making locally, nationally and internationally.

Examples of initiatives to secure a greater decision-making role for girls in adaptation at local and global level include:

The G.I.R.R.L. Project in Sonderwater, Ikageng township, NW Province of South Africa – 'Girls In Risk Reduction Leadership' – aims to reduce the social vulnerability of marginalised adolescent girls using practical capacity-building initiatives to increase individual and community resilience to disasters. The initiative addresses the underlying social vulnerability of marginalised girls by empowering them to take on leadership roles in disaster risk reduction programmes. It also inspires social change through challenging assumptions about the roles of girls in the community.

Named for its substandard human conditions, Sonderwater (meaning 'no water') experiences acute water scarcity and other hazards. The area is prone to drought, flooding and windstorms, which have in recent times increased in frequency and intensity. Climate risks are increasing the vulnerability of the population of Sonderwater who are already socio-economically challenged, resource deficient, and lack a basic level of public infrastructure. The 'Girls in Risk Reduction Leadership' project has ensured adolescent girls gained an increased understanding of the causes and consequences of the hazards facing their community, and empowered them with knowledge and skills to tackle these challenges through local action for climate adaptation. Its population is now overcoming the challenges of the natural environment through a gender-sensitive approach – where girls are taking on leadership roles. The initiative has helped girls to plan how to reduce the effects of flooding, drought and severe windstorms. It has also encouraged more critical thought in the community about how climate change will affect its people directly.⁶⁷

The World Association of Girl Guides and Girl Scouts (WAGGGS) – with over 10 million members in 145 countries all over the world – is playing an active role in promoting greater awareness of the gender dimensions of climate change at local, national and international levels through the *Unite for Climate* campaign. At UNFCCC's COP 16 they campaigned for the voices of girls and young women to be heard in decision-making on climate change, and for organisations such as the Girl Guides and Girl Scouts to be seen as important stakeholders in climate change action.⁶⁸ WAGGGS has produced a toolkit⁶⁹ on how to engage in 'UNFCCC article 6 advocacy' to promote to national decision-makers the importance of non-formal climate change education and training. The toolkit provides practical guidelines for engaging in national level advocacy, and awareness-raising in order to influence governments to support climate change education.

⁶⁶ FCCC/CP/2010/7/Add.1 paragraph 98

⁶⁷ African Centre of Disaster Studies at North West University of South Africa (2008) 'Girls as leaders in community resilience' in Gender Perspectives: Integrating Disaster Risk Reduction into Climate Change Adaptation – http://www.proventionconsortium.org/themes/default/pdfs/AG/3173ZAF_ISDRpaper.pdf

⁶⁸ <http://uniteforclimate.org/2010/12/girl-power-at-cop16-new-report-from-waggggs/> accessed 28 February 2011

⁶⁹ Toolkit available here: http://www.ineesite.org/uploads/documents/store/Climate_Change_resource_FINAL_ENGLISH-1.pdf

Children as Delegates at UNFCCC COPs

Plan's Child-Centred DRR programme has supported children and young people to participate in major global events on climate change and DRR, including the UNFCCC Conferences of the Parties (COP).

In 2007 at the COP13 meeting held in Bali, 5 young people (3 girls and 2 boys) challenged ministers and official delegates to uphold the rights of all children as they increasingly face the effects of climate change. At the UNFCCC COP15 meeting, Plan supported a group of 11 children (7 girls and 4 boys) from Indonesia, Kenya, the UK, Netherlands and Sweden to attend as young journalists, where they had the opportunity to interview global leaders and policy-makers and report on the negotiation process to major news networks around the world. Youth journalists from the UK and Indonesia who attended COP15 have gone on to give keynote speeches at an event with the UK Secretary of State for Climate Change, and to sit on the advisory board of Inconvenient Youth, an initiative of Al Gore's climate change leadership programme, The Climate Project.

At COP16 in Cancún Plan, together with partners in the Children in a Changing Climate coalition, facilitated the side event *Bearers of Future Responsibility* where girls and boys from Latin America and Asia debated with, amongst others, former UNFCCC Chief, Yvo de Boer, and human rights activist and former President of Ireland, Mary Robinson.



Photo: Plan

6 Conclusion: Overcoming the challenges

The global debate on Climate Change Adaptation and the increased funding commitments being made⁷⁰, present an opportunity to realise climate-resilient development by addressing issues of social justice and gender inequality.

Existing strategies are failing to effectively respond to the diverse local needs or opinions of those directly affected, and do not go far enough to support the realisation of rights in the context of climate change and gender equality.

The following policy recommendations seek to address these fundamental issues and are informed by the views and experiences of the girls interviewed in Ethiopia and Bangladesh.

1. Prescribe gender-sensitive strategies for climate change adaptation

International donors should:

- Ensure that national and global financing mechanisms for adaptation address the specific needs and rights of girls and fully address the ways in which pre-existing gender inequality and discrimination exacerbate the impact of climate change on them
- Require and facilitate greater integration between climate change adaptation, disaster risk management, and poverty reduction efforts. This should include promoting the sorts of multi-sectoral interventions required by providing more flexible funding mechanisms and technical assistance; and particularly promoting the delivery of quality education for girls and boys to increase climate change knowledge.

National governments should:

- Revise National Adaptation Strategies / National Adaptation Programmes of Action (NAPAs) to take into account the particular effects of climate change on adolescent girls and allocate adequate funding for programmes directly addressing their needs. They should work with girls' and women's rights organisations to assign gender responsive indicators for all NAPA projects, and enable adolescent girls to effectively contribute to decision-making on NAPA projects at local and national levels

⁷⁰ FCCC/CP/2010/7/Add.1 paragraph 98

- Ensure national climate change policies and programmes are in line with existing government commitments on gender, particularly the Convention on the Elimination of all Forms of Discrimination Against Women and the subsequent Beijing Platform for Action. Governments must move beyond the rhetorical categorisation of women and children as vulnerable groups, by adopting national climate change policies that include gender- and age-sensitive programming. They should strengthen the capacity of government actors to design and implement gender and age responsive climate change policies and programmes. Climate change and gender must not be seen in isolation, but should be addressed across all government departments – including education and finance ministries
- Ensure adolescent girls have improved access to education, training and awareness-raising on climate change adaptation, in line with existing international commitments. As signatories to the UN Framework Convention on Climate Change, governments have committed “to educate, empower and engage all stakeholders and major groups on policies relating to climate change” (UNFCCC Article 6). Additionally, as signatories to the UNISDR’s Hyogo Framework for Action, governments have committed “to use knowledge, innovation and education to build a culture of safety and resilience at all levels” (HFA priority 3). They are therefore accountable to adolescent girls, and all children, to provide this
- Recognise and promote the role of adolescent girls as transformative agents for community resilience by funding CSOs to undertake programmes to support this work
- Ensure effective mechanisms are in place for girls and boys to learn from their elders’ indigenous knowledge on adaptation, as well as adaptation knowledge informed by science.

2. Address gender inequality as a root cause of vulnerability to climate change

Policy-makers determining national and international adaptation policy should:

- Ensure climate adaptation work builds on existing efforts by women’s rights organisations in partnership with men and boys, to establish an enabling environment for girls’ development and protection. Focused work with parents, communities, religious leaders and traditional rulers is required to provide an enabling environment for the realisation of adolescent girls’ rights. Building support for girls’ rights and gender equality must be a part of climate change adaptation, as well as broader sustainable development initiatives
- Ensure adolescent girls are able to participate in decision-making and political processes that affect them. This requires tackling the inequalities that girls face in attaining education and employment through improved access to basic education. Quality learning for all girls and boys is required, with curricula that challenge gender stereotypes and promote girls’ rights and gender equality.

Climate change is the key challenge of our times, one we must all rise to. Taking the right strategic and effective action requires clear analysis of who is being affected and why. And fundamentally it requires investment to safeguard the rights of those most at risk. Strategies that recognise this and plan accordingly, that realise that adolescent girls in particular need to be included and empowered, will be strategies that help us all to weather the storm and contribute equally to a more resilient future.

7 Glossary

ANPPCAN – African Network for the Prevention and Protection of Child Abuse and Neglect	The African Network for the Prevention and Protection against Child Abuse and Neglect (ANPPCAN) is a pan African network that promotes child rights and child protection in Africa. http://www.anppcan.org
CCA – Climate Change Adaptation	The Intergovernmental Panel on Climate Change (IPCC) defines adaptation as "... adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects of impacts. This term refers to changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change." Source IPCC, 2001.
CGD – Centre for Global Development	CGD's work on climate change examines current and future impacts on developing countries, identifies how rich countries can help developing countries become more climate-resilient, seeks policy mechanisms to create low-carbon economies in rich and developing countries, and gathers and discloses emissions-related data to inform the policy dialogue and boost incentives for steep cuts in the emissions of heat-trapping gases. Its database lists in ranking order 233 states and combines short and long term factors e.g. changes in extreme weather risks from 2008-2015 and risks associated with storm surges and agricultural productivity loss from 2008-2050. Actual vulnerability to climate change depends on the interrelations of these risks with the determinants of resilience: economic development, demographic change and governance. http://www.cgdev.org/section/topics/climate_change/mapping_the_impacts_of_climate_change
CEDAW – Committee on the Elimination of Discrimination Against Women	The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), adopted in 1979 by the UN General Assembly, is often described as an international bill of rights for women. Consisting of a preamble and 30 articles, it defines what constitutes discrimination against women and sets up an agenda for national action to end such discrimination. http://www.un.org/womenwatch/daw/cedaw
COP – Conference of Parties	The Conference of the Parties (COP) is the "supreme body" of the Convention, that is, its highest decision-making authority. It is an association of all the countries that are Parties to the Convention. http://unfccc.int/essential_background/convention/convention_bodies/items/2629.php
CRC – Convention on the Rights of the Child	The Convention on the Rights of the Child is the first legally binding international instrument to incorporate the full range of human rights – civil, cultural, economic, political and social rights. In 1989, world leaders decided that children needed a special convention because people under 18 years often need special care and protection that adults do not. The Convention sets out children's rights in 54 articles and two Optional Protocols. It spells out the basic human rights that children everywhere have: the right to survival; to develop to the fullest; to protection from harmful influences, abuse and exploitation; and to participate fully in family, cultural and social life. The four core principles of the Convention are non-discrimination; devotion to the best interests of the child; the right to life, survival and development; and respect for the views of the child. http://www.unicef.org/crc/
CRED – Centre for Research on the Epidemiology of Disaster	CRED, the Centre for Research on the Epidemiology of Disasters, has been active for over 30 years in the fields of international disaster and conflict health studies, with research and training activities linking relief, rehabilitation and development. http://www.cred.be

DRR – Disaster Risk Reduction	Disaster Risk Reduction (DRR) is the broad range of humanitarian and development action to reduce the risk posed by natural disasters to individuals and communities. It is humanitarian in that it helps save lives, and developmental in increasing communities' resilience to hazards and shocks, as a prerequisite for sustainable development and pro-poor economic growth. http://www.oxfam.org.uk/resources/policy/conflict_disasters/downloads/oi_hum_policy_disaster_risk_reduction.pdf
EM-DAT – The International Disaster Database	Since 1988 the WHO Collaborating Centre for Research on the Epidemiology of Disasters (CRED) has been maintaining an Emergency Events Database EM-DAT. EM-DAT was created with the initial support of the WHO and the Belgian Government. The main objective of the database is to serve the purposes of humanitarian action at national and international levels. It is an initiative aimed to rationalise decision making for disaster preparedness, as well as providing an objective base for vulnerability assessment and priority setting. EM-DAT contains essential core data on the occurrence and effects of over 18,000 mass disasters in the world from 1900 to present. http://www.emdat.be
GEF – Global Environment Facility	<p>The GEF is a financial mechanism that provides new and additional grant and concessional funding to meet the agreed incremental costs of measures to achieve global environmental goals agreed to in international conventions and other priorities supported by the GEF including: (a) biological diversity; (b) climate change; (c) international waters; (d) land degradation, primarily desertification and deforestation; (e) ozone layer depletion; and (f) persistent organic pollutants.</p> <p>The GEF manages both the Least Developed Countries Fund and Special Climate Change Fund. The Least Developed Countries Fund (LDCF) aims to address the special needs of the Least Developed Countries (LDCs) under the Climate Convention. LDCF supports projects that address the urgent and immediate adaptation needs of the least developed countries, focusing on reducing the vulnerability of the sectors and resources that are central to human and national development, such as water, agriculture and food security; health; disaster risk management and prevention; and infrastructure, as identified and prioritized in their National Adaptation Programmes of Action. http://www.thegef.org/gef/lcdfssp</p>
GIRRL – Girls in Risk Reduction Leadership	The G.I.R.R.L project – 'Girls In Risk Reduction Leadership' – aims to reduce the social vulnerability of marginalised adolescent girls in Sonderwater (South Africa) using practical capacity building initiatives to increase individual and community resilience, including to disasters. Social inequality puts women and girls at a distinct disadvantage even in the most basic terms such as access to information, access to resources, limitation of movement and failure to understand survival methods during disasters. The project seeks to help incorporate girls and their perspectives into community-based disaster management and decision-making processes. http://acds.co.za/index.php?page=girrl
IASC – Inter-Agency Standing Committee	The Inter-Agency Standing Committee (IASC) promotes coordination, policy development and decision-making involving the key UN and non-UN humanitarian partners. The IASC was established in June 1992 in response to United Nations General Assembly Resolution 46/182 on the strengthening of humanitarian assistance. General Assembly Resolution 48/57 affirmed its role as the primary mechanism for inter-agency coordination of humanitarian assistance. http://www.humanitarianinfo.org/iasc/pageloader.aspx?page=content-subsidi-tf_gender-gbv

IPCC – Intergovernmental Panel on Climate Change	<p>The Intergovernmental Panel on Climate Change (IPCC) is the leading international body for the assessment of climate change. It was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts. The UN General Assembly endorsed the action by WMO and UNEP in jointly establishing the IPCC. http://www.ipcc.ch/organization/organization.shtml</p>
MISP – The Minimum Initial Service Package (for Reproductive Health)	<p>The MISP for Reproductive Health (RH) is a coordinated set of priority activities designed to: prevent and manage the consequences of sexual violence; reduce HIV transmission; prevent excess maternal and neonatal mortality and morbidity; and plan for comprehensive RH services in the early days and weeks of an emergency. The MISP distance learning module aims to increase humanitarian actors' knowledge of these priority RH services to initiate at the onset of a crisis situation. http://misp.rhrc.org/index.php?option=com_content&task=view&id=26&Itemid=45</p>
NAPAs – National Adaptation Programme of Action	<p>National adaptation programme of action (NAPA) provide a process for Least Developed Countries (LDCs) to identify priority activities that respond to their urgent and immediate needs to adapt to climate change – those for which further delay would increase vulnerability and/or costs at a later stage. http://unfccc.int/national_reports/napa/items/2719.php</p>
PDNA – Post Disaster Needs Assessment	<p>A PDNA is a government-led exercise, with integrated support from the United Nations, the European Commission, the World Bank and other national and international actors. A PDNA pulls together information into a single, consolidated report, information on the physical impacts of a disaster, the economic value of the damages and losses, the human impacts as experienced by the affected population, and the resulting early and long-term recovery needs and priorities. http://recoveryplatform.org/pdna/</p>
SAP – South Asia Partnership	<p>South Asia Partnership International (SAP - I) is a South based, South led International NGO. As the coordinating body of South Asia Partnership Network, SAP - I facilitates solidarity between other community based organizations and issue based networks within South Asia. South Asia Partnership network comprises of six national member organizations based in Bangladesh, Canada, Nepal, Pakistan and Sri Lanka. http://www.sapint.org/intro.php</p>
UNFCCC – United Nations Framework Convention on Climate Change	<p>Over a decade ago, most countries joined an international treaty - the United Nations Framework Convention on Climate Change (UNFCCC) - to begin to consider what can be done to reduce global warming and to cope with whatever temperature increases are inevitable. More recently, a number of nations approved an addition to the treaty: the Kyoto Protocol, which has more powerful (and legally binding) measures. The UNFCCC secretariat supports all institutions involved in the climate change process, particularly the COP, the subsidiary bodies and their Bureau. http://unfccc.int/essential_background/items/2877.php</p>
UNISDR – United Nations International Strategy for Disaster Reduction	<p>Created in December 1999, UNISDR is the secretariat of the International Strategy for Disaster Reduction (ISDR). It is the successor to the secretariat of the International Decade for Natural Disaster Reduction with the purpose of ensuring the implementation of the International Strategy for Disaster Reduction (General Assembly (GA) resolution 54/219). http://www.unisdr.org/who-we-are/mandate</p>

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Plan is a global children's charity. We work with children in the world's poorest countries to help them build a better future. A future you would want for all children, your family and friends. For over 70 years we've been taking action and standing up for every child's right to fulfil their potential by:

- giving children a healthy start in life, including access to safe drinking water
- securing the education of girls and boys
- working with communities to prepare for and survive disasters
- inspiring children to take a lead in decisions that affect their lives
- enabling families to earn a living and plan for their children's future.

We do what's needed, where it's needed most. We do what you would do.

With your support children, families and entire communities have the power to move themselves from a life of poverty to a future with opportunity.

"We will never achieve climate justice without addressing the gender dimensions of climate change, and girls themselves, their skills, knowledge and energy, must be part of the search for solution."

Mary Robinson – President of the Mary Robinson Foundation on Climate Justice



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