PROCEEDINGS OF AN INTERNATIONAL EXPERT GROUP MEETING

EXPLORING THE NEXUS BETWEEN CLIMATE CHANGE AND CHILD MARRIAGE: WHAT DOES THE EVIDENCE TELL US?

Convened by Action on Child, Early, and Forced Marriage

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Executive Summary

Climate change is one of the gravest global threats facing humanity resulting in the loss of lives, livelihoods, ecosystems, and biodiversity. Many parts of the world are already experiencing increases in the frequency and intensity of hot and cold extremes, marine heatwaves, heavy precipitation, droughts, changes in rainfall patterns, tropical cyclones and reductions in Arctic Sea ice, snow cover, and permafrost.[1]

However, the impacts of climate change are not gender neutral with vulnerable groups such as women and girls being disproportionately affected as pre-existing gender inequalities become amplified, threatening their lives, livelihoods, health, security and rights.[2] Moreover, the scientific and technological framing of climate change discourse has largely ignored its negative gendered dimensions including social outcomes such as increases in child marriage which have cascading detrimental outcomes for the health and well-being of girls and their children as well as other related consequences such as school dropout of girls.[3]

To date no systematic attempt has been made to discuss and consolidate the existing global evidence to formally establish the link between climate change and child marriage. This international meeting, the first of its kind to address this knowledge gap, marked a strategic milestone in clearly establishing the intersection between climate change and child marriage. Described as “long overdue” and “timely,” the meeting convened university researchers, climate scientists, policy makers, journalists, representatives of non-governmental organisations, child rights’ organisations, faith based and humanitarian organisations, and representatives from United Nations bodies on human and children’s rights to share current knowledge, evidence and gaps. Presentations included empirical research such as economic modelling, qualitative research, video documentary evidence from investigative journalists, rapid gender analyses after cyclones, experiential evidence from grassroots level as well as case studies showing the potential synergistic effect of combining climate change adaptation strategies with child protection training including to prevent child marriage. Evidence from Indonesia, India, Bangladesh, Mozambique, Zambia, Malawi, Kenya, Tanzania, Afghanistan and Ethiopia was presented. The importance of taking a child rights and human rights-based approach when addressing this nexus was emphasised by the Chair of the United Nations Committee on the Rights of the Child and a Gender specialist from the UN Office of the High Commissioner for Human Rights.

Although the link between climate change (SDG Goal 13) and child marriage (SDG Goal 5) may not seem obvious, evidence shows that eight of the top ten most vulnerable countries to climate change are low-income countries with high rates of child marriage, ranging from 20% in Bolivia to 76% in Niger.[4]

Researchers at the meeting unveiled the pathways through which climate change drives increases in child marriage. When already poverty-stricken families are suddenly hit with further economic shocks from climate change such as floods and cyclones, this results in a reduction in household income and an increase in damage costs, which push families deeper into poverty. This in turn amplifies pre-existing gender discrimination where boys are often more highly valued than girls, resulting in girls being withdrawn from school first and married underage as a coping mechanism. Marrying off a girl reduces family size, means one less child to feed, clothe and educate and in some countries, marriage will generate a bride price income which can help the family to survive the economic shock.

While more research is needed to unpack the nexus between climate change and child marriage, sufficient evidence already exists for policy makers in climate change adaptation and mitigation and child protection to integrate these two distinct policy areas to create climate resilient communities in which families do not resort to child marriage as a coping mechanism and commit to promoting and protecting the health and well-being of girls and fulfilling their human rights including protection from all forms of violence.

The Brides of the Sun project team[1] of investigative journalists spent five months documenting the lives of climate change related child brides in Mozambique and Malawi and highlighted how child marriage due to climate change was still framed as a future catastrophe waiting to happen rather than acknowledging that it is already happening. World Vision International has also established a clear link between climate change and child marriage through a review of its programming in twenty-four countries, so the evidence is already there.

It is time to bring the gendered dimensions of climate change affecting vulnerable women and girls to the forefront of climate action. The economic and social consequences of climate change are major social determinants of the health and well-being of vulnerable women and girls affecting their education, health, development and childhood, resulting for many in early pregnancy and motherhood and negatively impacting their lives, livelihoods, rights and futures. We concur with Dr Sima Bahous UN Women Executive Director who at COP 27 called on all parties to make gender equality, women’s empowerment and women’s leadership central to climate action. [2] We would add to that to prioritize the human rights and health and well-being of vulnerable women and girls in all climate action. Let us hope her words and those of thousands of women’s and children’s rights activists are heeded and acted upon.

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[1] Brides of the Sun investigation into how climate change is creating a generation of child brides. https://bridesofthesun.com/
Opening remarks by Dr Mohinder Watson, Founder, Action on Child, Early and Forced Marriage, and Main Geneva UN Representative, International Council of Women, “Exploring the nexus between climate change and child marriage: What does the emerging evidence tell us?”

Mohinder Watson warmly welcomed the speakers, moderators, and audience from over 50 countries to this International Expert Group Meeting, the first global gathering of its kind to address the nexus between climate change and child marriage.

Setting the scene for the meeting, a short video clip from the ‘Brides of the Sun’ investigation into climate change and child brides, a collaborative project between foreign correspondent and photojournalist Gethin Chamberlain, writer Maria Udrescu and video journalist Miriam Beller was shown. This team interviewed and videoed the life stories of many climate change-related child brides in Mozambique and Malawi, providing stark evidence that this is already a reality for many young girls and not merely a future possibility.[1]

The imperative to address child, early and forced marriages in all contexts was highlighted by Mohinder Watson from places where it persists as an integral part of a community’s traditions and customs, to parents who mistakenly believe that marrying girls early affords them greater protection from sexual violence during conflict, to the surge in child marriage and teenage pregnancies witnessed during the COVID 19 pandemic and now the increases in child marriage seen as a coping mechanism to deal with the economic shocks of climate change. Despite global efforts to address this practice, 12 million girls a year still enter child marriage according to UNICEF 2022[2]. The devastating impacts on girls’ lives from school dropout and early pregnancies to the negative impact on child and maternal health, the mental health of girls and the increased risk of domestic violence, were already well documented.

The increase in child marriage due to climate change must be addressed as child marriage is a violation of human rights and a barrier to achieving gender equality. The United Nations Sustainable Development Goal 5, Target 5.3 aims to ‘eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation by 2030’.

Aims of the expert group meeting:

- Raise awareness of, and share global evidence for the link between climate change and child marriage and identify knowledge gaps;
- Acknowledge and embrace the varied sources of evidence which are contributing to increasing our understanding of the link between climate change and child marriage;
- Provide guidance and recommendations to drive advocacy and policy change for the integration of climate change adaptation strategies and child protection policies.

[1] Brides of the Sun investigation into how climate change is creating a generation of child brides. https://bridesofthesun.com/
Climate change (Goal 13 of the UN SDGs) and child marriage (Goal 5, Target 5.3) are inextricably linked although the connection may not be immediately evident. Policy makers focusing on these two global issues must work together to study and collect data on the gendered dimensions of climate change and find gender sensitive solutions to address these interlinkages. As climate change extremes intensify and become more frequent and destructive, more poverty-stricken parents are likely to resort to child marriage as a coping mechanism. Any such increase in child marriage rates risks rolling back the gains made in eradicating child marriage, supporting girls’ education, and achieving gender equality.

Finally, Mohinder Watson thanked the guest speaker Mikiko Otani, Chair of the United Nations Committee on the Rights of Child and all the international expert group panelists, especially the two panel moderators, Professor Margaret Alston and Nankali Maksud for their insightful and valuable contributions to this landmark meeting. She also thanked the support team, Jeanne McDaniel, Dr Andrew Medlicott, Jule Voss, Dr Ourania Roditi, Prof Jacques Mauel, Heline Ahmad, Dr Jungsook Kim, President of the International Council of Women (ICW) and Linda Liu, Vice President of the ICW, Chris Eichert and Michael Platzer from the Coalition of Faith Based Organisations and the Brides of the Sun Project Team-Gethin Chamberlain, Miriam Beller and Maria Udrescue. She also offered special thanks to Walaa Allahham for her excellent technical support in the final layout and design of this report. The international audience from over 50 countries around the world was also warmly thanked for joining the meeting. It was hoped that they would leave the meeting with an increased understanding of the link between climate change and child marriage and convinced of the need for urgent action to integrate climate change action and child protection, including child marriage which are currently addressed separately but should be integrated.
Opening remarks from Ms Mikiko Otani, Chair of the United Nations Committee on the Rights of the Child (CRC).

Mikiko Otani thanked Dr Mohinder Watson for her leadership in convening this expert group meeting on the nexus between climate change and child marriage, a topic which had not received sufficient attention, despite its critical importance for girls and women and for everyone advocating for the rights of girls and women and for climate justice. Mikiko Otani said one of her first speaking engagements on becoming the chair of the CRC was at a special presidency event on climate change and the rights of the child convened by Morocco. She also participated in the Framework Convention on Climate Change (FCCC) in Bonn in 2017.

Mikiko Otani said damage to ecosystems and threats to biodiversity together with climate change can act as a threat multiplier by aggravating serious violations underlying conflict for limited resources including inequality, forced migration and even early marriage.

As a practicing family lawyer in Japan, where, although child marriage was not very prevalent, she, nonetheless, advocated against the laws which allowed girls to marry at age 16 while the minimum age for boys to marry was 18 years old.

Commenting on the areas where child marriage is prevalent, she said child marriage deprives girls of their childhood, negatively impacts their health and education and increases their risk of exposure to violence. For these reasons she advocates for an end to child marriage globally. In June 2021, she started focusing on child marriage and climate change as the UN Committee on the Rights of the Child had decided to produce a new General Comment on children’s rights and the environment, with a special focus on climate change. Although Mikiko Otani was already aware of and frequently mentioned the nexus between climate change and child marriage, she was often publicly asked about the evidence for this relationship. Unpacking and understanding this nexus is especially important to fully address the gender dimensions of climate change and the root causes of child marriage due to climate change. Mikiko Otani welcomed the timely organization of this expert group meeting and committed to take back and share the evidence, stories, experiences, ideas and concrete recommendations from the two panel sessions.

Mohinder Watson thanked Mikiko Otani for taking time out from her busy schedule to participate in the expert group meeting and looked forward to further collaborating during her term as the Chair of the Committee on the Rights of the Child.

Key takeaway from Ms. Otani’s presentation

A commitment to further raise awareness about the nexus between children marriage and climate change and share the recommendations and lessons learned from this meeting with members of the Committee on the Rights of the Child and other relevant stakeholders.
Panel 1: Evidence for the link between climate change and child marriage

Mohinder Watson introduced Margaret Alston, Professor of Social Work at Newcastle University and Emeritus Professor at Monash University, who had kindly accepted to moderate the first panel. Professor Margaret Alston has a distinguished career as an academic and an author and was a pioneer in conducting research showing the connection between climate change and child marriage in Bangladesh.

Professor Alston reiterated the timeliness of this expert group meeting and warmly welcomed the panel speakers and said that the speakers’ eagerness to be involved in this expert meeting was testimony to its importance. Professor Alston introduced the first speaker.

Dr Roberto Pasto, Austral University of Chile, “Not a dream wedding; the hidden nexus between gender discrimination, climate change and child marriage.”

Despite the global consensus on the negative impacts of child marriage on children, especially girls, the practice persists. The underlying causes of child marriage can be explained in terms of its economic and social dimensions, such as poverty, aggregate income, the role of women in society, gender inequality, the social status of women, etc.

Based on the ongoing work of Roberto Pasten, Eugenio Figueroa and Maytes Fuente and by empirically testing theories through the use of econometric analyses, Dr Pasten’s presentation aimed to unveil the link between climate change and child marriage. Their research focused on exploring the impact of climate change vulnerability, income, extreme poverty and gender discrimination on the marriage of girls under the age of 15 or 18.

The methods used were an Ordinary Least Squares (OLS) regression, the first one between vulnerability to climate change, and Structural Equation Modelling (SEM) for the effect of climate change on child marriage. Issues of endogeneity were also addressed.

The variables used included child marriage - girls either married by age 18 or married by age 15, taken from world development indicators (2018), vulnerability to climate change, as measured by the Notre Dame Gain Index 2018, some economic variables e.g., GDP per capita, the poverty index from the World Bank (2018) and social norms/cultural indicators from the gender equality index published by UNDP (2018) to look at gender inequality.

The highest rates of children married before the age of 15 occur in Africa and South East Asia, which are also the main areas highlighted on the vulnerability score of the Notre Dame Global Adaptation Index for climate vulnerability.
Child marriage in children under 18 can be explained in terms of climate change vulnerability, income, extreme poverty and gender discrimination. Gender discrimination showed the highest correlation with child marriage under 18 and under 15, but there were also strong correlations between climate change vulnerability and income, climate change vulnerability and extreme poverty, and climate change vulnerability and gender inequality.

Using the Structural Equation Model (SEM), pathways were constructed from one variable to another. The first step in the pathway showed that climate change vulnerability negatively affects household income, leading to extreme poverty which then impacted gender discrimination. Taken together, these two factors - extreme poverty and gender discrimination are the main drivers of child marriage in girls under 18 and under 15. At first glance, a link between climate change and child marriage might seem unlikely, but by studying how climate change directly impacts family income and poverty, the link becomes clearer.

Child marriage is a multi-faceted complex issue which requires different policy responses such as poverty reduction and increasing the general income level in developing countries. Strict laws to prevent child marriage and their enforcement as well as investment in women’s education are also needed to address gender inequality and to change social norms.

Climate change is often a low priority in cost-benefit analyses compared to other social issues, such as tackling extreme poverty. However, if the interplay between some of these social issues is considered, allocating resources to address climate change could simultaneously help address other social challenges, such as child marriage.

Key takeaways from Dr Pasto’s presentation

- Econometric analysis unveiled the pathways to explain how climate change vulnerability and child marriage are connected. It showed that climate change negatively impacts household income leading to extreme poverty and heightens gender discrimination which collectively drive child marriage in girls under age 15 and 18.
- Child marriage is complex and requires different policy responses including, reducing extreme poverty, increasing a country’s general income level, implementing laws banning child marriage and investing in women and girls’ education to address gender inequality and change social norms.

Dr Teguh Dartanto, Dean, Faculty of Economics and Business at the Universitas Indonesia, and head of Poverty, Social Protection and Development Economics, “Is This a Dream Wedding? The Impact of Damage Costs Related to Climate Change on Child Marriage in Indonesia”

Natural disasters are increasing the risk of women marrying at a young age. In Bangladesh and Indonesia, climate change related disasters increase the probability of child marriage as a means of reducing household expenditure (Alston et al. 2014, Ahmed et al., 2019, Dewi and Dartanto, 2019).
Building on this work, Dr Dartanto presented the findings of new research that he and Andriani Nur Pratiwi had conducted on the correlation between climate change and child marriage.

As background, Indonesia lies in the equatorial region and has experienced many natural disasters related to climate change such as floods, landslides, storms, droughts, and forest fires. Studies in Indonesia show that climate change leads to forced child marriage. An increase in child marriage was observed in Indonesia after the tsunami of 2004 in Aceh and after the 2018 tsunami in Palu. The baseline prevalence of child marriage in Indonesia is usually around 11% of women aged 20-24 years who were married before the age of 18.

In their previous research using logistic regression to analyse data from the national socioeconomic survey of 2015, a strong association between natural disasters and child marriage was shown (Dewi and Dartanto, 2019). However, in order to further test this conclusion, they used different datasets and methodologies to ensure that the evidence for the link between climate change and child marriage was robust. Thus, in an ongoing study Dartanto and Pratiwi are using the Instrumental Variable (IV) Probit regression method, a more rigorous approach, to analyse data from the Indonesia Family Life survey 5 (2014) which covered almost 83% of Indonesia’s population. This analysis showed that amongst those population segments who experienced disasters related to climate change, a higher likelihood of child marriage was registered compared to those who experienced other types of disasters. Another conclusion reached was that 19% of households which had experienced disasters related to climate change also practiced child marriage, a percentage which is higher than the national average of 11% of girls marrying before 18.

Their results showed a strong effect of climate change related damage costs on child marriage. The higher the damage costs suffered by the household, the higher the probability of child marriage. In addition, in households with many family members which suffered damage loss, there was a higher probability of child marriage. In these instances, child marriage is used as a coping mechanism in response to the damage induced by climate change. When household income is reduced, families seek consumption smoothing strategies to find alternative sources of financing, such as borrowing from other people or selling their assets. A further strategy used in order to relieve the household burden is to reduce the number of family members through early marriage or by decreasing education expenses by taking girls out of school. Both of these strategies can lead to an increase in child marriage (Dewi and Dartanto, 2019). Using different methodologies and datasets, they showed a strong correlation between the damage costs of climate change related natural disasters and child marriage.

An increase of 1 million Indonesian rupiah ($75) in damage costs led to a 4.4% increase in the probability of child marriage. The number of household members is also positively associated with a higher probability of child marriage, whereas parents’ and children’s education for example were negatively associated with child marriage.
Dartanto and Pratiwi concluded that climate change can affect child marriage, but it is an indirect effect related to the economic damage costs of climate change on family income that drives child marriage. This conclusion is important when planning climate change mitigation actions, such as early warning systems, as these can potentially lower the economic damage and hence reduce the likelihood of child marriages.

Key takeaways from Dr Tartanto’s presentation

- *Instrumental Variable regression analysis showed a positive correlation between the damage cost from climate change and the likelihood of child marriage, but this is an indirect effect due to the damage costs related to climate change affecting household income. An increase of IDR 1 million (or 75 USD) in damage costs increased the probability of child marriage by 4.4%.*
- *The size of the household showed a positive correlation with child marriage; the larger the family size, the greater the risk of child marriage.*
- *Climate adaptation and mitigation strategies such as early warning systems can help reduce the damage costs of climate change and hence act as a protective factor from early marriage.*

Useful resources:

Alston M., Whittenbury, K., Haynes, A., and Godden, N. (2014), Are climate challenges reinforcing child and forced marriage and dowry as adaptation strategies in the context of Bangladesh? Women’s Studies International Forum, 47 (Part A), 137-144. [https://doi.org/10.1016/j.wsif.2014.08.005](https://doi.org/10.1016/j.wsif.2014.08.005)


Ms. Heather Barr, Associate Women’s Rights Director, Human Rights Watch, “Marry before your house is swept away” - research in Bangladesh.

Heather Barr referred to the research that Human Rights Watch (HRW) had conducted in Bangladesh, a country deeply affected by the climate crisis, the large number of natural disasters, and a high prevalence of child marriages. In 2015, HRW conducted qualitative research to establish whether climate change had negatively affected human rights, including child marriage and if so, what measures had the government of Bangladesh introduced in order to reverse such a trend. Targeted interviews with families took place in order to determine their experiences of natural disasters and the factors that influenced their decision to proceed with child marriage, such as when girls should get married, who they should marry and why they should marry. The interviews aimed at facilitating married girls and their families to identify the factors driving marriages and how they impacted the girls’ lives. They also interviewed service providers, community leaders, and other experts.
Their study involved 114 interviews, 59 of which were with girls and women who had married as children in six districts of Bangladesh during the previous five years. The youngest bride interviewed had been married at age 10. Not all the families interviewed had experienced natural disasters, but many had. Three types of disasters were principally mentioned - cyclones, flooding, and erosion - all of which had prompted the affected families to marry their daughters earlier than they had intended to. The common narrative was that disasters had intensified the family’s economic desperation. As a result, an early marriage was their way of offsetting the loss incurred by the natural disaster by reducing their family size and also potentially increasing their daughters’ wellbeing by having better access to food in their new home with their husband and in-laws.

Although this was a small qualitative study, the findings suggested that there was a stronger link between river erosion and child marriage than between child marriage and cyclones or flooding. The explanation was that while a cyclone was a cataclysmic event in which people lost their homes and belongings and had a huge impact on their lives and futures, they were a regular unpredictable weather event in Bangladesh, so people just accepted them and dealt with them. Flooding experienced by families was often predictable, but the impact was not usually cataclysmic. When people lost their crops, perhaps every year, they would replant them and whilst this brought hardship, it did not have the same devastating impact as cyclones.

River erosion on the other hand was both cataclysmic and to some extent predictable. Families would often watch their neighbours’ houses fall into the river, and from this they could predict when their own home was likely to be swept away. River erosion led to homelessness and displacement. Families were aware of this danger which influenced their planning and decision-making. One option was to reduce their family size through marrying their daughters early, which would also ensure a safe new home for them. Thus, in these situations, child marriage was used as a coping mechanism in anticipation of becoming homeless and displaced.

HRW also examined the Bangladesh government’s planning measures in the event of natural disasters. Interestingly enough, although Bangladesh is usually quite active on gender issues, in 2015, their planning mechanisms showed little evidence of acknowledging the intersection between climate change, natural disasters and child marriage.

Natural disasters in any crisis affect men and women differently with women and girls being disproportionately affected. As the climate crisis deepens, we are likely to see more examples of how disasters are having a devastating impact on girls and women.

Heather Barr ended by mentioning some of the work HRW had been doing in Afghanistan where drought was already a problem even before the Taliban took over the country in August 2021. As Afghanistan’s assets were frozen, the economic impact of this created a devastating humanitarian crisis, in which 95% of families were dealing with food insecurity. Anecdotal accounts suggested child marriage was being used as a coping mechanism, with families selling their children – predominantly girls- in marriage to feed the rest of the family.
Families experienced three main types of disasters: cyclones, floods and river erosion, all of which reduced household income and affected decisions about child marriage. River erosion was considered the most detrimental disaster as it resulted in homelessness and displacement, often forcing parents to use child marriage as a coping mechanism to reduce family size and to ensure that their daughter(s) would be safer and have better access to food and other resources. Bangladesh’s long-term planning to mitigate disaster risk reduction must acknowledge the intersection between climate change, natural disasters and child marriage as women and girls are disproportionately affected.

Key takeaways from Ms. Heather Barr’s presentation

- Families experienced three main types of disasters: cyclones, floods and river erosion, all of which reduced household income and affected decisions about child marriage.
- River erosion was considered the most detrimental disaster as it resulted in homelessness and displacement, often forcing parents to use child marriage as a coping mechanism to reduce family size and to ensure that their daughter(s) would be safer and have better access to food and other resources.
- Bangladesh’s long-term planning to mitigate disaster risk reduction must acknowledge the intersection between climate change, natural disasters and child marriage as women and girls are disproportionately affected.


**Dr Lucia Corno**, Catholic University of the Sacred Heart, Italy and LEAP, “Weather shocks, child marriage and marriage payments”

Dr Corno’s presentation covered joint research conducted by her and Dr Alessandra Voena, (Stanford University and LEAP). Dr Voena’s presentation followed immediately after Dr Corno’s as the two presentations were linked. LEAP was looking at the reasons for harmful traditional practices such as child marriage and Female Genital Mutilation (FGM).

Over 700 million women married today were married before age 18 (UNICEF). Child marriage practice is common in Sub Saharan Africa and South Asia and is strongly associated with poverty both across and within countries with severe consequences on women’s socioeconomic outcomes.

Child marriage is common in countries where marriages are regulated by payments at marriage, often above the annual GDP per capita. The two types of marriage payments used around the world are the bride price, where payment is made by the groom/groom’s family to the family of the bride and is widespread in sub–Saharan Africa and dowry payments, which are made by the bride’s family to the groom or his family, which is more common in countries such as India.

Against this background their research questions were:

1. How do economic conditions affect child marriage in developing countries?
2. Do traditional norms of marriage payments influence such a relationship?

To answer the first question, they empirically investigated the impact of rainfall shocks on child marriage among women in Sub Saharan Africa and India. They concluded that negative rainfall shocks (i.e., drought) had similar effects on agricultural output and in reducing the income of poor households in both Sub-Saharan Africa and India.
However, they also reached some dissimilar conclusions regarding the geographical region studied. For example, while in Sub Saharan Africa, a drought increased the likelihood of early marriage by 3%; in India a drought decreased the risk of early marriage by 4%.

To explain these opposite effects of rainfall shocks on child marriage, they analyzed whether this empirical discrepancy might be driven by the prevalent mode of marriage payments used in these two regions of the world. They eventually established that in Sub Saharan Africa the positive effect of drought on child marriage is concentrated in ethnic groups and regions where bride price is the prevalent mode of payment at marriage. In India this negative relationship is concentrated among the Hindu population where dowry is the predominant payment at marriage.

In Sub Saharan Africa, households which are exposed to an income shock experience liquidity constraint, respond by marrying off their daughters early to receive a bride price. In contrast, in India those who are affected by income shocks due to drought and liquidity constraints, are less likely to marry off their daughters early because they cannot afford to pay a dowry to the groom’s family.

For this analysis, data on child marriage from demographic and health surveys was used with geocoded data[1].

In Sub Saharan Africa surveys across 31 countries were analyzed based on a sample of 326,645 women. The data from India was based on a sample of 66,466 women. The distribution of age of marriage in Sub Saharan Africa is 18.7 years and in India it is 17.6 years. The fraction of women married before 18 was 46.7% in Sub Saharan Africa and 53.95% in India.

Data on rainfall shocks was taken from the University of Delaware monthly precipitations from 1900-2010 covering terrestrial areas. A rainfall anomaly is defined as a calendar year with rainfall below the 15th percentile of the long-term record.

This data was combined with data on marriage payments based on an atlas of precolonial societies showing countries where bride price is prevalent and countries where dowry payment is the predominant form of payment at marriage.

What did the results show?
Their results showed a statistically significant correlation between drought and child marriage. In Sub Saharan Africa girls who experience a drought between the ages of 12-17 are 3% more likely to marry in the same year compared to girls who have never experienced a drought during the age of 12 to 17. In contrast, in India girls who experience a drought between the ages of 12-17 are 4% less likely to marry in the same year as the drought, compared to girls who had never experienced drought.

[1] ‘Geocoding is the process of transforming a description of a location—such as a pair of coordinates, an address, or a name of a place—to a location on the earth’s surface.’ https://desktop.arcgis.com/en/arcmap/latest/manage-data/geocoding/what-is-geocoding.htm
One anomaly was that in Eritrea, a country in Sub Saharan Africa which used the tradition of dowry as the mode of payment at marriage instead of bride price, drought led to less child marriage; a conclusion which is consistent with the findings for India where dowry was used at marriage. The relationship between drought and early marriage is only found in countries where bride price is the custom as this provides an income for the girl’s family.

Key takeaways from Dr Corno’s presentation

*Climate shocks are crucial in shaping marriage decisions in developing countries but act in a complex way that interacts with culture.*

- The effect of drought on child marriage has opposite effects in Sub Saharan Africa and India. In Sub Saharan Africa girls who experience a drought between age 12-17 are 3% more likely to marry in the same year compared to girls who have not experienced drought, as marriage involves a bride price income for the family. In India, girls who experience a drought between age 12-17 are 4% less likely to marry in the same year as parents are unable to afford the dowry payment to the groom’s family.
- In Eritrea, located in Sub-Saharan Africa, where dowry payments are used like in India, drought meant girls were 4% less likely to undergo child marriage as families were unable to afford the dowry payment. This conclusion was consistent with the findings from India.

*Dr Alessandra Voena, Stanford University and LEAP, “Lessons from the weather shocks literature from a policy perspective”*

Dr Alessandra Voena focused on how the results from the joint work with Dr Corno could be used to design effective policies to reduce child marriage.

Evidence from the literature shows that economic incentives can influence the occurrence of child marriage. These are not only long-term economic incentives, but short-term needs for liquidity, which also play a role in determining when child marriage in some instances occurs. Moreover, the relationship between economics and child marriage is a complex one that depends on culture and institutions which are important factors when designing polices.

Dr Voena shared new data from the Kagera region of northern Tanzania (Corno and Voena, 2023) in which they studied the relationship between negative rainfall shocks (drought) and child marriage through analyzing existing data from the Kagera health and development survey. They developed an estimated economic model of child marriage and economic shocks to study this evidence in a more policy focused way, by performing macroeconomic policy simulations. This model was used to study two different policy tools - enforced legal minimum age bans and conditional and unconditional cash transfer programs.

In the Kagera region of northern Tanzania, negative rainfall shocks were found to lead to a higher probability of child marriage at the time of the drought.
Evidence from the enforcement of minimal age of marriage laws show that although this is a commonly used policy to prevent child marriage, the enforcement of such laws is challenging. A simulation was developed in which girls were banned from marrying before the age of 16, and a counterfactual in which girls were banned from marrying before the age of 18. From these simulations they found that once the age ban is no longer in place - for example when the girl turns 16 - the rate of marriage does not immediately increase to the same level that it had been in the absence of a legal ban. This is because the liquidity considerations that would have pushed families to marry girls off in the baseline cases, may no longer be present by the time these girls turn 16.

So, if girls who have experienced some negative shocks at the age of 14 or 15 are kept out of marriage at these earlier ages, they may actually not get married straight away once it is legal for them to do so. The same situation applies to the legal ban at age 18. Thus, if child marriages can be prevented at these earlier ages by enforcing these minimum age of marriage laws, this can potentially shift the entire distribution of age of marriage up to women’s early twenties.

Their work suggested that if indeed liquidity considerations shape child marriage, then enforcing a minimum age of marriage can have additional benefits. Not only do they act as a short-term deterrent to the occurrence of child marriage of girls who are under the minimum legal age of marriage, but such laws can also shift the entire distribution of age of marriage by postponing child marriage until girls are older.

However, this data is only based on micro economic simulations and ideally, there should be randomized controlled trials to assess the effectiveness of this or other such policies.

The second set of policies focused on cash transfer programs. In a bride price economy, unconditional cash transfer programs which benefit the whole family, could curb child marriage. This is more costly than conditional cash programs but has other benefits especially when targeting poorer households.

One caveat is that it is vital to understand the context when making policy decisions. Their prior work suggested that unconditional cash transfer programs may be less effective in a dowry economy, so in these contexts, conditional cash transfers in which families are paid to keep their daughters unmarried, may be more successful.

Dr Voena concluded that child marriage does indeed respond to economic forces, but culture also plays a role, so it is important to understand these interactions and intersections. Poverty and negative economic shocks (drought) can increase the occurrence of child marriage, especially in bride price economies. Climate change may exacerbate this relationship. More empirical research is needed to study how to respond.

While there are economic policy tools that could curb child marriage, these tools are context specific and will depend on the economic forces, culture and institutions involved. Based on their economic simulation, they conclude that liquidity considerations in the short term can shape and raise the age of child marriage.
Child marriage does respond to economic forces but in a complex way in which culture also plays a key role. Climate change may exacerbate these relationships as it affects the distribution of household income by increasing absolute poverty.

Poverty and negative economic shocks from drought can increase the occurrence of child marriage especially in bride price economies, thus short-term liquidity considerations tied to bride price can increase child marriage.

Policy tools exist that could curb child marriage such as legal minimum age bans for marriage and conditional and unconditional cash transfer programs, but these policy tools are context specific, and their use will depend on the interplay of economic forces with culture and institutions. More empirical research is needed to understand these relationships.

Key takeaways from Dr Voena’s presentation

- Child marriage does respond to economic forces but in a complex way in which culture also plays a key role. Climate change may exacerbate these relationships as it affects the distribution of household income by increasing absolute poverty.
- Poverty and negative economic shocks from drought can increase the occurrence of child marriage especially in bride price economies, thus short-term liquidity considerations tied to bride price can increase child marriage.
- Policy tools exist that could curb child marriage such as legal minimum age bans for marriage and conditional and unconditional cash transfer programs, but these policy tools are context specific, and their use will depend on the interplay of economic forces with culture and institutions. More empirical research is needed to understand these relationships.


Dr Nahid Rezwana, University of Dhaka, Bangladesh, “The relationship between child marriage, disasters and climate change in Bangladesh”

Dr Rezwana explained that Bangladesh is prone to natural disasters including cyclones, floods, thunderstorms, water logging, river-based erosion, salinity, and landslides because of its geographical location, large population, and socio-economic conditions. Bangladesh is also the 7th most vulnerable country to climate change and has experienced 185 extreme weather events between 2000 and 2019. Child marriage is a social problem with Bangladesh having one of the highest rates of child marriage in the world. In 2020 4.4 million women were married before they were 18 and nearly 18% of them were under the age of 15.

Dr Rezwana’s research asked, “Is there any relationship between child marriage and disasters?” She drew on four studies she had conducted between 2012-2020 in three disaster prone areas of Bangladesh – Rangpur, Barguna, and Bhola which experience cyclones and river bank erosion. Both qualitative and mixed methodologies were used to understand the impacts of disasters on access to healthcare and Gender Based Violence (GBV). Her studies showed that GBV increases both during and after disaster periods. The term GBV covered child marriage, wife battering, rape and sexual abuse, trafficking, eve teasing, dowry related violence and mental torture, but child marriage was the most common form of GBV across different types of disasters.

According to participants, GBV exists during non-disaster times anyway, but increases during and post disaster periods, with the main increase being in early marriages.

In areas experiencing river bank erosion, all respondents said GBV increased including child marriage, dowry related violence and domestic violence. Although trafficking is not considered a form of violence, this sometimes occurs during migration.
Reasons for the increase in GBV during and after disasters in Bangladesh

In the cyclone prone areas in Barguna Dr Rezwana used qualitative research to ask participants why child marriage occurred just after disasters. The responses suggested that disasters create poverty and insecurity which become strong drivers of child marriage. There are cases of dowry-driven child marriage revealed in the studies. While a lower dowry is usually paid for younger girls anyway, after a disaster, when families are unable to afford even a small dowry, the groom’s family may offer a marriage proposal without demanding a dowry from the bride’s family and may even agree to pay for all the marriage costs. In such cases, parents feel they have little choice but to accept the marriage proposal. Parents said if there had been no cyclone, they would have refused such early marriages, but when they were suffering intense poverty - no food, proper shelter etc., they agreed to daughters being married early. Thus, the groom’s family’s decision to waiver the dowry payment can be an important driver of child marriage for impoverished families, as it removes the financial burden of paying a marriage dowry to the bride’s family.

In one quote, a girl from Barguna said she was married within 2 months of cyclone Sidr, because her family was already poor, and the cyclone had destroyed everything and further increased their poverty. The girl’s father felt insecure and was concerned about his daughter’s security and reputation and wanted to protect the family’s honour, so he arranged a marriage for his daughter as soon as possible.

Participants reported that after disasters there are unknown men who roam around looking for victims, which makes people feel very insecure. In addition, rich men are reported to use disasters as an opportunity to prey on girls from poor families.

Families worry that their daughters may be kidnapped or sexually violated, which would damage the family’s reputation. In sum, in disaster situations, the damaged environment, the destruction of housing and the fear of sexual violence are drivers of early marriage.

Gender discrimination and social practices also have a strong influence on family decisions in disasters where child marriage is used as a coping strategy. Whenever a family is in crisis, these factors play an important role as girls are seen as a burden on the family, so during disasters, more child marriages of girls occur.

Child marriage has many negative consequences, including dowry related violence, wife beating and wife abandonment and divorce. It also has many negative impacts on girls’ education and physical and mental health.

Moreover, child marriage often traps girls into abusive relationships which they cannot escape from. Thus, disasters have a gendered impact, disproportionately affecting women and girls. Child marriage is the most common form of GBV that occurs during post disaster periods with the main drivers being poverty and insecurity. The number of disaster victims as well as child marriage victims will likely increase due to climate change.
Key takeaways from Dr Rezwana’s presentation

- **Gender based violence increases during and after disasters – especially child marriage.** *Insecurity during disasters is a key driver of child marriage as families fear girls maybe kidnapped or sexually abused which would damage the family’s and girl’s honour.*
- **Child marriage can be driven by dowry related considerations during disasters, such as the groom’s family agreeing not to demand a dowry from the bride’s family.**
- **Disasters in Bangladesh have a gendered impact and disproportionately affect women and girls. While Bangladesh has introduced measures to address child marriage, more needs to be done.**


**Mohinder Watson** thanked the speakers on the first panel for sharing their expertise which was helping to build a more nuanced picture of the link between climate change and child marriage. Special thanks were offered to Professor Margaret Alston for masterfully guiding the first panel session. Next Mohinder Watson introduced and expressed her thanks to Nankali Maksud, Senior Advisor on the prevention of harmful practices (FGM and child marriage) based at UNICEF Headquarters, New York, Programme Division, who had kindly agreed to moderate the second panel.
Panel 2: Sharing best practices of climate change adaptation policies and how to achieve greater integration of climate change adaptation strategies and child marriage prevention policies.

Dr Mary Nyasimi, Director, Inclusive Climate Change Adaptation for a Sustainable Africa, “How Climate Change is Pushing Children into Early Marriages in Kenya”

Dr. Nyasimi provided some context to Kenya whose economy is largely dependent on rainfed agriculture and tourism, both of which are susceptible to climate variability, climate change and extreme weather events. The inter-seasonal weather variability is increasing which together with declining rainfall has impacted cereal production in recent years. Recurrent droughts and floods are experienced in Kenya, mostly in the semi-arid areas and are likely to be exacerbated by increasing temperatures, heavy rainfall events and sea level rise, leading to severe crop and livestock losses. Kenya was currently experiencing famine and displacement in the northern region.

Thus, climate change affects agriculture, leading to reduced grain yields and a lower quality of crops, health stress in livestock and damage to crops and land. Water is an important issue in terms of reduced water quantity and quality, increased water scarcity, and increased saltwater intrusion. Climate change is also affecting human health, due to increased heat stress and an increased risk of vectors and water borne diseases. Ecosystems are affected by climate change as there is degradation and loss of coastal habitats, a reduced diversity of native species and economic losses to the tourism industry. Energy and infrastructure are also affected as there is reduced hydropower capacity, increased flooding, and landslide damage to infrastructure.

Although legislation governing child marriage in Kenya exists, change is slow. Child marriage has been prohibited in Kenya since 1990, when the country ratified the United Nations Convention on the Rights of the Child. Additional Kenyan laws, including: the Children’s Act of 2001, the Sexual Offences Act of 2006 and the Marriage Act of 2014 (which explicitly prohibits the marriage of children under 18), further criminalize this practice. In 2013, Kenya together with other African nations committed to ending child marriage by 2030. Kenya has made some progress in reducing child marriage: the percentage of young women between 20 and 24 years of age who were married before their 18th birthday dropped from 34% in 1994 to 23% in 2016. But the target date of 2030 for eliminating child marriage is fast approaching, and the country is still far from meeting this goal.

Many factors fuel child marriage including poverty, illiteracy, gender inequality, and culture among others. In addition, marriage in Kenyan society is often considered as the only way for a girl to be socially accepted and respected. For the girl’s mother, marriage is seen as “a symbol of respect” and everyone praises her for what is considered a good intention and action. While many girls tend to get married because they believe in the ideology that marriage is the most important event in their lives, for other girls marriage is an escape from the reality of poverty, inequality, and climate change. There is also a widespread belief that the younger girls marry, the better.
There is a link between climate change and early marriages in Kenya as climate change has given rise to a resurgence of child marriage in the last five years, especially among the pastoral communities. Increasingly frequent droughts have depleted food, water and grazeland. Livestock – the backbone of pastoralist communities are dying of hunger, thirst, and disease. Fishermen, herders, and small-scale farmers are among those who have faced devastating droughts, floods, heatwaves, and hurricanes. For many people, climate change has completely altered the trajectory of their lives and also the lives of their daughters.

In an effort to cope with the effects of climate change, desperate families are taking their daughters out of school and marrying them off in exchange for bride price — typically comprised of new clothes, drums of fresh milk and several camels.

Northern Kenya consists of many ethnic groups including traditionalist pastoralist communities which are deeply patriarchal. Boys are expected to be the financial providers for the family and to make all household decisions, and as a result are more highly valued than girls. Girls are typically used to provide domestic labour and are valued in terms of the bride price they will generate for the family when they marry. During times of economic hardship such as during a drought, families take girls out of school before boys. While Kenya provides free public schooling, the cost of transport to and from school, uniform, books, etc. can be too costly for these pastoralist communities, so they prefer to educate boys rather than girls.

There are a number of strategies and practices used by some communities to eliminate child marriage in Kenya:

- Msichana ‘Girl’ Empowerment Program uses a holistic approach to create an enabling environment in which a girl is free to choose her own future. The program starts from the community level, through intergenerational dialogue e.g., with village elders, and involves government officials, parents, and girls themselves. It also includes a peer learning program where girls learn from each other and catalyze change among themselves in safe spaces. However, they believe that change is too slow and that more needs to be done.

- National Free Education Programs: Free education can reduce the illiteracy level and be used to counter child marriage. Programs such as advice against early marriage, and good menstrual hygiene practices are introduced in the syllabus so that children have a better understanding of such issues and can openly talk about them. Schools are empowering both girls and boys by nurturing their talents and creating awareness of self-development. Boys are mobilized too, hence increasing male engagement on child marriage. However, during times of crisis such as drought, girls are still the first ones to be taken out of school.

- Community leaders are spreading awareness within their communities of the harmful effects of child marriage and are helping to transform social and cultural norms using media platforms such as mobile campaigns and radio talk shows to create greater awareness. Some girls have been rescued from early marriages, so safe spaces are created for them. SMS codes and text messages sent to families in those northern communities mentioned earlier allow potential victims a way to reach out for help, advice, or support. Safe spaces are created for survivors and victims of child marriage to openly share their experiences and stories about child marriage among themselves and with others at risk of early marriages.
There are examples of some successful programs to curb child marriage, but change is slow and needs to increase as in some communities large numbers of girls are still subject to child marriage every year. Kenya is unlikely to meet the SDG 2030 target to end child marriage globally by 2030.

Dr Nyasimi ended by saying that we can shape our future by taking accountability for fulfilling our children’s needs. Lastly and most importantly, she said let children be children.

**Key takeaways from Dr Nyasimi’s presentation**

- *The negative impacts of climate change on Kenya’s agricultural economy and tourism as well as on livestock and the environment is forcing some families to use child marriage as a coping mechanism to generate bride price income.*
- *Gender discrimination where males are more highly valued in society as financial providers and decision makers, means girls are the first to be taken out of education during hard times.*
- *Progress at reducing child marriage needs to increase as Kenya is unlikely to meet the SDG target of ending child marriage by 2030. A focus on girls’ empowerment and agency is important since marriage as an institution is highly regarded in many parts of Kenyan society and girls themselves aspire to get married as soon as possible to gain social status and respect.*

**Ms Martina Hibell**, Barnfonden (ChildFund) Secretary General, Sweden, “Don’t let them drown.”

Martina Hibell shared stories from three countries where child marriage is endemic and where Barnfonden has been protecting girls in communities affected by climate change.

The first story was from Zambia, home to about 1.7 million child brides, 400,000 of whom married before age 15. Margaret, a mother in Luangwa, Zambia where child marriage is rampant and families suffer from frequent droughts and floods, stumbles from one disaster to the next. Margaret was angry and confused when ChildFund arrived at her 13-year-old daughter’s bridal shower with the police to stop the wedding. However, having seen how her daughter was now thriving in school, she has become a strong advocate against child marriage. She said: “I thought the money and the marriage would help our family. Now I can see that taking a 13-year-old girl to be married is like taking her to the water to drown.”

The fight against child marriage in this community is largely youth driven, who identified this as an issue they wanted to change. They rallied the police, the village chief and others and their bravery and perseverance paid off, as they succeeded in convincing authorities to help them stop child marriage. A turning point came when the village chief said he could and would impose a fine on families arranging child marriages before the legal age. This highlights the importance of empowering youth who should be provided with high quality education and opportunities for employment after graduating.

The second story concerns the impact of the extended drought in Siraro District, in southern Ethiopia, which had left classrooms empty as parents took their children out of school to find daily labour to help them put food on the table.
In some areas not only are children pulled out of school, but drought can also lead to an increase in child marriage. When children drop out of school, boys are often sent to different districts to work while girls are forced into early marriages and often have to undergo female genital mutilation. Families hope to get the bride price from the groom’s family as a source of income to help them survive. During difficult times, the most effective help organisations can give is to help keep children in school – either in the form of a small cash subsidy to support families or providing food so that children will get at least one meal a day to survive.

Sajata, a 14-year-old girl from Rajasthan India, who had just the year before escaped from an arranged marriage, was the focus of the third story. For many subsistence farmers in Rajasthan, their landholdings are no longer large enough to sustain their needs from having been increasingly divided over successive generations. In addition, the lack of water caused by more frequent and prolonged droughts meant that families’ livelihoods are rarely sufficient to sustain their family needs.

Sajata’s parents were in this position and were forced to find waged labour in the nearby town. Sajata has four siblings, so it was difficult for her family to make ends meet. Therefore, marrying Sajata was seen as a sensible option as this would mean one less mouth to feed and it was also in line with the traditions and customs of tribal families in Rajasthan. When it was announced that Sajata was to be married, the adolescent group she was a part of intervened; they informed a helpline in India which sent a team to intercept and prevent the marriage. Sajata was lucky to have had peer support, a helpline to call, and community members trained to intervene in such circumstances. Thus, having strong and coordinated child protection mechanisms is vital. Not all girls are as lucky as Sajata who is now back in school studying. Child marriage in Rajastan is a common practice, especially in southern Rajastan, where it is a cultural norm. Despite having legislation against child marriage, the practice continues. During 2021, within 9 months, Barnfonden prevented eight such marriages with the help of adolescent groups.

These stories highlight the importance of empowering girls themselves, as they are a powerful voice that needs to be heard, through setting up and using girls’ clubs, teaching children and the community about child rights, and ensuring there are referral systems, helplines, and focal points.

Climate change must be considered in all we do, as this is forcing increasing numbers of families into desperate situations that give rise to many forms of violence against children, including child marriage. When faced with economic hardship, families take whatever steps necessary to survive. To stop child marriage, families’ climate resilience must be improved by having more efficient agricultural and irrigation systems, savings schemes, and the creation of alternative sources of income.

A societal transformation is needed to address violence against children including child marriage based on a system’s approach to help children’s own understanding and to convince them that traditions that violate children’s rights are unacceptable.
A community-based approach involving NGOs, the police, government representatives, families, and village chiefs, is needed to address child protection systems and societal norms. National governments must prioritize child protection and enforce laws to protect children, including during crises. A multi-sectoral approach is needed to address children’s rights, while also addressing the effects of climate change and how we mitigate these. All this is achievable. Martina Hibell thanked Dr. Mohinder Watson for convening this meeting to shine a light on this important issue.

**Key takeaways from Ms Martina Hibell’s presentation**

- A focus on girls’ empowerment is vital as they are a powerful voice that needs to be heard. This can be achieved through girls’ clubs, educating children and communities about children’s rights.
- A multi-sectoral approach is needed to address violence against children including child marriage and to change societal norms to protect children.
- More climate change resilient communities and systems are needed as well as more research although sufficient evidence from grassroots level already exists.


Caroline Ouaffo Wafang welcomed the timely organisation of this event, especially since the OHCHR is currently deeply involved in the debate regarding climate change. Caroline Ouaffo Wafang also thanked Dr Mohinder Watson, Founder of Action on Child, Early and Forced Marriage and Representative of the International Council of Women, for convening and involving the Office of the High Commissioner for Human Rights in this important event.

The meeting’s focus was clearly relevant to current global concerns as the world is presently up against the triple planetary crisis of climate change, pollution, and nature loss. Yet, the treatment and adaptation of related policies with regards to child marriage prevention run mostly parallel, at least at the national level, although it is known that a clear connection between them and climate change exists.

In a time of heightened stress, lawlessness and homelessness, women and girls face an increased threat and prevalence of violence. Situations of environmental degradation and resource scarcity, as well as environment-related emergencies, lead to displacement and breakdowns in social and security structures, and a concomitant rise in gender-based violence (GBV), which is also often used as a means of reinforcing privileges and control over resources. In such contexts, incidences of child marriages may also rise as an economic and social coping mechanism for families in emergencies.
As the negative impact of climate change is expected to worsen in the future, it is vital that women and girls are protected from the risk of child marriage. The recent Intergovernmental Panel on Climate Change (IPCC) report has reiterated the threat that the changing environment poses for every aspect of human rights, from displacing people from their homes, forced migration, to threatening food security. The interplay of all these factors must be better understood to enable the adoption of targeted policies in order to address and to prevent child marriage from being used as a coping strategy in response to climate change.

**Efforts at the UN level to address this interconnection:**

A recent interagency statement between the Office of the High Commissioner for Human Rights, (OHCHR), UN Women and the United Nations Environment Program (UNEP) on Human rights, the environment, and gender equality mentions that climate change is a human rights crisis that demands a feminist response.

Time and again women and girls in vulnerable situations have borne the brunt of climate change because of intersecting factors such as their age, descent, ethnicity, race, economic and social class, indigenous background, migrant status, and disability. This threat continues to jeopardize their human right to a violence free environment and a clean, healthy, and sustainable environment.

In 2019, the High Commissioner for Human Rights presented a report on the issue of child marriage in humanitarian settings, including environmental emergencies and the aftermath of natural disasters. H.E. Michelle Bachelet recognized that child marriage had a higher incidence in environmental emergencies, with terrible consequences for the human rights of women and girls.

It is the international legal obligation of States, including through the Sustainable Development Goals (SDG) commitments, to address, prevent and eliminate child marriage, to ensure human rights accountability and to provide redress and services for survivors. As this is a vital intervention with lifelong impact, adequate funding and human resources should be prioritized for this purpose, alongside food, water, shelter, and health services.

Furthermore, both the CEDAW Committee’s general recommendations n.35 on GBV (2017) and n.37 on the gender-related dimensions of disaster risk reduction in the context of climate change (2018), single out situations of disaster and the degradation and destruction of natural resources as factors that affect and exacerbate GBV, including child marriage. The Committee has observed that sexual violence is common in such contexts and may become acute in the wake of a national disaster.
The CEDAW Committee’s recommendations addressed to States are the following:

- Develop policies and programmes to address existing and new risk factors for gender-based violence against women, including child marriage, in line with international standards.
- Ensure that the minimum legal age of marriage is 18 years for both women and men, by including training on the prevalence of early and forced marriage for all personnel involved in disaster response activities.
- Develop and implement child-sensitive social protection policies.
- Set up systems for the regular monitoring and evaluation of interventions designed to prevent and respond to gender-based violence against women, within programmes relating to disaster risk reduction and climate change.
- Provide training, sensitization and awareness-raising for the authorities, emergency services workers and other groups on aspects of GBV that are prevalent in situations of disaster and how to prevent and address them.
- Provide mechanisms that are confidential and physically, financially, and linguistically accessible to all.
- Adopt long-term policies and strategies to address the root causes of GBV and child marriage, with all stakeholders.

Caroline Ouaffo Wafang said that effectively starting to address this crisis will require a gender-responsive, human rights-based approach, targeting the root causes of inequality, discrimination, and marginalization, and making room for the important contributions of all stakeholders, especially women and girls. Such efforts should promote gender-transformative actions in a culturally appropriate manner, by enabling practising communities to collectively explore alternative ways of fulfilling their values and addressing their concerns. She also highlighted the importance of addressing practical issues stemming from gender discrimination, such as swimming lessons for girls and women which could increase their chances of survival during floods.

An example was shared from the government of Sri-Lanka, which as part of the post-disaster needs assessment, consulted together with its partners, with at least 800 children affected by the 2016 floods and landslides, in a safe and enabling environment. That provided avenues for sharing experiences and giving feedback to identify protection needs for providing more tailored support and assistance.

Nankali Maksud the moderator, thanked Caroline Ouaffo Wafang and said that while we may not yet have all the answers, we can already use the examples provided from research, the grassroots level as well as policy directives to make the connection between climate change and child marriage and consider what more we could do.
As the negative impact of climate change is expected to worsen in the future, it is vital that women and girls are protected from the risk of child marriage. This relationship must be better understood to prevent child marriage from being used as a coping strategy in response to climate change.

States are obliged to fulfil SDG commitments to address, prevent and eliminate child marriage, to ensure human rights accountability and to provide redress and services for survivors.

Both the CEDAW Committee’s general recommendations n.35 on GBV (2017) and n.37 on the gender-related dimensions of disaster risk reduction in the context of climate change (2018), highlight situations of disaster and the degradation and destruction of natural resources as factors that affect and exacerbate GBV, including child marriage.

Key takeaways from Ms Caroline Ouaffo Wafang’s presentation

- As the negative impact of climate change is expected to worsen in the future, it is vital that women and girls are protected from the risk of child marriage. This relationship must be better understood to prevent child marriage from being used as a coping strategy in response to climate change.
- States are obliged to fulfil SDG commitments to address, prevent and eliminate child marriage, to ensure human rights accountability and to provide redress and services for survivors.
- Both the CEDAW Committee’s general recommendations n.35 on GBV (2017) and n.37 on the gender-related dimensions of disaster risk reduction in the context of climate change (2018), highlight situations of disaster and the degradation and destruction of natural resources as factors that affect and exacerbate GBV, including child marriage.

Useful resources:


Ms Laila Khondkar, Independent Expert, “Addressing child marriage in the context of climate change in Bangladesh.”

Laila Khondkar explained that Bangladesh has one of the highest prevalences of child marriage in South Asia and in the world with 51 percent of women who are currently aged 20-24 being married while they were still children. Although some progress has been made to end child marriage, it has mainly affected girls under the age of 15 and not girls in the 16-18 age group. COVID 19 further threatened the progress that had been made.

The reasons for child marriage include poverty, a fear of sexual and other harassment of girls where marriage is seen as a form of protection, poor law enforcement, loopholes which allow underage marriage, widespread social acceptance of child marriage and parents’ belief that marrying off their daughters is one of their major responsibilities.

Bangladesh is already one of the most climate vulnerable countries in the world and will become even more so due to climate change. Floods, tropical cyclones, storm surges and droughts are likely to become more frequent and severe in the coming years with some of these changes already visible.
The Government of Bangladesh has invested over USD 10 billion to make the country less vulnerable to natural disasters, with mitigating strategies ranging from flood management schemes, coastal polders, cyclone and flood shelters, raising of roads and highways above flood level, warning systems for floods, cyclones and tidal surges, community-based disaster preparedness and development of saline resilient varieties of rice and other crops. Communities are also extremely resilient and are also implementing initiatives to adapt to disasters such as collecting rainwater and crop diversification. However, currently these Government led initiatives are limited and need to be scaled up quickly.

Child marriage increases during and after disasters. Although many girls in Bangladesh are committed to getting an education, they live in fear of being married off at any time. Education is a protective factor against child marriage but only if girls attend school for 10 or 12 years. The costs of schooling is also prohibitive for many families. Unless girls are in school or vocational training, they risk being married early.

The disaster itself disrupts the education of children as classrooms are destroyed or are used as shelters. During and after disasters, child marriage is often used as a coping strategy for families due to poverty, disruption to education, as girls are often expected to take care of siblings while parents look for work, fear for girls’ safety, or migration to other areas.

Bangladesh’s National Adaptation Plan includes a commitment to prioritize the poor and most vulnerable groups including women, the elderly and children. Gender equality is identified as a crosscutting criterion and there is reference to gender differentiated impacts of climate change. However, while policies are in place, these have not been implemented.

Recommendations to address any increase in child marriage due to climate change:

- Continue girls’ education and skills development as girls’ education is a critical protective factor. Climate change adaptation programmes must support efforts that promote greater access to quality education for adolescent girls (e.g., restoration of education and the completion of secondary education for adolescent girls as part of disaster recovery work.) More must be done to bring married girls back to schools. Girls need to be provided with sexual and reproductive health services to delay unwanted pregnancies. More efforts should be directed towards changing societal norms.

- Strengthen social protection since poverty drives child marriage. Current social protection measures, although vital, are limited and need to be scaled up. These should be child-sensitive, gender-responsive, disability-inclusive and linked to child protection systems. Social protection systems must be shock-responsive, allowing efficient and effective additional payments to help families cope before, during or after climate-related and other shocks.

- Legal enforcement and safety of girls is vital. Laws must be properly enforced and any special provision allowing early marriage must be removed. Strengthen community-based and national child protection systems. Ensure the safety of girls in the community and strengthen birth and marriage registration systems to prevent tampering with the girls’ age.
• Collect disaggregated data. Take an equity approach to policy planning and implementation; analyse existing inequalities and disaggregate data, including by age, gender, and disability status etc., to capture the specific impact of the climate crisis on different groups of children.
• Address social norms. Facilitate meaningful participation of girls in climate change adaptation decision-making and risk reduction activities to understand their views and priorities. Boys and young men must be engaged in the fight to prevent child marriage. Increase parental awareness on the rights of girls to education, health and protection and the importance of treating boys and girls equally. Direct efforts to influence the social norms which accept child marriage, e.g., discourage neighbours from bringing marriage proposals for underage girls and from attending their marriages.

**Key takeaways from Ms Laila Khondkar’s presentation**

- *Continue girls’ education/skills development even during disasters and discourage their dropout from school and ensure their safety.*
- *Implement and enforce child marriage laws together with robust birth/marriage registration systems to prevent the manipulation of the age of girls.*
- *Work with communities to change social norms and strengthen and scale up social protection to prevent families from resorting to early marriage.*
- *Collect disaggregated data.*

**Mr Saul Butters,** Assistant country director of CARE Mozambique, “Climate Change and Child Marriage in Mozambique – Lessons for Integrating Child Marriage into Climate Change Adaptation.”

Climate change was at the forefront of CARE’s intervention in Mozambique where they faced two types of challenges: the spectacular shocks, seen during the cyclone season from January to April each year when Mozambique is hit by cyclones and flooding, and the periodic droughts. In 2018 they had to deal with drought, cyclone, and flood responses all at the same time.

**Impacts of Climate Change in Mozambique**

Since 2016 Mozambique has faced the El Nino drought of 2016/17, Cyclone Dineo (Inhambane province) in 2017 and Cyclone Idai (Sofala Province) followed by Cyclone Kenneth (Cabo Delgado Province), both in 2019. Cyclone Kenneth was the highest intensity cyclone ever recorded in Sub Saharan Africa and it was also the first time in recorded history that two significant cyclones made landfall in the same cyclone season. In 2021 Cyclone Eloise (Sofala Province) hit Mozambique and already by March 2022, Mozambique had faced a tropical storm Ana (Zambezia Province).

While cyclones have always been a part of the weather system in this part of the world, Mozambique was now experiencing an increased intensity and frequency of cyclones. Saul Butters shared a satellite image of a pending cyclone (left) which was being tracked the day of the expert group meeting, showing a land mass in the north of Mozambique due to be hit by the cyclone at 7pm that day in Nampuna province.
Saul Butters shared the above satellite image of a pending cyclone which was being tracked the day of the expert group meeting, showing a land mass in the north of Mozambique due to be hit by the cyclone at 7pm that day in Nampuna province.

Saul Butters explained that these large seasonal shocks were one aspect of the impact of climate change, but the other aspect was the lower intensity shocks causing food insecurity which covered large parts of the country.

While the big periodic weather events demand significant focus and response, even more important are the lower-level tropical storms such as Ana and Dumako, the delayed onset of rainfall at the start of the season, irregular rainfall distribution, below-average rainfall, and flooding in central and southern Mozambique. This is because Mozambique is principally an agriculture-based economy and people rely on rainfed agriculture, so when the timing of rainfall is unpredictable, farmers cannot make an agricultural livelihood as they had done in the past.

Regarding the general context of child marriage, although the legal age is 18, Mozambique is among the countries with the highest rate of child marriage. The Bill addressing child marriage came into force in 2019 and eliminated a loophole in Mozambican family law which had allowed children to marry at 16 with parental consent. Around 48% of girls are married before the legal age of 18, 14 per cent of whom were married before the age of 15. As of 2015, there were 631,000 child brides in the country.

CARE has developed a tool for rapid gender analysis when there is a disaster to understand the gender dynamics, for example in response to the El Nino drought and also cyclone Idia and Kenneth in 2019, which have provided evidence of the relationship between climate change and child marriage.

After the El Nino drought (2016/17), CARE’s research published in their report “Hope Dries Up”, confirmed that many families used child marriage as a coping mechanism to raise income through the payment of a bride price or by reducing the number of dependents per household. However, collecting hard data to establish proof and evidence is challenging but focus group discussions clearly pointed to the link between climate change and child marriage.
In 2003, the median age for first sexual intercourse for girls was 16, but after the drought, anecdotal evidence suggested that this had lowered to just 11 or 12 years. There were frequent stories of men befriending girls aged 11-13 and luring them away for unprotected sex in return for money or food, leading to unintended pregnancies.

**Cyclone Idai and Kenneth 2019: Rapid Gender Assessments**

In response to the cyclones and floods respondents reported that in some rural areas, girls as young as nine were being forced to go through the initiation ritual to ‘become a woman.’ After this ritual, girls are told they can no longer play like a child and may be forced to live with a man, often much older, and begin sexual relations. Overall anecdotal data suggests a trend of a lowering age of sexual debut and child marriage.

In the context of Mozambique, the impact of climate change on child marriage is not creating new dynamics, rather, it is exacerbating existing negative coping mechanisms within vulnerable communities. While child marriage is not a new phenomenon, the progress made previously is being undermined as the current situation has been exacerbated since communities have become more vulnerable to climate change. The impact of COVID has further contributed to the increase in child marriage.

**CARE’s strategies to address child marriage in Mozambique**

The empowerment and agency of adolescent girls is very important to address child marriage. However, the focus cannot be limited to girls alone as the decision-making power lies with the men in the family. Any progress will be undermined unless other actors are involved, thus engaging men is a fundamental part of CARE’s work.

**Male engagement as part of awareness raising - data from cyclone Kenneth 2019**

In all locations visited, men, women and adolescents all agreed that men in the family made all the significant domestic decisions regarding finances, education, the marriage of children, and reconstruction. Adolescent girls reported that fathers decided on the amount of the bride price (known as lobolo) payable to marry a girl. Adolescent girls and various key informants reported that when a girl becomes pregnant, her parents require her to go and live with the boy or man to avoid family shame.

**Investing adequately in addressing power dynamics**

Positively addressing power dynamics and perceptions of gender roles is a long term and important investment that cannot be addressed through one-off training sessions. Addressing decision-making power and enhancing gender balanced discussions with community leaders and influencers is essential for successful outcomes. To make genuine progress much time needs to be invested in local communities, but donors often want large-scale implementation, which is difficult.
Focus on adolescent girls’ empowerment:
Adolescent girls are empowered through targeted livelihoods’ support and skills trainings to provide confidence and independence. This includes adolescent focused savings groups which are proven entry point for behavior change and awareness raising activities. Also, the focus on adolescent girls’ access to sexual and reproductive health (SRH) services should not only target young mothers, but also include all women. Education is key after a disaster as more girls drop out of school than boys, so investing in catch up classes to get girls back into education is very important as the link between education and early marriage is well established.

While State services do exist in Mozambique, they are weak. The government is willing to implement laws against child marriage, but often lacks the capacity to do so. CARE works with government services at the community and district level to help improve their efficiency.

Key takeaways from Mr Saul Butters’ presentation:
- The importance of focusing on adolescent girls’ empowerment and agency and investing in girls’ education, including catch up classes and also sexual reproductive health education.
- Engage with males who are the family decision-makers to address power dynamics.
- In Mozambique, the impact of climate change on child marriage is not creating new dynamics, rather, it is exacerbating existing negative coping mechanisms within vulnerable communities.


Ms Tamara Tutnjevic, Senior Policy Advisor violence against children/global campaign lead, World Vision International, “How to achieve greater integration of climate change adaptation strategies and child marriage prevention policies.”

There is a clear connection between climate change and child marriage. World Vision International (WVI) started to explore this link about four years ago as part of their campaign ‘It takes a world to end violence against children’, where they examined the linkages between child marriage and climate change under the broader heading of child protection and women’s empowerment. They noticed that an increase in child marriage was linked to an increase in food insecurity and the loss of livelihoods in climate change induced crises.
Evidence on what works to end child marriage in our programmes.

WVI published an evidence-based report on what works to end child marriage just before they undertook a mapping exercise of their climate change and environmental action programming and its impact on child well-being, including child marriage.

From reviewing their projects in 24 countries, involving climate smart projects, integrated water resource management, waste management, agroforestry and Farmer Managed Natural Regeneration (FMNR) projects, community-based disaster risk management, climate empowerment through environment and climate change education, as well as energy efficient technologies, an impact of climate change on child marriage was established. The rationale was that these programs provided livelihoods’ security (higher income from different food production), improved access to food (improved soil fertility, crop production and productivity, livestock production), a greater resilience to shocks and disasters making families more prepared and less likely to depend on child marriage as a coping strategy.

Across these projects, WVI also applied different approaches to empower girls, including through youth clubs but also through projects that specifically champion women and girls such as Farmer Managed Natural Regeneration (FMNR) projects. WVI examined the connection between interventions to end child marriage and address climate change. The following examples were shared:

**Bringing it together: showing the intentional way of bringing together the two narratives of climate change and child marriage in Kenya.**

For many families, prolonged drought as a result of climate change results in the loss of livelihoods. As a result, they tend to resort to marrying their underage daughters in exchange for livestock, food, and money or to maintain the social status of the family.

So, in addition to introducing climate change coping strategies such as diversifying livelihoods, regeneration initiatives to restore land etc., and disaster risk reduction strategies which are all directly addressing the loss of livelihoods, child protection training was also provided. The training was used to create awareness and increase the capacity of the community and community leaders to address child protection, child marriage and FGM. WVI also promoted child participation and agency across these integrated programs, while the child protection side was integrated with the climate change and environmental strategies.

**Bringing it together in Tanzania youth clubs.**

In response to deforestation and environmental degradation in Tanzania, World Vision have started working together with youth. Not only do they focus on combating climate change, but also on engaging young people into having a greater impact on their community. This youth project involves empowerment training, finance and management, preservation, child rights and use of the WVI’s social accountability approach: ‘Citizens Voice in Action’. This initiative has been designed to help young people or citizens of the community to hold authorities accountable for improvements in the provision of services, health care and education.
Following the empowerment training provided by WVI, children identified the obvious environmental threats affecting their community, such as deforestation but also the need to address child marriage and sexual violence.

WVI has introduced the Sauti youth project to address increased deforestation and degradation of coastal habitats. Youth empowerment is provided through training on environmental management and preservation, advocacy and child rights. The citizens’ voice and action approach is used to strengthen local action and government accountability. There are 2,665 direct beneficiaries and 857 participants who have benefitted from the project, having planted more than 7500 trees and distributed 12,000 trees to their community members. The Sauti youth project also advocates for an end to child marriage, sexual violence and encourages environmental preservation.

**Bringing it together project: Eco Friendly villages Bangladesh.**

This project focuses on the response of whole villages and involves an intentional physical design, where residents have their say on issues affecting them, such as water, transportation, waste management, livestock raising etc. These projects are implemented in communities where WVI has already run projects for many years with local partners such as women’s savings groups etc. to help them become strong enablers of change.

Interventions used include training on the management of natural resources and non-farm production, value chain development and environment-friendly production systems. By adding the child protection element, increasing environmental education, and helping villagers to adapt to sustainable livelihoods, WVI is encouraging villages to become eco-friendly while also addressing other issues such as child marriage. This project is at the early phase, but it is being closely monitored as it is one way of addressing not only livelihoods and sustainability, but also child marriage.

A multi-sectoral and community-based approach is used by mainstreaming gender and child protection activities through community-based interventions such as women’s savings groups and local disaster risk management committees. These groups became enablers and agents of social transformation.

**Looking to the future, how can we systemically showcase the correlations?**

WVI questioned how they could convince people not only of the link between climate change and child marriage but also vice versa. The discourses on climate change and child marriage have to be integrated as they often function in parallel, even within WVI’s own projects where a community can be implementing two similar projects using different objectives. As a result, a key aspect is intentionality in efforts for reversing climate change and understanding the linkages between climate change and child marriage and developing programmatic synergies in order to reduce vulnerabilities and their impact on girls and their families.

The few examples above clearly illustrated not only how actions to reverse climate change can affect child marriage by addressing the risks related to livelihoods, but also how empowered women and especially young children can make better choices for their future if their education is not interrupted, and they gain good environmental knowledge and skills.
Therefore, placing women and girls at the centre of climate change adaptation interventions is critical. Ending child marriage takes time; at the same time climate change has to be addressed. As a result, the development of a long-term road map is necessary, while also identifying some short-term wins. One example is the power of education: its value is twofold, both in terms of delaying child marriage, but also because it can instil environmental consciousness in future generations. Evidently, integrating environmental education into the education curriculum and ensuring girls are finishing primary and secondary education can have a double positive effect. The challenge is how to bring such policies into national action plans and into the design of all the implemented programs, in order to address climate change and child marriage and other issues at the same time.

The complexity of climate change and child marriage requires a multi-sectoral approach and a response in line with the different contexts e.g., a different approach is required in order to respond to drought or to flooding, as climate change affects different communities in different ways. However, what is for certain is that the impact on girls is always the same: child marriage. Therefore, if some common indicators are developed in order to facilitate the collection of data on the impact of climate change and to enable the development of programmatic synergies focusing on climate change adaptation action and ending child marriage, a much larger impact will be achieved.

Currently WVI is trying to integrate child marriage indicators with their climate change adaptation programs to move beyond circumstantial evidence and establish the link that would allow them to intentionally introduce this as a core part of their programs from the beginning. Tamara Tutnjevic welcomed the expert meeting and looked forward to greater collaboration across agencies that are working on these issues in order to bring their experiences and knowledge together and collect reliable data. This would enable them to practically test what works and whether a synergy between the two approaches is feasible. By putting that data and evidence together, an agenda for future change can be created.

**Key takeaways from Ms Tamara Tutnjevic’s presentation**

- *Intentionality is the key to bringing climate change and child marriage policy areas together.*
- *Women and children must be placed at the centre of climate change policies.*
- *A long-term road map is needed together with short term quick wins.*
- *The complexity of such programs requires a multi-sectoral approach, involving the use of common impact indicators, and stronger collaboration and data sharing across agencies to build evidence.*

**Useful resources:**

- World Vision (2020) *Ending violence against children while addressing the global climate crisis | ODI: Think change*
Michael Platzer warmly thanked the audience and speakers for their insightful contributions on this important topic. Mohinder Watson echoed those thanks and said it had been an honour to meet and bring together this amazing group of experts and thanked all the distinguished speakers, panelists, moderators, international audience and the behind-the-scenes support team. A special thanks was extended to Professor Margaret Alston for all her support and encouragement to organize this expert group and the Chair of the Committee on the Rights of the Child for her shared interest in the meeting and giving the guest opening speech.

Significance of the Expert Group Meeting

This landmark expert group meeting brought together global evidence to firmly establish the connection between climate change and child marriage, marking a strategic milestone in advancing the research, advocacy and policy agenda on the need for, and the benefits of, integrating climate change mitigation and adaptation policies with child protection measures, including protecting girls from child marriage and all forms of violence.

The commitment and support shown by Mikiko Otani, Chair of the Committee on the Rights of the Child (CRC) to engage fully in the meeting which aimed to unpack the nexus between child marriage and climate change showed the importance of the event. It is hoped that the meeting’s outcomes may provide useful insights for the CRC’s draft general comment No. 26 on children’s rights and the environment with a special focus on climate change.

Such normative frameworks are vital for protecting the rights and lives of children who are among the most vulnerable groups in society, especially girls who are at risk of exposure to increased threats during disasters, such as gender-based violence, including child marriage.

Since 2015, States have committed to meet the targets in the SDG 2030 Agenda including SDG Goal 13 on climate change and its impacts and SDG Goal 5 on gender equality, including target 5.3 on ending child marriage by 2030, and SDG target 16.2 to end abuse, exploitation, trafficking and all forms of violence against and torture of children.

The SDG 2030 Agenda recognises the importance of the interlinkages between the 17 SDGs since all development and social problems are cross-cutting issues, and the SDGs were not intended to be addressed in silos as stand-alone goals. An additional benefit of establishing interlinkages between different SDG goals and policy areas is the increased opportunity to achieve synergies by integrating programming, for example on climate change adaptation and mitigation and child protection including child marriage and violence against children.
Insights into the evidence for the linkages between climate change and child marriage

The impacts of climate change on child marriage are highly context specific as emphasised by different speakers. Evidence documented by an investigative team of journalists from the ‘Brides of the Sun’ project clearly shows that climate change-related child marriage is already occurring in Malawi and Mozambique and is not a negative outcome that may happen at some future point. Moreover, World Vision International established a clear connection between climate change and child marriage through a review of their projects in 24 countries. Moving to the details of the mechanisms involved in child marriage, Dr Pasten unveiled the connection between climate change vulnerability and child marriage, by demonstrating how climate change acts by negatively impacting household income leading to extreme poverty which heightens pre-existing gender discrimination. These two factors drive child marriage in girls under age 15 and 18.

Similarly, Dr Corno and Dr Voena showed that climate change related economic shocks were crucial in shaping marriage decisions in developing countries as they affected the distribution of household income, pushing families into absolute poverty. Drought in Sub Saharan Africa led to an increase in child marriage in economies where bride price was the dominant form of payment at marriage. Girls who experienced a drought between the ages of 12-17 were 3% more likely to marry in the same year compared to girls who had not experienced drought. This was attributed to bride price being the dominant form of payment at marriage in which cash or in-kind payments are made by the groom and his family to the bride’s family. In times of hardship, this bride price income can help the family cope with the economic shock from drought. In contrast in India, girls who experience a drought between the ages of 12-17 were 4% less likely to marry in the same year, as their parents were unable to afford the dowry payment made to the groom and his family upon marriage. Thus, payments at marriage can be important drivers of child marriage, but the relationship is complex and interacts with culture and social norms.

Some of this complexity was highlighted by Dr Rezwana whose research in Bangladesh showed how dowry payment systems could change during disasters in a way which increased child marriage. For example, the groom’s family may agree to waiver the dowry payment from the bride’s family which could be a powerful incentive for parents to accept a marriage proposal for their young daughter as this removed the burden of providing a dowry. Other studies by Dr Rezwana in Bangladesh showed how the insecurity arising during and after disasters contributed to gender-based violence (GBV) – especially child marriage, as families feared their girls maybe kidnapped or abused which would damage family honour and reduce the marriage prospects of girls. Parents considered marrying their daughters off was one of their main responsibilities, but climate change could directly affect the age at which girls are married.

In Indonesia Dr Dartanto and Andriani Nur Pratiwi showed a positive correlation between the damage cost from climate change and the likelihood of child marriage. They highlighted that it was an indirect effect of climate change which affected household income. An increase of 1 million Indonesian rupiah (or 75 USD) in damage costs increased the probability of child marriage by 4.4%. The size of the household also showed a positive correlation between climate change with child marriage; the larger the family size, the greater the risk of child marriage.
Qualitative research conducted in Bangladesh by Human Rights Watch showed families regularly faced cyclones, floods and river erosion, all of which reduced household income and influenced the family’s decisions about the marriage of girls. River erosion had the greatest impact on child marriage since the family knew their house would be swept away by the river, leaving them homeless and displaced. This consideration forced parents to marry girls early as a coping mechanism to reduce family size and to ensure that their daughter(s) would be safe and have better access to food and other resources.

Dr Nyasimi showed that in Kenya the negative impacts of climate change on its agricultural economy as well as on its livestock and the environment forced some families, particularly in pastoralist communities, to use child marriage as a coping mechanism to generate bride price income. An unrelated driver of child marriage in Kenya is the high regard placed on the institution of marriage, since girls themselves aspire to get married as soon as possible believing this to be the only way of acquiring a social status and respect.

Gender discrimination where males are more highly valued in society as financial providers and decision makers, means girls are often the first to be taken out of education during disasters and the first to be married off. The lower value accorded to women and girls in society is echoed in several presentations. Thus, the drivers of child marriage in the context of climate change are a complex mix of damage loss, extreme poverty, risk of homelessness and displacement, gender discrimination, social norms, dowry and bride price related considerations, disruption to, and costs of education, GBV and the related insecurity. Other related factors are the high regard for the institution of marriage in some areas, as well as the pressure on parents to keep daughters safe and arrange their marriages.

**Action points from the Expert Group Meeting:**
Child marriage is a complex multi-dimensional issue requiring different context-specific policy tools and actions (some of which are also used to address child marriage in other contexts) and includes measures to:

- Address the intersection between climate change, natural disasters and gender-based violence, and integrate child marriage mitigation strategies in States’ long-term planning as well as in the projects and interventions by international organisations and donor agencies.
- Integrate child protection systems into climate change policies by offering child protection training to all stakeholders and educating communities about children’s rights.
- Build national capacities to deal with climate change through the creation of climate resilient communities and systems which place children’s and women’s rights and health and well-being at the centre of climate action.
- Adopt a multi-sectoral approach to address violence against children, including child marriage, which engages non-governmental organisations, the police, government representatives, village chiefs and communities, including males as the key family decision-makers to protect children and change societal norms and behaviours.
• Implement and enforce minimum legal age bans for child marriage, supported by robust birth and marriage registration systems.
• Address poverty through conditional/unconditional cash transfer schemes, strengthen and scale up social protection systems and encourage women to enter the labour market.
• Work with communities to change social norms to prevent child marriage and address gender equality through focusing on women’s and girls’ agency, empowerment and education and increasing their leadership roles in climate change mitigation and adaptation.
• Broaden the school curriculum to include education on children’s and human rights, climate and the environment, sexual and reproductive health and basic survival skills like swimming.
• Ensure the continuity of girls education during disasters, minimise school dropouts, offer alternative teaching modes and catch-up classes where necessary.
• Ensure the safety and protection of girls from sexual violence during disasters to both protect girls and allay their parent’s fears of sexual abuse which can drive child marriage.
• Implement robust climate adaptation and mitigation strategies such as early warning systems which can not only help reduce the damage costs of climate change but also serve as a protective factor against child marriage.
• Draw on all relevant normative frameworks including the SDGs and the CEDAW Committee’s general recommendations no.35 on GBV (2017) and no.37 on the gender-related dimensions of disaster risk reduction in the context of climate change (2018), which highlight factors that affect and exacerbate GBV, including child marriage.
• Conduct more research, collect disaggregated data, foster collaboration, develop and use common impact indicators to share and build evidence across agencies.
• Intentionally bring together climate change and child protection policies and programming.
Why urgent action is needed to prevent climate change-related child marriage

For too long climate change discourse has focused on its scientific and technological aspects, yet the toll on the health, well-being and lives of vulnerable women and girls has received little attention, hence it is imperative that the gendered dimensions of climate change, such as child marriage and violence against children and women are recognised and addressed in all climate action. Advancing this agenda will require adopting a gender-responsive, health for all, children’s and human rights-based approach to address the root causes of inequality and discrimination, as well as dismantling negative social norms and ensuring that women and girls are at the centre of all climate action.

The increases seen in child marriage due to climate change are not creating new dynamics, but rather are exacerbating existing negative coping mechanisms within vulnerable communities as demonstrated through presentations made at this expert meeting and documentary evidence showing that girls today have already been forced into child marriages due to climate change.

This report aims to raise awareness of these findings and encourage their incorporation into national policies and action plans. A critical factor moving forward is intentionality - to consciously bring together climate change and child marriage programming even though these two global policy areas may seem unconnected at first sight.

Although more research is needed, ample evidence of the interlinkages between climate change and child marriage and other forms of violence against children and women already exists to warrant urgent action. The time to act is now as the cost of inaction will be a generation of girls forced into child marriages, many of which could have been prevented.
ANNEX 1: SPEAKERS BIOS

Dr Mohinder Watson, Founder of NGO Action on Child, Early and Forced Marriage, Main Representative for the International Council of Women at the UN in Geneva and Expert Group Meeting Convenor

Dr. Watson is an independent research consultant and has conducted extensive research on child marriage, child widows, girls’ education in Afghanistan and on the impact of COVID 19 on vulnerable women and girls.

She is an invited speaker at international meetings including at the UN in Geneva and New York and the European Parliament in Brussels. She was invited by the Swiss Government to speak on child marriage alongside Dubravka Šimonovic, the then UN Special Rapporteur on Violence against Women to commemorate the 10th Anniversary of the United Nations Human Rights Council.

Ms. Mikiko Otani, Chair of the United Nations Committee on the Rights of the Child

Ms. Mikiko is Chair of the United Nations Committee on the Rights of the Child (2021-2023) and an international human rights lawyer based in Tokyo where she practices family law with a focus on women’s and children’s rights including human rights education, early childhood development, child participation, girl child, child marriage, human trafficking, migrant children and access to justice.

She is currently a Council Member of the International Bar Association’s Human Rights Institute, a Commissioner and a Member of the Executive Committee of the International Commission of Jurists. Ms Otani is the country representative of Japan for the Family Law and Family Rights Section of LAWASIA (The Law Association for Asia and the Pacific).

Dr. Margaret Alston, Professor of Social Work at Newcastle University and Emeritus Professor at Monash University

Margaret Alston is a Professor of Social Work at Newcastle University and Emeritus Professor at Monash University. Previously she was Professor of Social Work and Head of the Department at Monash University, Melbourne, Australia and prior to that was Professor of Social Work at Charles Sturt University. In 2010 she was awarded a Medal of the Order of Australia and in 2021 she was made a Member of the Order of Australia (AM) for her services to social work and to women. Professor Alston has undertaken a number of research projects across the Asia-Pacific region and within Australia on gender, climate change, and the impacts of environmental disasters on people and communities. She has published widely on gender equality issues, rural social issues, social work and environmental disasters including several books.
ANNEX 1: SPEAKERS BIOS

Dr. Roberto Pastén, Associate Professor and Director of the Economics Institute of the Austral University of Chile

Dr. Pastén has been working as Associate Professor and Director of the Economics Institute of the Austral University of Chile since 2018. He has previously worked as Economics Advisor with the Environmental Court at the province of Antofagasta, Chile. He has conducted research on environmental sustainability of economic development and optimization of use and disposition of natural resources for social welfare.

Previously he had also held the positions of Associate Professor with the University of Talca in Chile, visiting Professor with the FEN University of Chile and the University of Gröningen, The Netherlands. Dr. Pastén has also been an environmental consultant for the World Bank, UNDP and the Ministry of the Environment and has published on environmental issues in scientific journals.

Dr. Teguh Dartanto, Dean, Faculty of Economics and Business, Universitas Indonesia

Dr. Dartanto is a Dean, Faculty of Economics and Business, Universitas Indonesia and Head of Cluster Research on Poverty, Social Protection and Development Economics in the same department.

He was formerly Vice Dean and a Head of the Department of Economics at Universitas Indonesia. His expertise lies in poverty analysis, social protection, development economics, and health economics. Dr. Dartanto has an extensive publication record and is also appointed as Indonesia’s Representative at the Governing Board of Economic Research Institute for ASEAN and East Asia (ERIA).

Ms. Heather Barr, associate director of the Women’s Rights Division at Human Rights Watch

Ms. Barr is associate director of the Women’s Rights Division at Human Rights Watch. She has researched human rights in countries including Afghanistan, Bangladesh, Myanmar, Nepal, Pakistan, Papua New Guinea, South Korea and the US on issues including child marriage, girls’ education, women’s access to health care, domestic violence, online gender-based violence, so-called "moral crimes", "honor violence" and "virginity exams", the rights of refugees and prisoners, torture, civilian casualties, freedom of expression and association, and human trafficking.

She was the interim/acting co-director of the Women’s Rights Division from 2018-2021. She joined Human Rights Watch in 2011 in Kabul, Afghanistan, as the Afghanistan researcher, after working for the United Nations on human rights and legal reform in Afghanistan, Bangladesh, Burundi and Jordan.
ANNEX 1: SPEAKERS BIOS

Dr. Lucia Corno, associate professor in the Department of Economics and Finance at Cattolica University

Dr. Corno is associate professor in the Department of Economics and Finance at Cattolica University and Executive Director of the Laboratory for Effective Antipoverty Policies (LEAP) at Bocconi University. Before joining Cattolica, she held academic positions at University College London and Queen Mary University. She is a fellow of the Centre for Economic Policy Research (CEPR) and full member of the EUDN (European Development Research Network).

In 2019 Professor Corno received the prestigious ERC Starting Grant to study the reasons behind the persistence of harmful traditions (i.e., female genital cutting and child marriage). She constantly collaborates with international organizations and governments in developing countries to implement and evaluate the effectiveness of anti-poverty policies.

Dr. Alessandra Voena is a Professor of Economics, Department of Economics, Stanford University, USA

Alessandra Voena is a Professor of Economics, Department of Economics, Stanford University, USA and the Laboratory for Effective Antipoverty Policies (LEAP) at Bocconi University, where she teaches and conducts research on labor economics and on gender.

She holds a Ph.D. and an M.A. in Economics from Stanford University. Alessandra’s research examines family and gender relations around the world, and particularly in Sub-Saharan Africa and India.

Dr. Nahid Rezwana, Associate Professor, Department of Geography and Environment, University of Dhaka

Dr. Rezwana has been an Associate Professor, Department of Geography and Environment, University of Dhaka since 2005. Her fields of interest are hazards and disaster management, gender, health and climate change.

Dr. Rezwana has conducted research in these fields and has an extensive publication record, including a book on 'Disasters, Gender and Access to Healthcare: Women in Coastal Bangladesh' in 2018. She is also the co-author of the book 'Social Formation in Dhaka 1985-2005', published in 2010.
ANNEX 1: SPEAKERS BIOS

Ms. Nankali Maksud, Senior Advisor for UNICEF Headquarters, Programme Division

Nankali Maksud comes from Tanzania and works as Senior Advisor for UNICEF Headquarters, Programme Division focusing on the prevention of harmful practices (female genital mutilation and child marriage). She has over 19 years of experience in managing child protection programmes in Eastern and Southern Africa with UNICEF.

As a child rights advocate, she has been involved in advocacy that led to improved protection of children affected by HIV and AIDS and other vulnerable children. Nankali has played a leading role in coordinating UNICEF’s engagement with governments and other partners in the development of programmes for the protection and care of vulnerable children in countries in Eastern and Southern Africa.

Dr. Mary Nyasimi Executive Director of the Inclusive Climate Change Adaptation for a Sustainable Africa

Dr. Nyasimi works as an Executive Director of the Inclusive Climate Change Adaptation for a Sustainable Africa, headquartered in Nairobi, Kenya. Dr. Nyasimi is committed towards building resilience amongst communities through a gender and socially inclusive and transformative approach in various economic sectors including agriculture, energy, water and infrastructure.

Prior to joining ICCASA, Dr. Nyasimi worked with the CGIAR Research program on Climate Change, Agriculture and Food Security (CCAFS) as a Gender and Social Inclusion Science officer, where she was able to create opportunities for women, young people and marginalized groups and to promote equitable access to resources, information and power in the agri-food system in order to close the gender gap by 2030 and contribute towards Sustainable Development Goals and the commitments made in the Paris Agreement.

Mr. Saul Butters Assistant Country Director – Programmes with CARE Mozambique

Mr Butters has worked for the past 5 years as Assistant Country Director – Programmes with CARE Mozambique. He has previously worked as Programmes director at Concern Worldwide in Mozambique and Programme Manager at the Norwegian Refugee Council, in Goma, Democratic Republic of Congo (DRC).

He has also worked at Concern Worldwide, Area Manager/Emergency Programme Manager in North Kivu DRC, and Programme Officer, at Masisi, DRC. He specializes in NGO programme management in conflict and post-conflict contexts.
ANNEX 1: SPEAKERS BIOS

Ms. Martina Hibell, Secretary General for Barnfonden (ChildFund Sweden)

Ms. Hibell is Secretary General for Barnfonden (ChildFund Sweden), a child rights organisation based in Malmö, Sweden. Over the past few years, Barnfonden has been developing models that address how to improve climate change thinking and planning across the many thematic dimensions influencing a child’s life and the various layers of the socio-ecosystem model. Ms Hibell has a strong programme background built on project management experience working in 10 countries, and has spent time in Latin America.

Ms. Caroline Ouaffo Wafang, Advisor on Gender and Women’s Rights with the OHCHR

Caroline Ouaffo Wafang, is since 2016 the Advisor on Gender and Women’s Rights with the OHCHR, Geneva Switzerland. Prior to that, between 2014 and 2016 she was Regional Gender Adviser at the United Nations Human Rights Office for West Africa.

Ms. Laila Khondkar, Independent Expert on Child Protection

Ms. Khondkar is an independent expert working in international development for almost two decades. As a development practitioner and researcher, she has worked on Child Protection, Child Rights Governance, Reproductive Health, HIV/AIDS etc. Laila has worked with Save the Children in various technical, management and leadership roles in Bangladesh, Papua New Guinea, Liberia, Australia, and England.

She has provided consultancy support to international organizations. She has conducted public health research at the Centre for International Development (Harvard University), Africa Centre for Health and Population Studies (South Africa), and Institute of Population and Social Research (Mahidol University, Thailand).

Ms. Tamara Tutnjevic, Senior Policy Adviser for Ending Violence against Children for World Vision International

Ms. Tutnjevic is a Senior Policy Adviser for the campaign ‘It takes a world to end violence against children’ for World Vision International. She has over twenty years of experience in child care and protection system reform as well as in policy and programme development to address violence against children. Prior to joining World Vision, Tamara worked with a number of international organizations on strengthening policies for the realization of women and children’s rights, including Oxfam, UNICEF, ILO and the World Bank.
ANNEX 2: CONCEPT NOTE FOR THE EXPERT GROUP MEETING

Prepared by Mohinder Watson, PhD, MPH, Founder Action on Child, Early and Forced Marriage and Main Geneva UN NGO Representative International Council of Women

Climate change is one of the biggest global threats facing humanity. A warming planet is already adversely affecting human beings and the environment and resulting in the loss of lives, livelihoods, ecosystems, and biodiversity.

The 2021 Intergovernmental Panel on Climate Change (IPCC) report[1] states that human-induced climate change is already affecting many weather patterns and climate extremes in all parts of the world. These include increases in the frequency and intensity of hot and cold extremes, marine heatwaves, heavy precipitation, droughts, changes in rainfall patterns, tropical cyclones and reductions in Arctic Sea ice, snow cover, and permafrost.

The UN acknowledges that climate change has been driven largely by industrialized countries, yet some of the countries most adversely affected are those that have contributed the least to it.[2] This is supported by the Global Climate Risk Index 2021[3] which ranks the extent to which countries have been affected by climate-related extreme weather events. It shows that eight out of the ten countries most severely affected by extreme weather events were low or lower-middle income countries.

Although climate change impacts everyone, men and women are affected differently.[4] Women, men, girls, and boys have different experiences of climate change due to the inequalities associated with socially constructed gender roles. These existing inequalities are further deepened by climate change. In developing countries, women and girls are more dependent on natural resources as they are usually responsible for crop production and for providing food and water for the household.[5] In Sub-Saharan Africa, women account for 48.7 percent of agricultural labour but only 15 percent of agricultural land holders.[6]

When already struggling families face additional climate-related economic shocks, this affects family dynamics and especially harms adolescent girls. While child marriage is the result of a combination of many interconnected factors, additional financial hardship can compound existing vulnerabilities to drive child marriage as a coping strategy in efforts to smooth household income.[7] Flash floods and cyclones in Bangladesh have been linked to increases in gender-based violence, sexual violence, and early marriage.[8]

Of the countries ranked in the top ten most at risk of climate change in the Climate Risk Index 2021, eight of them have high rates of child marriage, ranging from 20 percent to 76 percent.

ANNEX 2: CONCEPT NOTE FOR THE EXPERT GROUP MEETING


<table>
<thead>
<tr>
<th>Ranking in Climate Risk Index 2019</th>
<th>Countries ranked most at risk of climate change</th>
<th>Percentage girls married/in union before age 18 (UNICEF country reports)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mozambique</td>
<td>53%</td>
</tr>
<tr>
<td>2</td>
<td>Zimbabwe</td>
<td>34%</td>
</tr>
<tr>
<td>3</td>
<td>Bahamas</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Japan</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Malawi</td>
<td>42%</td>
</tr>
<tr>
<td>6</td>
<td>Islamic Republic of Afghanistan</td>
<td>28%</td>
</tr>
<tr>
<td>7</td>
<td>India</td>
<td>27%</td>
</tr>
<tr>
<td>8</td>
<td>South Sudan</td>
<td>52%</td>
</tr>
<tr>
<td>9</td>
<td>Niger</td>
<td>76%</td>
</tr>
<tr>
<td>10</td>
<td>Bolivia</td>
<td>20%</td>
</tr>
</tbody>
</table>

Any increase in child marriage has important implications as child marriage is a violation of children’s human rights and a barrier to achieving gender equality. Target 5.3 of the UN’s Sustainable Development Goal 5 on gender equality aims to “eliminate all harmful practices, such as child, early and forced marriage and Female Genital Mutilation (FGM) by 2030.”

Every year, 12 million girls are married as children.[3] This figure is predicted to increase by 10 million over the next decade due to the COVID-19 pandemic.[4] Child marriage has many negative consequences for girls as they often drop out of secondary school, experience early pregnancy and child birth, have more birth complications and an increased risk of domestic violence.[5]

As the negative impact of climate change is expected to increase in the future, it is vital that adolescent girls are protected from the risk of child marriage. Girls must have access to quality education as this can enable them to gain paid work, support their own children’s education, build more resilient families, and reduce their vulnerability to climate-related economic shocks.

Currently, climate change adaptation policies and child marriage prevention policies are largely seen as two unrelated policy areas, yet there is already compelling evidence of the connection between them. This must be better understood to enable these policies to be integrated to prevent child marriage from being used as a coping strategy in response to climate change. As children have rights as well as needs, climate change adaptation policies offer policymakers the opportunity to protect adolescent girls’ rights, health, and lives and advance gender equality.

ANNEX 2: CONCEPT NOTE FOR THE EXPERT GROUP MEETING

Objectives of the Virtual Expert Group Meeting:
This meeting will convene experts from academia, UN agencies, civil society, development agencies, and other key stakeholders to share emerging evidence from different countries and settings for the linkages between climate change and increased rates of child marriage.

The Panelists will:
1. Provide insights into the gendered impact of climate change including child marriage;
2. Discuss the emerging evidence supporting the links between climate change and child marriage based on quantitative and qualitative methods;
3. Share examples of best practices of climate change adaptation policies which can help improve livelihoods and avert the use of child marriage as a coping strategy in the context of climate change;
4. Provide different perspectives on how policies to address climate change and child marriage prevention can be integrated as part of larger efforts to mainstream gender in climate change policies and research;
5. Identify and discuss areas for further research and recommend future actions to advance the meeting’s outcomes.

There will be two panels each with 6 speakers; the first will focus on the evidence base for the links between climate change and child marriage and the second will focus on best practices in climate change adaptation strategies and consider how climate change and child marriage policies can be synchronized at the local, regional and national level.

This report has been compiled by Action on Child, Early and Forced Marriage, the Convenor of this Expert Group Meeting, held on 10th March 2022.

We wish to thank our partners and supporters of the event.