Unsafe homes, at-risk children

violence in climate disasters

March 17, 2025

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Written in fulfillment of the requirements for the degree of Master in Public Administration in International Development, John F. Kennedy School of Government, Harvard University.

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Acknowledgements

Eleanor and Valeria would like to express their deep gratitude to all those who supported and guided them through this thesis. They are especially grateful to Yeva Avakyan at Save the Children US for giving them the opportunity to work on such a crucial issue, that connects two major global challenges: gender-based violence and climate change. They also sincerely appreciate Yeva and Begoña Fernandez for their valuable guidance in understanding how these crises impact lives of women and children worldwide.

This thesis would not have been possible without the guidance of their advisors – Professor Hannah Riley Bowles, for gently nudging them to make their recommendations simple and actionable, and Professor Iris Bohnet, for strengthening their quantitative analysis with a child-focused lens. They are grateful to their Section Advisor, Professor Rema Hanna, whose thoughtful feedback helped them structure their analysis into a clear and coherent story. They also extend their appreciation to Professors Eliana La Ferrara and Wolfram Schlenker, whose insights helped refine their approach to analyzing the link between gender-based violence and climate shocks.

They are deeply grateful to the Women and Public Policy Program for supporting their fieldwork in Peru. A special thank you goes to all the interviewees from Save the Children, Peru's government ministries and women's and girl's rights organizations, who generously shared their time and expertise, providing invaluable perspectives that shaped this research. A heartfelt thanks goes to the MPA/ ID Program team – Carol Finney, Sarah Olia and Erin Meade, as well as Lisa Munroe Korte, for solving every administrative challenge along the way and keeping them on track with their deliverables so they could focus on their policy problem.

Eleanor and Valeria are grateful to each other for their partnership in this work, their friendship and support to one another through this journey. They would like to express their gratitude to their families for their unwavering support. Eleanor is especially thankful to her close friends, and Valeria to her partner, for motivating them through difficult days. A special thank you goes to Valeria's family, who welcomed Eleanor into their home in Peru and treated her as one of their own. Finally, they would like to thank everyone who supported them along the way, whether through guidance, encouragement or a kind word – whose contributions helped make this work possible.

Executive Summary

Peru faces a dual crisis of vulnerability to climate disasters and high rates of intimate partner violence (IPV), both of which have direct and indirect effects on child wellbeing and development. This makes Peru a critical case study for Save the Children US to explore the intersection of extreme weather events and gender-based violence and interventions to mitigate the risk to children. Peru is one of the most affected countries by El Niño and recent episodes have occurred more abruptly and with greater intensity. More than 4 in 10 women in Peru report experiencing violence each year, with evidence suggesting extreme weather events increase risk factors for IPV. Further, violence in households not only harm women but also children, being associated with increased risks of child malnutrition.

The drivers for increased risk of gender-based violence in climate disasters can be understood at three levels – household factors pertaining to the individuals and their relationship, community factors relating to the social structures within which violence occurs, and societal factors pertaining to existing norms that promote violence against women and girls.

This study finds that in the aftermath of extreme rainfall linked to the 2017 El Niño Costero, IPV rates stagnated in affected regions, diverging from the national trend of decline in IPV. Women in these regions were 3.4 percentage points more likely to have experienced IPV in the last 12 months as compared to unaffected regions, with alcohol-related aggression emerging as a key mechanism.

Recognizing that children in violent households face both immediate and long-term harm, this study recommends two phases of interventions for Save the Children. In the first phase, Save the Children can bundle GBV response information with emergency menstrual kits during emergency response and can provide psychological support to children of GBV survivors by partnering with government provided GBV support services. In the second phase, they can advocate for sustained national and local funding for GBV services in disaster response. They can also expand their programming to include gender norms messaging, such as involved parenting approaches in community theaters and highlighting community male role-models in child friendly spaces and education programming.

Motivation and Background

Children are among the most vulnerable to the impacts of climate change, suffering detrimental impacts on their physical and mental health, and disruption to their education and development. Children are also extremely vulnerable to experiencing violence, both directly and through witnessing gender-based violence within their homes. Despite the many risks children face, their specific protection needs are often overlooked in disaster response and recovery efforts. Commissioned by Save the Children US (see Box 1), this policy paper aims to understand the risk of gender-based violence within households in the context of extreme weather events and develop practical recommendations for Save the Children US to keep children safe as climate change intensifies.

Box 1: Client background

Save the Children was founded in 1919 by Eglantyne Jebb with the mission to improve the lives of children by ensuring they have access to education, health care and protection. Today the iNGO works in 115 countries, directly and via partners, in education, health and nutrition, child protection, humanitarian response and advocacy for children. In 2023, Save the Children supported 105.9 million children globally and responded to 121 emergencies in 63 countries.

Save the Children is a strong advocate for children's rights and protecting them from violence. In 2023, they empowered 9,400 child protection workers to prevent and respond to violence and their advocacy efforts held 25 governments and institutions accountable for protecting children. Save the Children is also a Green Climate Fund (GCF) accredited entity and launched a joint initiative with the Global Partnership for Education (GPE) to build climate resilient schools in vulnerable countries in 2023. Other examples of emergency response work in 2023 include responding to emergency floods in Bangladesh and Pakistan and severe droughts in Ethiopia through providing essential health services, cash and voucher assistance, support for survivors of GBV, and ensuring continuation of learning.

Climate change and children

Climate change has exacerbated the frequency and severity of natural disasters in recent years. Between 2000 and 2019, the frequency of floods increased by 134%, storms by 40%, and droughts by 29% as compared to the previous 20-year period. Children experience the physical health impacts of climate change in the short and long term, through injuries, heat-related illnesses, infectious diseases and malnutrition, but also experience mental health impacts in the form of grief, anger, loss of identity and feelings of hopelessness (American Psychological Association & ecoAmerica, 2017).

Gender-based violence and climate change

One in three women are subjected to physical or sexual violence in their lifetimes and this violence is experienced early – one in four women aged 15-24 years will have already experienced intimate partner violence by their mid-twenties (*Violence Against Women Prevalence Estimates 2018*, 2021). Climate change can heighten existing gender inequalities by constraining women's access to food, essential services and opportunities, and increase discrimination against women and girls in affected communities (Yadav & Lal, 2018). This undermines their ability to adapt to or recover from climate-induced emergencies and may increase the risk of gender-based violence (GBV), including intimate partner violence (IPV) and child, early, forced marriage and unions (CEFMU).

There have been several reported instances of natural disasters heightening risk factors that increase men's perpetration of violence towards women and girls. Post Hurricane Katrina, new cases of GBV increased fourfold from 4.6 to 16.3 per 100,000 women per day in Mississippi, primarily driven by increase in violence by intimate partners (Anastario et al., 2009). This effect has also been observed in slow onset events, such as heat waves. A study in India, Pakistan and Nepal found a 4.5 percent increase in IPV prevalence for a one degree Celsius increase in annual mean temperature, linked to heat-aggression but also indirect pathways such as mental health impacts and economic stress (Zhu et al., 2023). In fact, a recent global study evaluating the impacts of environmental shocks on intimate partner violence using nationally representative surveys from 1993 to 2019 across 156 countries (Mannell et al., 2024) found a significant relationship between

storms, landslides and floods, and Intimate Partner Violence, with climate shocks having a similar magnitude of effect on IPV as GDP, indicating that the association between climate shocks and IPV prevalence may be similar to the economic drivers of violence.

Risk to children from Gender-based violence in climate emergencies

When women experience GBV in the context of extreme weather events, children are likely to be adversely affected too. A study conducted in Haiti post Hurricane Matthew found that children experienced heightened depression and adverse events such as witnessing interpersonal violence and experiencing neglect and abuse (Dass-Brailsford et al., 2022). Children are also especially vulnerable to violence in the context of extreme weather events, through child marriage, sexual exploitation and female genital cutting (FGC). For example, a study in rural Bangladesh found high instances of abuse of children by parents during floods (Biswas et al., 2010). Other studies have found high prevalence of FGC and child marriage in drought-affected areas, as parents marry off their daughters to sustain the household (Mburu et al., 2024).

Further, there is strong evidence of GBV leading to intergenerational transmission of violence. Women experiencing violence are more likely to use violence to discipline their children. There is also evidence linking women experiencing intimate partner violence to higher likelihood of poorer health outcomes for their children, such as suffering from diarrhea and anemia (Morrison & Orlando, n.d.). Children exposed to violence are more likely to engage in violent behavior as adults, become juvenile delinquents and suffer from depression (Dodge et al., 1990; Straus & Donnelly, 2017).

Relevance to Save the Children's mission

Given that natural disasters exacerbate GBV risk and both of these disproportionately impact children and reinforce gender inequality, studying this intersection is of crucial importance to Save the Children. Being a global leader in child rights and climate adaptation, and a voice for creating a gender-equal future for children, Save the Children has a key role to play in raising awareness of the link between GBV and climate change, influencing policy, and directing resources to better protect children and their caregivers from GBV in the face of climate change.

Context: Why Peru?

Vulnerability to climate crisis

Peru is highly vulnerable to natural disasters, ranking among the most at-risk countries due to frequent earthquakes, floods, landslides, and droughts (World Bank, 2022). Moreover, Peru is one of the most affected countries by El Niño-Southern Oscillation (ENSO), a climate phenomenon that disrupts weather patterns worldwide (Yglesias-González et al., 2023). Although El Niño events can be predicted months in advance, some episodes occur more abruptly and with greater intensity (Peng, Q. et al., 2024)

For instance, the Coastal El Niño 2017 left over 137 fatalities, 112 injuries, 1 million affected individuals, 230,000 damaged houses, and more than 5,000 hectares of deteriorated crops (Alatrista-Salas et al., 2021). In the context of warming climate led by climate change, extreme Coastal El Niño could increase the frequency of events up to 14 events per century (Potsdam-Institut für Klimafolgenforschung & International Organization for Migration, 2021).

Climate change and children in Peru

Extreme weather events in Peru impact children's health, education, nutrition, safety, and mental well-being. Rising temperatures increase risks of respiratory diseases, dehydration, and heat-related illnesses, with reported respiratory infections surging in 2023. Additionally, school disruptions due to climate-related disasters, including floods and disease outbreaks, have affected learning, while food insecurity has worsened, with over 500,000 people newly affected by hunger due to lost crops and livestock. Limited access to outdoor play and safe spaces restricts children's development, while climate anxiety and extreme heat contribute to rising mental health concerns (Save the Children, 2023).

The crisis of GBV in Peru

Peru has the second-highest prevalence of intimate partner violence in Latin America and the Caribbean, with 38% of women experiencing IPV at some point in their lives, only behind Bolivia (42%) (World Bank, 2023)[1]. In response to this crisis, the Peruvian government has introduced policies such as the National Policy for Gender Equity (2019) and Results-Based Budget Program for Reducing Violence Against Women (2019) (Vaccaro & Mayorca, n.d.). While these initiatives have contributed to a decline in IPV rate, progress has stagnated in the last years. As shown in Figure 1, more than 4 in 10 women continue to report experiencing violence. Moreover, demand for protection services remains high, with over 320,000 cases of violence against women and families assisted in 2024, and nearly 50,000 support services already provided in 2025 (Ministry of Women, 2025b).

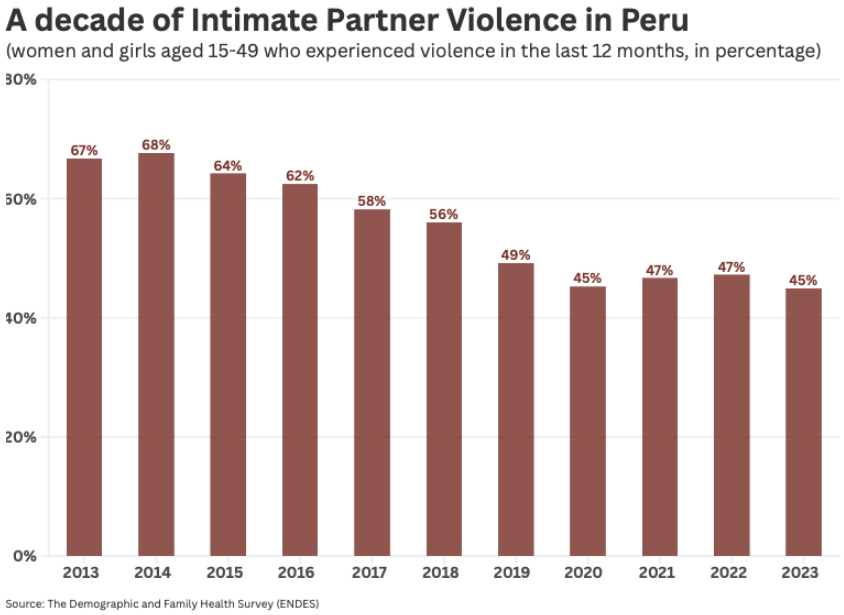

Figure 1: A decade of IPV in Peru (women and girls aged 15-49 who experienced violence in the last 12 months)

Source: Demographic and Family Health Survey (ENDES), 2013-2023.

The effects of GBV does not only impact individual women; it limits women's ability to participate fully in society, disrupts families, and creates barriers to economic growth. Women who experience

[1] These statistics refer to the proportion of ever-partnered women aged 18-49 years experiencing intimate partner physical and/or sexual violence at least once in their lifetime and the last 12 months.

violence face higher rates of depression, social isolation and job insecurity, while pregnancy loss occurs in 26% of affected cases (*Impacto y Consecuencias de La Violencia Contra Las Mujeres*, n.d.). Moreover, there impact extends to future generations, as children of mothers who experience domestic violence are more likely to repeat a school year (Alcázar & Ocampo, 2016). Additionally, violence against women leads to $6.7 billion USD in annual losses, equivalent to 3.7% of Peru's GDP, due to 70 million missed working days each year (Vara Horna, 2013).

The effects of GBV does not only impact individual women; they permeate every level of society, including the highest spheres of government. This widespread presence makes policy change challenging, as the very institutions responsible for addressing GBV are not immune to it.

"Violence is often invisible, perhaps because even the authorities are violent. In one high-level meeting, a female government official spoke about violence in Peru, but the room barely listened. Other leaders talked over her, ignoring her words."

- Former Minister, Peru

Objective

The objectives of this policy analysis are twofold (See Box 2 for definitions and scope):

- Given that children are at increased risk in violent homes, what is the relationship between extreme weather events linked to the climate crisis and GBV within households?
- What mechanisms may be driving this increase and where can Save the Children intervene?

Box 2: Definitions and scope of work

According to the United Nations International Children's Emergency Fund (UNICEF)[2], Gender Based Violence is used to describe any harmful act perpetrated against a person based on socially ascribed/gender differences between males and females. It includes acts of causing physical, sexual or mental harm or suffering, or threats of such acts, and other deprivations of liberty. The

[2] Gender-Based Violence in Emergencies: Operational guide | UNICEF

focus of this research is on violence committed within the private sphere, in families and intimate relationships and includes intimate partner violence (IPV), child, early, forced marriage and unions (CEFMU), femicide, female genital mutilation (FGM) and other forms of GBV. The scope of extreme weather events being evaluated are those known to be exacerbated by the climate crisis – storms, hurricanes, cyclones, floods, droughts, wildfires, heatwaves and the El Niño and La Niña phenomenon.

Empirical Strategy

We have taken three approaches to understand the relationship between extreme weather events and gender-based violence and the mechanisms driving this increase:

1) Literature review: We reviewed existing scientific and grey literature, and studies conducted by global and local organizations in the field of gender-based violence and climate change (see Box 1 in appendix 1 for search keywords used)
2) Quantitative analysis: Given research on the mechanisms driving the increased risk of GBV due to the climate crisis is limited, we look for quantitative evidence of the impact of intensified El Niño events on GBV within households in Peru
3) Qualitative research: Acknowledging that GBV, in particular within domestic settings, tends to be significantly underreported, we supplemented (1) and (2) with 25+ qualitative interviews with former heads of the Ministry of Environment and Ministry of Women and Vulnerable Populations in Peru, Save the Children Global and Regional leadership, Save the Children Peru country leadership and emergency response programming staff, and women's/girls' rights organizations in Peru.

Based on the above, we have developed specific recommendations for Save the Children US, that they can pilot and test in programming in Peru and scale to other program locations in the future.

Literature Review

To understand how risk factors for GBV may be exacerbated in the context of climate change, we took the integrated ecological framework on the causes of gender-based abuse as our base (HEISE, 1998), which suggests that violence against women and girls results from an interaction of factors

at different levels of social environment (see Figure 1 in appendix 1). We evaluated existing literature on extreme weather events and GBV to identify drivers of the increased risk of violence, mapping them across different levels of the socio-ecological framework. The factors linked to climate change that increase GBV risk within households can be understood at three levels (Figure 2):

- *Household factors:* These are factors pertaining to the individual men and women and the relationship context in which violence takes place. These include factors that increase the risk of men perpetrating violence such as the inability of women to access support services (e.g., shelters, crisis hotlines) during climate disasters, men consuming more alcohol and/ or drugs, as well as factors affecting the household such as income stress and food insecurity, higher stress and depression, cramped living conditions, and increased relationship conflict, due to the disaster.
- *Community factors:* These are factors relating to the social structures, both formal and informal, that serve as protection for women from violence or provide support when violence occurs. Community factors include disruption to support services during climate disasters or support services getting overwhelmed due to peaks in GBV cases during emergencies, leaving women and children without protection. They also include informal structures such as women's social networks that may weaken in disasters, and women losing access to income, credit and property due to climate events, which could increase risk of violence.
- *Societal factors:* These are risk factors pertaining to the macrosystem within which violence occurs. These include gender inequitable attitudes, child, early, forced marriage and unions (CEFMU), norms condoning male authority over women and children, expected roles and behaviors for men and women or norms that accept violence towards women and girls as a means of discipline.

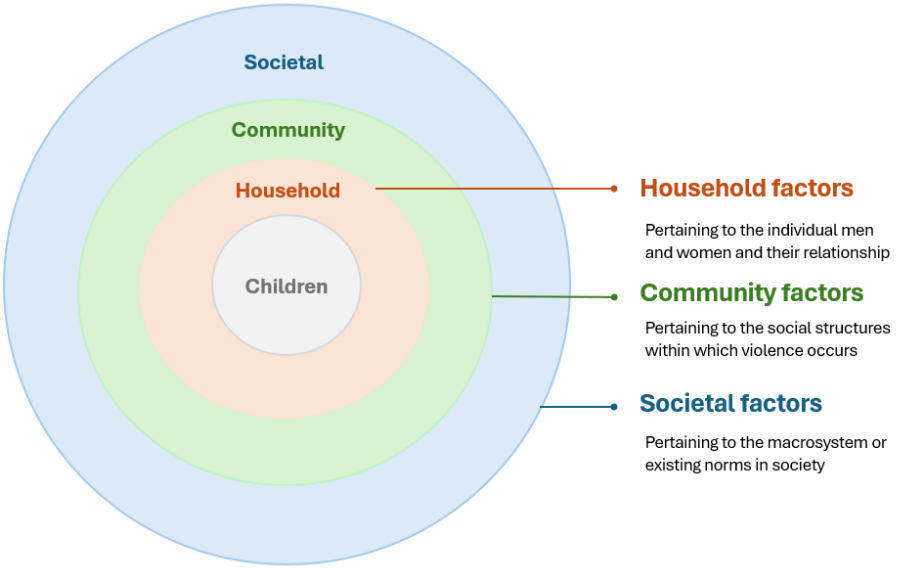

Figure 2: Factors linked to climate change that increase GBV risk within households

Household factors

Inability to access support services

During and in the aftermath of extreme weather events, women may be less able to access support services due to mobility and time constraints, increased caregiving responsibility or simply lack of awareness of what support is available during emergencies. For example, women tend to be more reliant on public transportation than men, and when these services are disrupted due to extreme weather events, they face greater mobility restrictions (World Bank, 2020). Women in Bangladesh's southwestern region, which is prone to flooding, often spend more time in waterlogged premises taking care of family members and livestock (World Health Organization, 2014). Another study in Australia evaluating the impacts of drought found women overloaded with caregiving, work and financial responsibilities as farm incomes declined (Whittenbury, 2013).

Alcohol and drugs

Studies have found that the partner's use of alcohol or drugs greatly increase the risk of violent injury from the intimate partner (Grisso et al., 1999). This risk is multiplied in the context of natural disasters, where alcohol and drugs are used as a coping mechanism. An assessment in Myanmar

after Cyclone Nargis noted a perceived increase in both alcohol consumption and domestic violence after the disaster (Le Masson, 2022). Another study of the 2003 heatwave in Barcelona found higher incidence of alcohol and sedative use disorders, and higher scores on the Severity of Psychiatric Illness Scale (SPI), indicating higher dangerousness to others (Bulbena et al., 2006).

Income stress and food insecurity

Income-related stress contributes to increased risk of violence against women and girls. A representative study of US households found employment instability and perception of financial situation to significantly affect the likelihood of women experiencing IPV (Benson et al., 2003). Income-related stress tends to be exacerbated in times of climate crises, particularly among people in agriculture. A study in Kenya found greater odds of reporting IPV among women whose partners worked in agriculture as compared to women whose partners did not (Allen et al., 2021). Men may also use violence as a means to extract resources from women or their relatives, when their own incomes are reduced due to extreme weather events (Bloch & Rao, 2002).

Further, research in South Africa found that the odds of male perpetration of IPV doubled with food insecurity (Hatcher et al., 2022). Another study in rural Bangladesh found that women tend to eat least and last in times of food insecurity, to ensure enough for her children and to avoid IPV and conflict (Lentz, 2018). Food insecurity and hunger has been reported to increase the number of early and forced marriages in West Africa and Philippines, which in turns increases the risk of IPV (GBV AOR, 2022; Women's Refugee Commission and Plan International, 2022).

"A month after the floods in Piura, a new layer of stress emerged in the communities: economic hardship, job loss, and uncertainty of their circumstances. These pressures escalate the risk of violence of women. When violence occurs during emergencies, a mobile response team is organized to provide immediate assistance. But as the crisis continued, it became clear that this was unsustainable."

- Director of GBV Prevention Program, Ministry of Women in Peru

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Increased stress, depression and anxiety

Both men and women experience high levels of stress during and after extreme weather events, which are known risk factors for violence against women. A study of men arrested for domestic violence found extremely high prevalence of mental health disorders, including posttraumatic stress disorder (PTSD), depression, generalized anxiety disorder (GAD), panic disorder, social phobia, alcohol and drug disorders, and a positive association between mental health disorders and perpetration of violence against intimate partners (Shorey et al., 2012).

Cramped living conditions and forced time with intimate partners

During the COVID-19 pandemic, several countries reported increases in GBV in domestic spaces linked to forced and prolonged time at home with intimate partners, creating frustration and providing more opportunities for abuse (Murray et al., 2023). A similar effect can be expected in the aftermath of climate disasters. A study of the impact of extreme cold shocks on IPV among Peruvian women found higher probability of IPV due to increased time indoors and therefore higher exposure to violent partners (Lakdawala et al., 2024). Another study in post-cyclone Bangladesh highlighted children experiencing molestation and sexual abuse due to cramped living conditions where children were sharing beds with extended relatives (Akhter et al., 2015).

"In a confined space where seven people of different ages and needs are living together, tensions rise, and relationship dynamics become more intense. Signs of violence emerge—not because violence suddenly appears, but because it escalates. In my experience, it has always been present; climate crises only amplify it."

- Women's rights lawyer, local NGO

Increased relationship conflict

When climate shocks occur, communities face stresses of property and communal loss, food and water scarcity, which contribute to increased conflict that can manifest in increased incidences of violent behavior by men towards women in their households (Dankelman, 2016). Extreme weather

events can cause changes to the power relations between spouses and impact the bargaining power women have in their households. A study exploring the relationship between heat waves and IPV found hot weather increases aggression and IPV against women, however an increase in the woman's relative potential wage can protect her from IPV (Henke & Hsu, 2020).

"When the Guna people had to relocate due to rising sea levels, they were uprooted from everything they knew. Imagine moving a fishing community to the mainland. It put a lot of stress on their interactions, and they did not know how to engage in conflict resolution"

- Regional GBV Advisor, iNGO

Community factors

Disruption to support services and inadequate capacity

A study on 30 emergency settings across 22 countries found that GBV coordination mechanisms are not timely, specialist GBV services are limited and affected women are not adequately engaged. This stems from weak commitments by governments, competing priorities during humanitarian response, insufficient and inconsistent funding, and lack of accountability to GBV risk mitigation (Raftery et al., 2022). Post-disasters too, there is often reduced capacity to support women experiencing violence, which can delay provision of timely and quality treatment, resulting in worse health outcomes for women (Thurston et al., 2021).

"We have established connections from our NGO to GBV support services but in some communities, there is limited bandwidth to absorb women experiencing violence during disasters since they already have a full plate."

- Former Country Director of Peru. iNGO

Weakening of social networks and feelings of isolation

Informal networks (friends, families, coworkers) tend to be the first source that women go to for support when they experience IPV (Palermo et al., 2014). Social networks have been found to be protective factor against IPV, decreasing the likelihood of violence as the amount of social support available increases (Baumgartner, 1993). A study of urban women in post-conflict Côte d'Ivoire, found fractured social networks and feelings of isolation from family and friends to be a significant barrier to disclosing or seeking help after experiencing IPV (Cardoso et al., 2016).

"In the aftermath of disasters, there is a breakdown of social safety nets and social capital dynamics – women's groups, village savings loans associations, parent teacher groups where women meet and have allyship and solidarity together."

- Climate Resilience Lead, iNGO

Lack of access to income, assets and credit

Lack of access to income and financial dependence on men has been consistently identified as a barrier by women to leave abusive relationships (Anderson, 2007). Climate-related shocks affect the poor and vulnerable the most, through loss of assets such as land, water, livestock, and social capital, but the effects are gender-differentiated. As an example, warmer temperatures in Mexico affected the agricultural income of women and their social connections more than men, who had more employment options (Buechler, 2009). In another study, after a drought in Burkina Faso, women had to part with livestock and non-farm assets, such as jewellery, and came under tighter control from the heads of the household for the grains they used for cooking (Roncoli et al., 2001).

Societal factors

Gender inequitable attitudes

Studies have found that patriarchal attitudes embedded in social structures and expectations of women to stay in marriages lifelong, trap them in cycles of violence, which intensify as families are under pressure to survive (Nguyen, 2019). Another study in the Philippines found that conservative

interpretations of Catholic faith gave men positions of power and encouraged women to be subservient to men, which contributed to increased violence against women and girls in the aftermath of the typhoon.

"Working on sexual and reproductive rights with youth, I saw how rooted patriarchal ideas and strict gender roles were among boys and girls. Even something as natural as menstruation was surrounded by taboos, that made us feel ashamed of our own bodies."

- Women's rights lawyer, local NGO

Child, early, forced marriages and unions

Child marriage, defined by the UN as a formal or informal union before the age of 18, is both a form of and a risk factor for gender-based violence. Climate change has been found to impact child marriage through its impact on access to resources and income, through increasing extreme poverty and gender inequality, both of which are drivers of child marriage (Pastén et al., 2024). A study in coastal Bangladesh, found a positive association between higher exposure to floods and incidence of child marriage, linked to patriarchal norms that consider unmarried daughters to be a burden and marry them off as a risk coping mechanism (Asadullah et al., 2021). Early marriages are linked to higher instances of spousal physical or sexual violence, as seen in Nepal, where women married by age 15 had 83% higher likelihood of experiencing physical abuse and 71% higher probability of experiencing sexual abuse, as compared to women married after the age of 20 (Pandey, 2016).

Gendered norms condoning male authority over women and children, expected roles and acceptance of violence as appropriate "discipline"

Evidence from humanitarian settings has found that the most effective interventions to reduce incidences of IPV are those that address gender inequitable norms and power structures (Murphy et al., n.d.). However, support for community-based and women's rights organizations to develop prevention programming to address harmful cultural norms is limited in humanitarian efforts, due to being seen as long-term or development focused ("Gap Analysis of Gender-Based Violence in

Humanitarian Settings," n.d.). This exacerbates the vulnerabilities faced by women in the context of natural disasters, such as limitations to mobility, lack of decision-making power and access to essential health services during times of crisis.

In agricultural and rural communities, men tend to face a crisis of identity and masculinity as their livelihoods as farmers come under threat in the context of extreme weather events such as droughts (Alston, 2011). When men are unable to live up to societal expectations of masculinity, they feel the need to exercise control, choosing violent, abusive and hyper-masculine masculinities (Austin, 2016). A study in Haiti found that men may use physical violence against women and children to assert control and dominance in contrast with the stress and loss of control they feel due to economic instability (Bermudez et al., 2019).

"When masculinity feels threatened, violence appears to reassert control. Women are taught to recognize physical or psychological abuse, but men are not told they have no right to impose authority. In many societies, marital consent is dismissed—'You are his wife, you must comply."

- Women's rights lawyer, local NGO

Another study in coastal Bangladesh evaluating the impact of Cyclone Roanu explored the notion of slow violence towards women, and a layering and compounding of trauma, where patriarchal norms result in those with responsibility, such as community leaders and local government viewing domestic violence as a private matter and even as a means of maintaining 'discipline' within the home.

Our research indicated strong inter-linkages between household, community and societal factors, and that factors reinforce one another in the context of climate emergencies (See Figure 2 in appendix 1 for systems map).

Quantitative Analysis

This study analyzes how extreme weather events, particularly intense rainfall linked to climate change, are associated with IPV prevalence in households. First, it examines the relationship between IPV and children's well-being, recognizing the risks to their safety and development in violent homes. Next, it investigates how climate-related shocks, such as intense rainfall, may affect IPV rates in Peru. Finally, it explores the possible mechanisms driving this increase, where Save the Children can identify intervention points to protect children and support affected families.

Data sources

This study analyzes climate patterns and IPV trends over the past 20 years (2004–2023) using two primary datasets:

- *Climate data:* To assess climate patterns, the analysis relies on rainfall data measured in total precipitation levels (millimeters). The data source is ERA5 post-processed monthly statistics, provided by the Copernicus Climate Change Service (C3S) under the European Union's Copernicus Earth Observation Programme[3]. This dataset tracks changes in rainfall across different regions of Peru, allowing the identification of extreme weather events, possibly associated with El Niño.
- *Socio-economic data:* To examine IPV trends, the analysis incorporates data from ENDES, collected by the National Institute of Statistics and Informatics (INEI)[4]. This survey provides information on women and girls aged 15-49 who have experienced IPV in the past 12 months, along with their household and personal characteristics.

[3] ERA 5 Monthly Average Data | C3S
[4] Peru Demographic and Family Health Survey (ENDES) Dataset | INEI

Box 3: Definition of Intimate Partner Violence (IPV)

This analysis adopts the definition of IPV used in ENDES[5], which categorizes IPV into three forms of abuse:

- **Psychological violence:** Involves verbal aggression, insults, threats, controlling behavior, and actions aimed at undermining self-esteem.
- **Physical violence:** Includes acts such as hitting, pushing, kicking, or slapping.
- **Sexual violence:** Defined as coercion or force to engage in sexual acts without consent.

According to ENDES 2023, psychological violence remains the most prevalent form of intimate partner violence, affecting 44% of women and girls aged 15-49, while physical violence (8%) and sexual violence (2%) continue to persist. It is important to acknowledge that IPV, particularly sexual violence within households, is often underreported. However, this analysis relies on the most reliable data available, as ENDES follows the standards of the National Health Surveys. A detailed overview of the trends in these types of violence over time is provided in appendix 2.

Descriptive statistics: who experiences IPV?

Based on the 196,727 observations of women who reported IPV over the study period, the findings highlight that IPV disproportionately affects younger, low-income and women living in urban areas. However, IPV is not limited to a single group, it affects women across different backgrounds, including those employed and with higher levels of education.

As shown in Table 1, the average profile of a woman who experiences IPV is 33 years old, lives in an urban area (64%), has at least secondary education (9 years of education on average), and is employed (67%). These statistics challenge common assumptions about IPV victims, indicating that IPV is not limited to rural areas or women with limited education and economic opportunities. Instead, it affects the average woman in a city in Peru, just as it does in other developing countries with similar urbanization patterns and gender dynamics.

[5] Peru ENDES 2023 | INEI

Among socio-economic characteristics, marital status is relevant in the Peruvian context. Cohabiting women, i.e., those who live with their partner but are not married, experience IPV at significantly higher rates than married women (Table 1). This aligns with a broader societal shift away from marriage[6], yet it also highlights the weaker legal protections and financial security often associated with other types of partnerships.

Additionally, from Table 1, IPV is prevalent among women from middle and low-income households, where limited access to income, assets and credit can limit their ability to leave abusive relationships or access support services. As highlighted in the literature, financial dependence is a major barrier, and climate-related shocks further exacerbate this vulnerability by deepening economic insecurity.

Summary Statistics: Women Suffering Violence (2004-2023)

	(1) Women Experiencing Violence		
	Mean	SD	Obs
Age	33	8.137	196,727
Years of education	9.1	4.264	196,726
Employed	0.67	0.469	189,805
Urban	0.64	0.481	196,727
Wealth status			196,727
Poorest	0.25		
Poor	0.28		
Middle	0.22		
Rich	0.15		
Richest	0.09		
Marital status			196,727
Married	0.28		
Cohabiting	0.55		
Widowed	0.01		
Divorced	0.003		
Separated	0.17		
N	196,727		

Table 1: Summary statistics of women who have experienced IPV

[6] The relationship recession is going global

Violence at home and children well-being

This section focuses on the relationship between IPV and child well-being, using malnutrition as a proxy indicator.

Box 4: Definition of malnutrition

This study follows World Health Organization (WHO) standards [7], defining malnutrition as stunting, where a child's height-for-age z-score falls below -2 standard deviations (SD) from WHO's growth reference. Thus, stunting is recognized as an indicator of poor environmental conditions, food insecurity, and recurrent infections, making it a strong measure of children's overall well-being (World Health Organization, 2025).

Given data availability about malnutrition, the analysis uses ENDES surveys from 2007–2023 to construct household-level indicators. A household is classified as experiencing malnutrition if at least one child under five years old is stunting, while household-level IPV is identified when any woman in the household reports experiencing IPV in the last 12 months.

To estimate the relationship between IPV and child malnutrition, an Ordinary Least Squares (OLS) regression model is applied. The model assesses whether child malnutrition rates differ between households with and without IPV exposure, while controlling for regional and time-based variations. The regression equation is:

$$malnutrition_{jt} = \alpha + \beta_1 IPV_{jt} + \epsilon_{jt}$$

Where:

- $malnutrition_{ijt}$: Dummy variable equal to 1 if at least one child in household j is stunted.
- IPV_{jt}: Dummy variable equal to 1 if any woman in household j experienced IPV in the last 12 months.
- ϵ_{ijt}: Error term.

[7] Malnutrition in children | WHO

According to Table 2, the results show a statistically significant relationship between IPV and child malnutrition. On average, households experiencing IPV are associated with a 2.34 percentage point higher likelihood of child malnutrition at the 1% significance level. This suggests that IPV is related to food insecurity and poor child health outcomes. However, the low R^2 value indicates that while IPV is a contributing factor, other socioeconomic and environmental conditions also influence malnutrition outcomes.

Child Malnutrition & Household Violence

	(1) Malnutrition
Violence	0.0234***
	(0.00318)
Constant	0.167***
	(0.00541)
R2	0.000911
N	182944

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 2: Child malnutrition and IPV at the household-level

These findings highlight the interconnected risks of violence and child well-being. Children in violent households face not only psychological and physical harm but also a higher risk of undernutrition, which can have long-term consequences for their development and future opportunities.

Climate-related shocks

Based on Diaz & Saldarriaga (2023), climate shocks are categorized as wet shocks as years when total accumulated rainfall in a region exceeds the 95th percentile of its historical precipitation levels in the last 20 years (2004–2023), indicating extreme rainfall events. Conversely, dry shocks occur when rainfall falls below the 5th percentile, signaling severe drought conditions.

Over the past two decades, Peru has experienced sporadic wet shocks. As illustrated in Figure 3, the 2017 wet shock was by far the most severe affecting 11 out 25 regions in the country (44%). This was

nearly three times higher than the next most significant wet shock in 2009 (16%) and far beyond any other year in the study period.

This wet shock was directly linked to the 2017 El Niño Costero, an abrupt warming of coastal waters off Peru that triggered intense rainfall. According to the National Meteorological and Hydrological Service of Peru (2017), the rapid increase in ocean temperatures fueled storms that brought heavy rains to regions at much lower elevations than usual. Rivers and streams that were typically dry overflowed rapidly, leading to catastrophic flooding, landslides, and infrastructure collapse. The disaster led to 162 deaths, displaced nearly 1.5 million people, and damaged hundreds of thousands of homes. While classified as a moderate-intensity event, the 2017 El Niño had devastating consequences and is considered the third most intense in Peru over the last century.

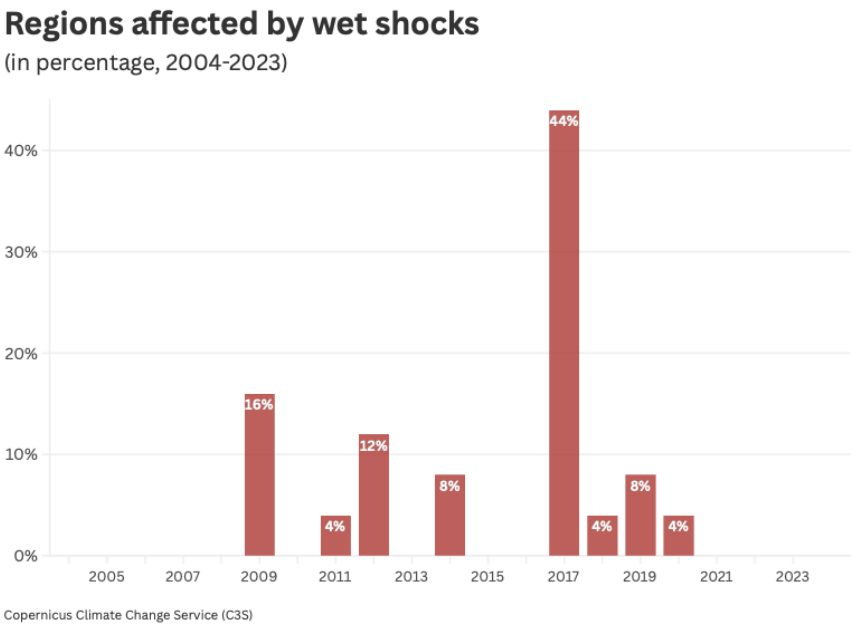

Figure 3: Regions affected by wet shocks

Source: Copernicus Climate Change Service (C3S).

As highlighted in Figure 4, the affected areas include Northern regions (Tumbes, Piura, Lambayeque, Cajamarca, San Martín, and Amazonas), Central regions (Lima and Junín) and Southern regions (Huancavelica, Ica, and Ayacucho). Thus, the unprecedented rainfall of 2017 provides a crucial case for understanding how climate shocks can not only devastate infrastructure but also deepen social issues such as IPV.

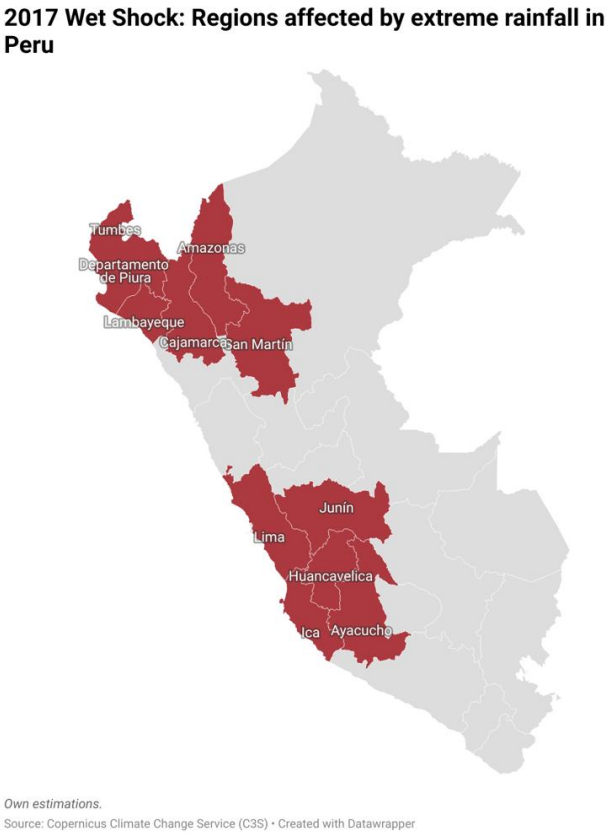

Figure 4: Regions affected by the 2017 Wet shock – El Niño Phenomenon

Source: Copernicus Climate Change Service (C3S)

Methodology

Climate-related shocks and IPV in Peru

This study examines how extreme rainfall in 2017, one of the most severe weather shocks in recent history, can influence IPV in Peru. To assess this impact, the analysis applies a Difference-in-Differences approach to measure causal effects when a policy or event affects one group but not another. This method compares IPV trends before and after the shock in regions that experienced extreme rainfall (treatment group) versus those that did not (control group).

The treatment group consists of women living in 11 regions that faced the wet shock in 2017, where precipitation exceeded the 95th percentile of historical levels (2004–2023) (Figure 4). While the control group includes women in regions that did not experience extreme rainfall that year. To

capture both immediate and sustained effects, the analysis examines IPV rates two years before the shock (2015–2016) and two years after (2018–2019). By comparing these time periods, the study isolates the impact of the 2017 rainfall shock while accounting for pre-existing trends.

Figure 5 shows that before the 2017 wet shock, IPV rates were declining in both affected and non-affected regions. However, after the shock, the trend diverged, while IPV continued to decline in non-affected regions, the decrease stagnated in affected areas. This suggests that extreme rainfall disrupted progress in reducing IPV. By 2019, IPV rates was higher in affected regions (49.8%) compared to non-affected regions (48.8%), highlighting how climate shocks can exacerbate social vulnerabilities and affect progress in addressing gender-based violence.

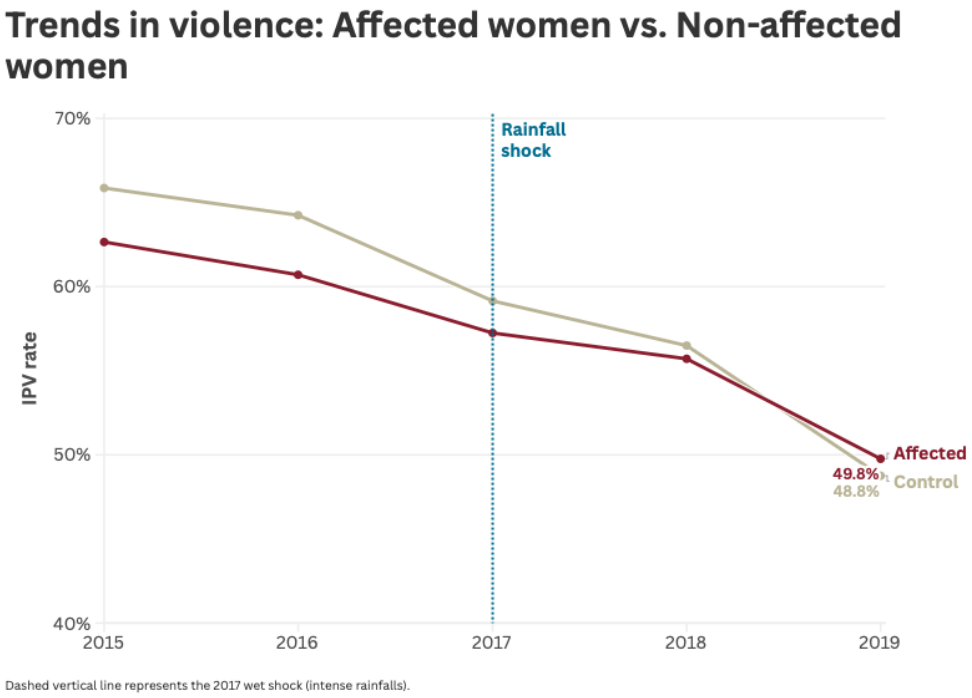

Figure 5: Difference in trends in violence between women living in affected vs non-affected regions
Source: ENDES 2015-2019

The following equation estimates the effect of extreme rainfall on IPV:

$$IPV_{ijt} = \alpha + \beta_1 Treated_j + \beta_2 Post_t + \beta_3 (Treated_j \times Post_t) + \phi X_{ijt} + \epsilon_{ijt}$$

Where:

- IPV_{ijt}: Dummy variable equal to 1 if woman i in region j and year t has experienced IPV in the last 12 months.
- $Treated_j$: Dummy variable equal to 1 for regions affected by the 2017 wet shock.
- $Post_t$: Dummy variable equal to 1 for the post-shock period (2018-2019).
- X_{ijt}: Control variables, including age, education, employment wealth quintile, urban residence and marital status for woman i in region j in year t.
- ϵ_{ijt}: Error term for woman i in region j in year t.

In this analysis, **the coefficient of interest is $\boldsymbol{\beta_3}$**, the interaction term of the Treated and Post, that captures the impact of extreme rainfall on IPV prevalence. The regression results are presented in Table 3 showing how extreme rainfall influence IPV across three different model specifications:

- Model 1: The baseline Dif in Dif regression, estimating the raw effect of extreme rainfall without additional controls.
- Model 2: Expands Model 1 by including control variables such as education, employment, urban residence, wealth quintiles and marital status to account for socio-economic factors.
- Model 3: Introduces region and year fixed effects, which help control for unobserved time-invariant regional characteristics and national trends, ensuring that the estimated effect is driven by local variations in rainfall and IPV.

Additionally, standard errors are clustered at the region and year level across all three models to account for potential correlation within regions over time. This approach reduces the risk of overestimating statistical significance by controlling for unobserved regional shocks that may simultaneously affect both extreme rainfall and IPV prevalence.

The results in Table 3 indicate a statistically significant increase in IPV after the extreme rainfall event in the affected regions, as shown in Model 3. The regression analysis reveals that women in affected regions were 3.4 percentage points more likely to experience IPV after the shock compared to those in unaffected regions (see highlighted in Table 3). This effect, statistically significant at the 5% level, confirms that this increase is unlikely to be due to random variation, suggesting a causal

link between extreme rainfall and IPV. The full regression results, including additional specifications, can be found in the Appendix 3.

Regression Results

	(1) Model 1	(2) Model 2	(3) Model 3
treated	-0.0337**	-0.0308*	0.0214
	(0.0164)	(0.0174)	(0.0230)
post_shock	-0.124***	-0.125***	-0.171***
	(0.0235)	(0.0241)	(0.0120)
treated_post	0.0349	0.0347	0.0340**
	(0.0281)	(0.0293)	(0.0139)
Constant	0.651***	0.615***	0.513***
	(0.0141)	(0.0171)	(0.0213)
R2	0.0122	0.0624	0.0809
N	87933	87929	87929

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Impact of the 2017 Rainfall Shock on IPV: Regression Analysis

To confirm that the observed increase in IPV was caused by the extreme rainfall and not by pre-existing differences, a balance test was conducted. This test compares key demographic characteristics between affected and unaffected regions before and after the 2017 wet shock.

Table 4 shows that before the shock, the treatment and control groups were statistically comparable in terms of age, education, employment, urban residence, and IPV prevalence. This similarity supports the parallel trends assumption, a key requirement for the Difference-in-Differences methodology. By confirming that both groups followed similar trajectories before 2017, the analysis ensures that any observed changes in IPV rates after the shock can be attributed to the extreme rainfall event rather than pre-existing differences between the groups.

Balance Test: Treatment vs Control (Pre shock)

	(1) Control			(2) Treated		
	Mean	SD	Obs	Mean	SD	Obs
Age	32	7.922	21,925	32	7.940	21,886
Years of education	9.58	4.160	21,924	9.51	4.114	21,886
Violence	0.65	0.477	21,925	0.62	0.486	21,886
Employed	0.63	0.483	21,923	0.62	0.484	21,885
Urban	0.68	0.468	21,925	0.69	0.464	21,886
N	21,925			21,886		

Table 4: Balance test of baseline characteristics

Mechanisms

Extreme weather events can intensify stress and economic hardship, leading to harmful coping mechanisms such as increased alcohol consumption, which has been linked to higher rates of IPV. As discussed in the literature review, studies have found that alcohol-related aggression increases in the aftermath of natural disasters.

Quantitatively, the regression results support this hypothesis, as the interaction term remains positive and statistically significant across all three models (Table 5). This suggests that women in affected regions experienced a 7.55 percentage point increase in IPV linked to alcohol consumption compared to non-affected areas. The consistency of this result across different model specifications indicates a causal relationship between extreme rainfall and increased alcohol-related aggressions. The full regression results, including additional specifications, can be found in Table 1 in appendix 4.

Alcohol-related aggressions			
	(1)	(2)	(3)
	Model 1	Model 2	Model 3
treated	-0.0533***	-0.0438***	-0.0234
	(0.0146)	(0.0141)	(0.0209)
post_shock	-0.0485***	-0.0528***	-0.0571***
	(0.0152)	(0.0130)	(0.0101)
treated_post	0.0755***	0.0775***	0.0753***
	(0.0196)	(0.0194)	(0.0119)
Constant	0.377***	0.306***	0.259***
	(0.0122)	(0.0178)	(0.0197)
R2	0.00206	0.0450	0.0511
N	11671	11671	11671

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Alcohol-related aggressions as a mechanism of IPV: Regression Analysis

Among the household factors, income stress and food insecurity have been identified as risk factors for IPV, particularly in households that depend on agriculture. The literature highlights that economic instability, such as job losses or reduced income, can increase IPV risk by increasing household tensions and creating power imbalances.

To explore this mechanism, additional regressions tested whether employment loss, measured by agriculture-related employment within the couple or the partner's job status. While the results showed a negative association after the 2017 shock, their effects were not statistically significant. This may be due to data limitations, as it is not panel-based and may not fully capture employment dynamics over time. Further research using longitudinal data could provide clearer understanding into the relationship between extreme weather events and financial distress contribute to IPV. Additional details on these findings are included in Table 2 in appendix 4.

Policy Recommendations

We propose four policy recommendations for Save the Children US to mitigate the risk to children from violence in their homes in the context of climate change. These recommendations are grounded in evidence from Peru and incorporate insights from a diverse group of stakeholders, such as representatives from Save the Children's global offices, the Peru country office, former Peruvian ministers, and local NGOs.

The proposed recommendations are categorized by the identified factors that increase the risk of gender-based violence within households in extreme weather events – household, community and societal factors (Figure 6). They have been selected from a broader set of policy alternatives to be aligned to Save the Children's core programming areas and their capacity to effectively intervene to address the issue. We have focused on areas where Save the Children US has the greatest potential for impact and provide practical, actionable steps to strengthen child protection in communities affected by climate change.

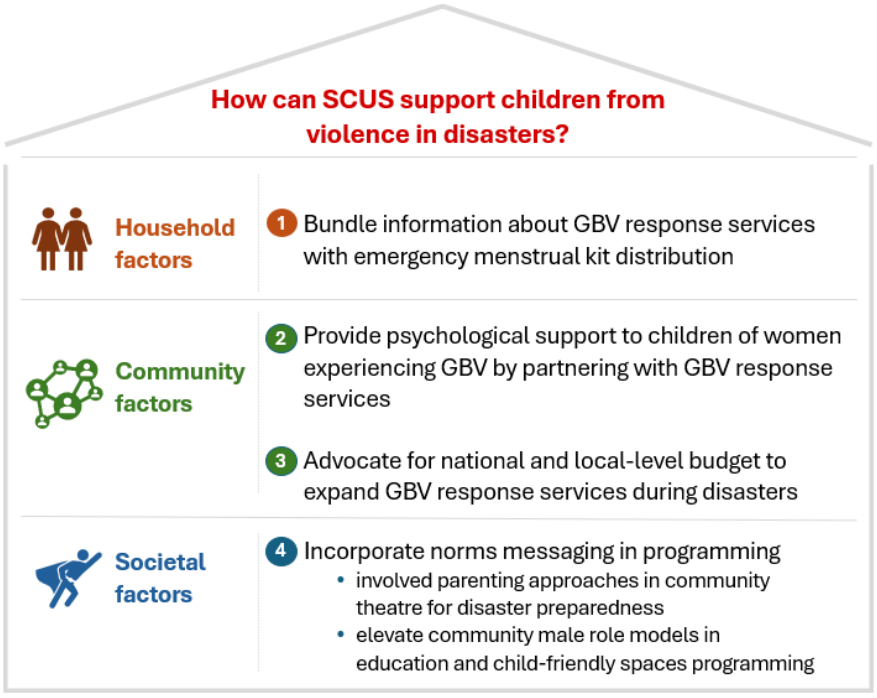

Figure 6: Policy recommendations to mitigate risk to children from violence in climate disasters

Our recommendations are evaluated based on their **operational feasibility**, their **effectiveness** and their **political supportability**, defined as follows:

- Operational feasibility is evaluated on three sub-criteria - the alignment of the recommendation with the Save the Children's mission and core programming areas, the organization's in-house capacity for policy implementation and how efficient the organization would be in policy implementation i.e., can Save the Children implement the policy with minimum additional resources
- Effectiveness is measured on two sub-criteria – how likely is it for the policy implementation to translate into positive outcomes for children, (e.g., delivery of a service versus changing norms and attitudes) and the scale of impact of the policy i.e., is it impacting an individual or the broader community
- Political supportability assesses how likely Save the Children US is to adopt the policy based on the level of support for the policy from Save the Children leadership, board and donors.

Guidelines followed for scoring the recommendations on the above-mentioned criteria are mentioned in appendix 5. Based on how the policies scored on the evaluation criteria, we recommend rolling out the policies in two phases (Figure 7):

- Phase I (Prioritized for immediate action): These are recommendations that scored favorably across the three criteria and are incremental builds on existing core programming of Save the Children (Recommendations 1 and 2). We expect the timelines to begin implementation to be within the next 6 months.
- Phase II (Mid-term initiatives): These are recommendations that require additional resource investment by Save the Children (Recommendation 4) or require buy-in from authorizers to pursue (Recommendation 3). We recommend that Save the Children begin implementing these within 12-18 months after running pilots and incorporating learnings from Phase I recommendations.

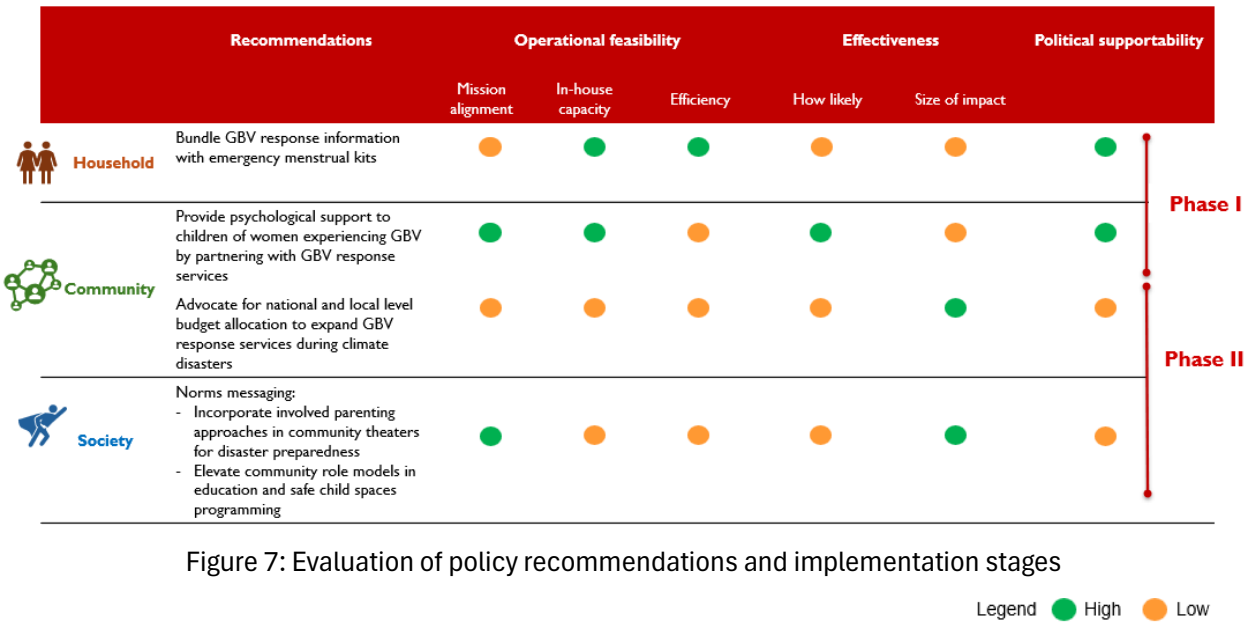

Figure 7: Evaluation of policy recommendations and implementation stages

Phase I Recommendations

Recommendation 1: Bundle GBV response information with emergency menstrual kits

Rationale

The inability of women to access support services came up as a significant household factor that contributes to increased risk of GBV within households in the context of extreme weather events. Our interviews suggested that women may be unaware of where to access support services during an emergency due to disruption of public services. Further, women lose access to their social networks, which may make accessing support challenging, especially for socio-economically disadvantaged communities who had pre-existing barriers to access help (Sharma & Borah, 2022). According to ENDES 2023, of the women experiencing physical violence in Peru, 11% cited not knowing where to go or not knowing the existence of support services as the main reason for not seeking help.

Proposed solution

As part of Save the Children's response to emergencies caused by floods in Peru, the organization distributes kits for dengue prevention, safe water and hygiene kits, and disinfection kits for shelters and educational institutions. Our recommendation is to bundle information about where to access support for GBV, along with emergency response kits.

Box 5: Examples of similar initiatives

In response to floods in Lambayeque, Peru, UNFPA distributed hygiene kits containing soap, underwear, menstrual pads, and protection kits including a flashlight to help safely navigate at night and a whistle to alert others in emergency. UNFPA also partnered with the Women's Emergency Center to protect women and children vulnerable to sexual abuse by deploying mobile units of lawyers, social workers and psychologists, as well as organizing talks for communities to promote the need for protection against gender-based violence and for access to sexual and reproductive health care (*ReliefWeb*, 2018).

An important risk to mitigate when designing this solution is to ensure that access to the information is targeted to women so as not to create unintended negative consequences for women or children (if an abusive intimate partner discovered the information pamphlet). This can be done by displaying the information at distribution centers instead of putting them in the kits or using discrete approaches to share the information – for example, sealed envelopes with generic health branding, QR codes to reduce visible printed material, etc.

Analysis

While providing GBV response information to women is not directly aligned to Save the Children's mission and core programming areas, the organization has the in-house capacity to provide this service, and it requires minimal resource investment since Save the Children provides emergency response kits, including menstrual kits to help communities cope with disasters in Peru. We do not see concerns with organizational supportability since this is an incremental build over existing Save the Children programming.

Implementation approach

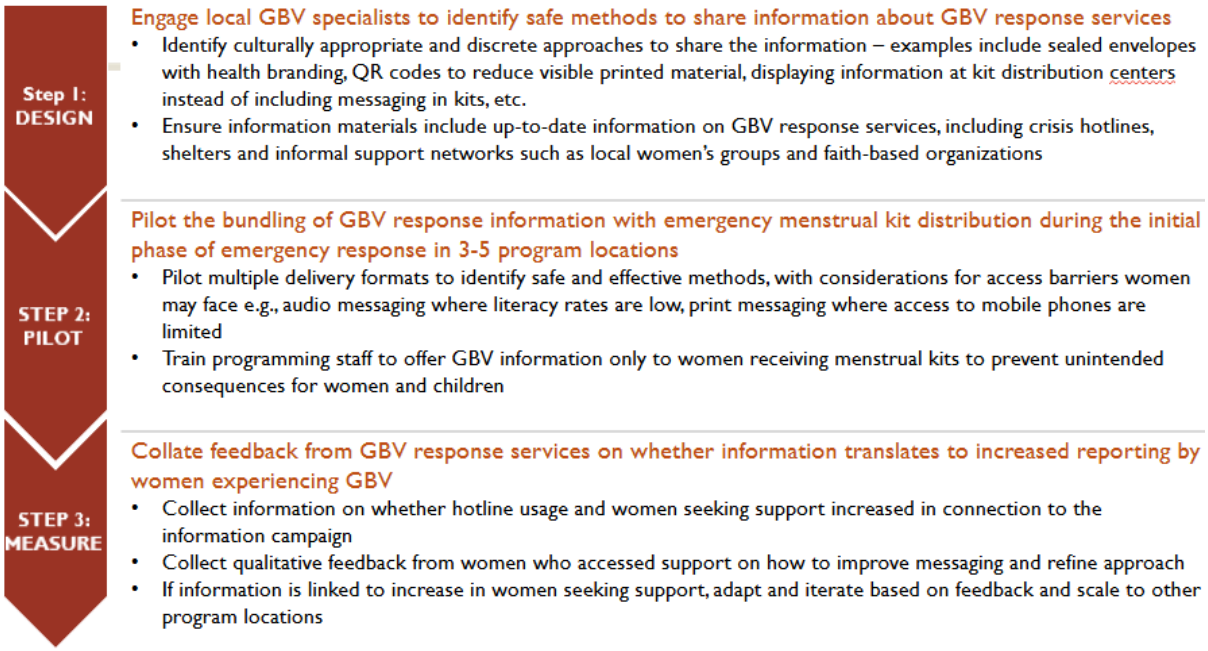

Figure 8: Actionable strategy for Recommendation 1: Bundle GBV response information with emergency menstrual kits

Recommendation 2: Provide psychological support to children of women experiencing GBV by partnering with GBV response services

Rationale

During climate-related disasters, support services are often disrupted making it even more difficult for women and their families to access critical assistance. Moreover, GBV response mechanisms frequently fall short, with limited capacity to meet the heightened demand for protection. In Peru, Women's Emergency Centers (CEMs) provide free, multidisciplinary support to victims of GBV, offering legal assistance, emotional support, and social services (Ministry of Women and Vulnerable Populations, 2016). However, these services face significant constraints during climate emergencies, leaving survivors and their families without timely care.

In addition, while CEMs focus on supporting women, psychological care for children of GBV survivors mostly remains absent. This gap is exacerbated during climate-related disasters, when stress, trauma, and displacement make children even more vulnerable. As highlighted by a former

Peruvian minister, even when small-scale psychological interventions exist, they have a profound impact on children's well-being.

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*"We got a small budget to provide psychological support to women experiencing violence **and** to their children. In the context of climate disasters, it has a great impact, not only helping children cope with losing their homes and belongings, but also addressing deeper trauma that existed before the disaster"*

- Former Minister, Peru

Proposed solution

Save the Children is a specialized iNGO in child protection and provides direct, door-to-door support in both regular programming and emergency response. By forming partnerships with CEMs, Save the Children can channel targeted psychological support to children of GBV survivors who do not receive adequate support from CEMs. This would reduce duplication of effort by Save the Children, who currently identify at-risk children by going door-to-door in communities, enabling them to provide support to children already identified by CEMs through the women who seek support at these facilities. This collaboration would help address the emotional trauma experienced by these children in disaster-affected contexts where distress is intensified by loss of stability and security.

Analysis

This initiative aligns directly with Save the Children's mission to protect children, leveraging existing expertise in child protection. Moreover, the organization has the capacity to implement this service, but additional resources, particularly trained child psychologists, may be required to scale up in affected areas. The approach builds on existing child protection frameworks, making it a natural extension of Save the Children's work. The initiative has a high likelihood of success, though the initial impact may be modest as it will be gradually integrated into programming.

Implementation approach

The actionable steps highlight building partnerships with the CEMs[8] that provide assistance to women experiencing GBV.

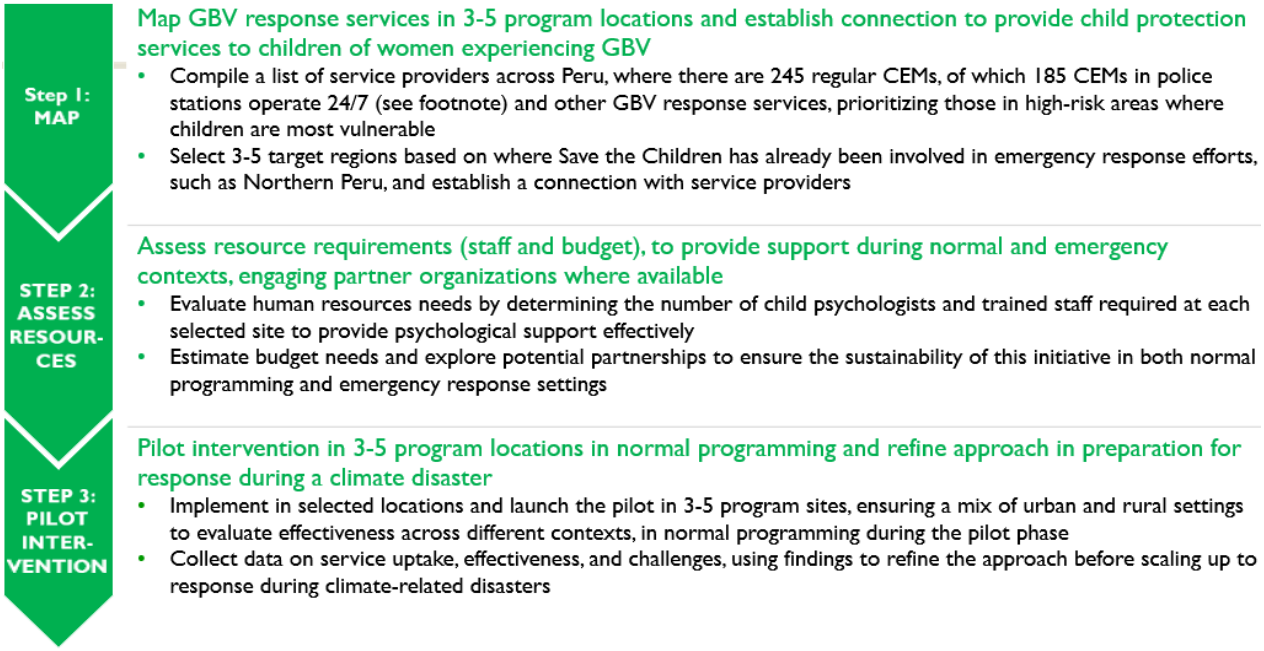


Figure 9: Actionable strategy for Recommendation 2: Provide psychological support to children of women experiencing GBV by partnering with GBV response services

Phase II Recommendations

Recommendation 3: Advocate for national and local-level budget to expand GBV response services during disasters

Rationale

Funding for GBV services in disaster settings is often inadequate, leaving women and families without critical support when they need it most. Climate disasters put even more pressure on already limited resources, delaying essential care and increasing the risks for women and children. Without sustained investment, emergency response plans fail to address the heightened vulnerability of those experiencing violence.

[8] This is the current list of CEMs available in Peru: Peru CEMs | Ministry of Women and Vulnerable Populations

Save the Children, a recognized leader in child protection and emergency response, has extensive experience providing humanitarian assistance in climate emergencies. Following the 2023 floods, the organization supported over 27,800 people, including nearly 10,000 children, across Piura, La Libertad, Lambayeque, Lima, and Arequipa by delivering food, healthcare, safe water, and education support[9]. Beyond immediate relief, Save the Children has also worked with regional governments to improve disaster planning and has advocated for specialized disaster management offices at the local level[10]. In addition, it amplifies children's voices on key issues that affect their futures, as seen in a series of COP simulations conducted with children from 20 countries including Peru, ahead of COP29 to integrate their calls into national and international negotiations[11].

"Save the Children is constantly engaging with the government on how to better prepare for disasters and could advocate for them to liaise with community-level disaster response teams to consider the impacts of extreme weather events on women in the communities"

- Country Director, iNGO

Proposed solution

The Peruvian government has increased its focus on climate preparedness in recent years through establishment of the High-level Commission on Climate Change that clarifies mandates for sectoral, regional and local actors, development of a National Adaptation Plan[12], and a $750 million credit line from the World Bank to respond to El Nino shocks and foster climate change adaptation and economic recovery[13]. This is a key moment to influence decision-making and secure financial commitments for GBV services from a child rights lens, as a core component of disaster response.

Save the Children's presence in Peru in climate disasters, makes it well-positioned to advocate to national and local governments for increased budget allocations to strengthen GBV response

[9] El Niño 2023 actions | Save the Children Peru
[10] Joint effort with Regional Governments | Save the Children Peru
[11] Children's climate demands for COP29 | Save the Children's Resource Centre
[12] World Bank Group: Peru Country Climate and Development Report
[13] World Bank Supports Climate Action and Economic Recovery in Peru

services, promoting a safe environment for children. Save the Children can push the Ministry of Environment and the Ministry of Women and Vulnerable Populations for a permanent GBV funding stream in national emergency response plans, to flow down into regional response plans. This would ensure that protection services remain available before, during, and after climate disasters.

Analysis

This recommendation aligns with Save the Children's mission to protect children and strengthen child protection systems, but advocacy for increased GBV funding in disaster response is not a central focus of its current actions. While Save the Children already engages with local and regional authorities in emergency planning discussions, they may need to invest in additional lobbying capacity in their country leadership teams. The key factor in driving this forward is the organization's political willingness to elevate this issue, using evidence from climate-related disasters to highlight the urgent need for sustained GBV funding. Beyond Save the Children's expertise to lead this advocacy effort, its success will ultimately depend on government buy-in and budgetary flexibility.

Implementation approach

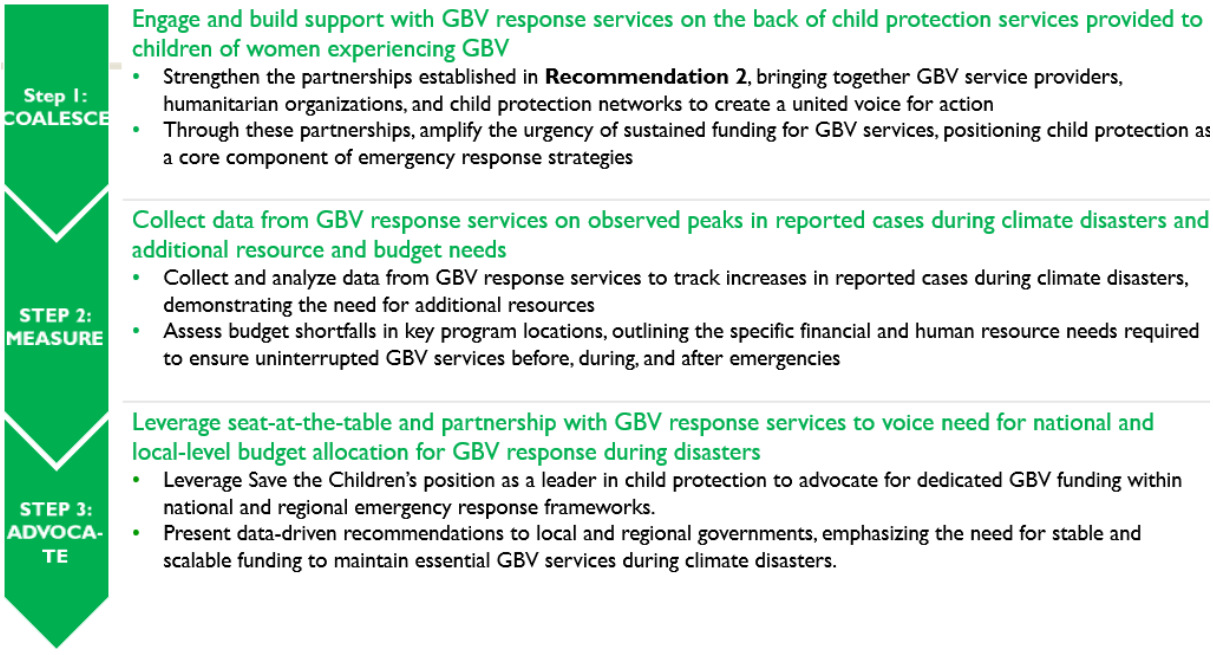


Figure 10: Actionable strategy for Recommendation 3: Advocate for national and local-level budget to expand GBV response services during disasters

Recommendation 4: Incorporate norms messaging in programming

(a) involved parenting approaches in community theatre for disaster preparedness

(b) elevate community role models in education and child friendly spaces programming

Rationale

Gender inequitable attitudes and norms around expected roles and behavior from men and women are known risk factors for gender-based violence against women and children. A study on the aftermath of the Black Saturday bushfires in Australia found that society's expectations of masculinity and the pressure on men to live up to the male provider and protector role and was linked to increased drug and alcohol abuse and increased risk of domestic violence against women and children (Parkinson & Zara, 2020).

Interviews with Save the Children programming staff suggested that due to short timelines and resource constraints in the initial phase of emergency response, GBV efforts are focused on directing women and children experiencing violence to referral pathways for support. However, there is scope to work on GBV prevention within climate change adaptation and resilience efforts.

Proposed solution

Save the Children Peru has been working with the regions of northeastern Peru, which have high vulnerability to disasters on preparedness and response to emergencies, with a focus on children, adolescents and women. These efforts have involved communication campaigns, awareness through educational institutions and community theatre (Save the Children, 2024). Our recommendation is to adopt creative approaches of norms messaging within these efforts, such as through demonstrating involved parenting approaches in community theatre.

Box 6: Examples of similar initiatives
Interactive Theatre for Justice (ITJ)[14], developed by Theatre for a Change, uses theatre to address injustices related to sexual and reproductive health and rights of women and girls. It is grounded

[14] Building support for women's and girls' rights through interactive theatre | Align Platform

in the Forum Theatre approach and has been effectively employed across countries, including Bangladesh, the Democratic Republic of Congo, Ghana, Malawi, Nepal, and Tanzania. Participants select their target audience – those they believe have the most power to effect positive change e.g., girls at risk of child marriage choose to perform for their parents or village chiefs. Post performance, the audience is invited to suggest and enact alternative outcomes, creating a deeper understanding of the problems girls face, collaboratively developing solutions and prompting commitments from those in power to implement tangible change. For example, ITJ was linked to a mayor in Nepal establishing a scholarship fund to encourage married girls to return to school and to a district councilwoman in Bangladesh forming a child marriage prevention committee to intervene in child marriage cases and report them to the police.

Save the Children has also been supporting municipalities in Piura and Lambayeque, regions highly vulnerable to climate events from the El Niño phenomenon, with child friendly spaces – protective environments for girls and boys in the event of emergency. These spaces integrate animation and socialization strategies for children and adolescents and involve their families to help process anxiety and stress and promote positive coping strategies (Save the Children, 2024). Our recommendation is to include elements of GBV prevention within these spaces, and other education programming, by elevating community male role models, to display positive and involved parenting to both children and parents.

"In Papua New Guinea, we addressed gender norms through a program for parents on how to manage children's behavior. Men saw a benefit and started coming on their own to trainings. It requires long-term investment in communities but now we see a shift in gendered behaviors at home, where young men are cooking and doing the dishes because they see how much burden fell on their wives"

- Regional GBV Advisor, iNGO

A key risk to consider when implementing this recommendation is that Save the Children could face resistance from communities for challenging deeply ingrained cultural beliefs. If not approached carefully, communities may perceive efforts as interference in private matters, which could create mistrust and hinder the organization's ability to carry out climate resilience programming.

Analysis

This recommendation has strong alignment with Save the Children's mission to create a safe environment for children and fits within core programming areas of education and resilience building for emergencies. This recommendation ranks lower on other elements of operational feasibility because it would require more specialized expertise to design norms messaging that is culturally appropriate.

The effectiveness is harder to measure compared to delivery of services as tracking shifts in attitudes is complex, requiring efforts in monitoring and evaluation. However, it ranks high on the scale of impact as shifting community attitudes around parenting roles can have long-term benefits beyond individual households, influencing broader societal norms. Political supportability may be lower since norms change work can be more sensitive and less tangible than direct interventions.

Implementation approach

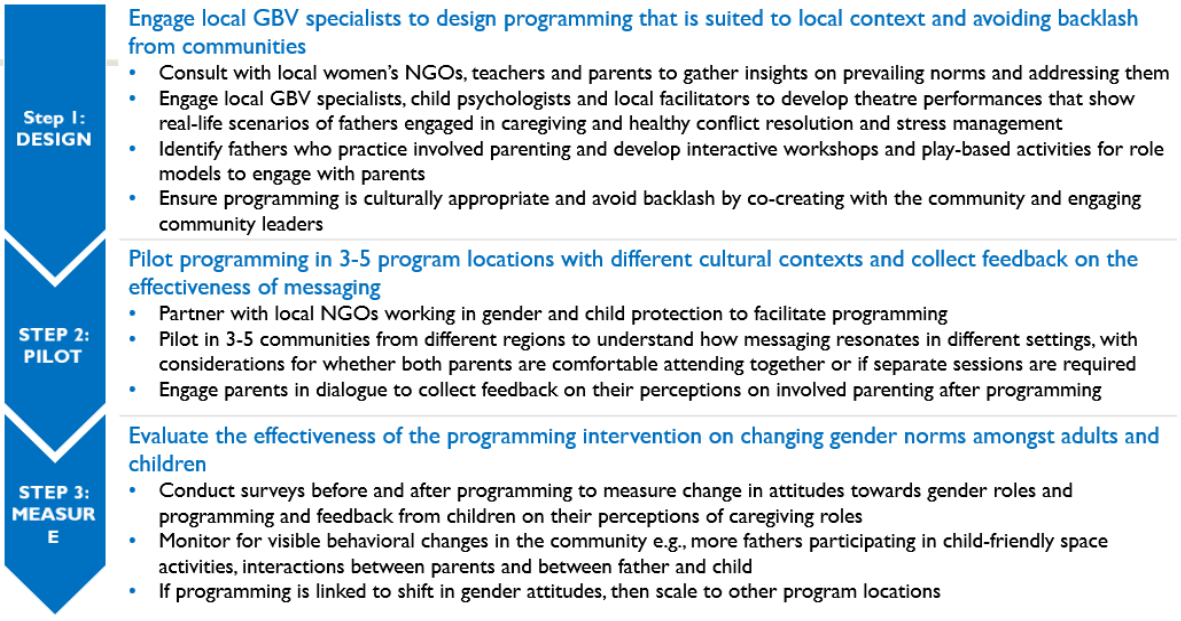


Figure 11: Actionable strategy for Recommendation 4: Incorporate norms messaging in programming

Conclusions

This policy analysis paper highlights the urgent need to protect children from the hidden dangers of climate disasters: unsafe homes and the increased risk of violence. As extreme weather events intensify, families face increased stress, economic hardship, disrupted services, and instability based on societal factors, all which fuel gender-based violence within households. For children, living in an unsafe home is more than a temporary crisis, it can shape their emotional and physical well-being for years to come. When disasters strike, response efforts must protect children from the violence that climate shocks can trigger. Moreover, prevention and intervention must go hand in hand to break the cycle of violence and ensure that every child has a safe place to grow.

Change is possible. As a former Peruvian minister shared, a small group of women stood up for a fellow worker facing domestic violence, and they succeeded.

"I visited a microenterprise where a woman was experiencing physical violence from her husband. 19 women who worked there went to the woman's home and told the husband that if he touched her, he would not walk again. And the husband never hit her again."

- Former Minister, Peru

Collective action can make a difference and Save the Children's reach can protect thousands of children across entire communities. With immediate actions such as bundling information about GBV response services with emergency menstrual kit distribution and expanding psychological support for children of GBV survivors, Save the Children can strengthen their current child protection programming. This represents an opportunity to create lasting change because no child should grow up in an unsafe home, particularly in the context of climate disasters.

Appendix

Appendix 1 – Literature review

Box 1: Literature review search keywords

Climate change

- (Climate AND change) OR (natural AND disaster)
- (Extreme AND weather) OR (Extreme AND event) OR (Adverse AND weather) OR (Adverse AND event)
- (Rain AND shock) OR (Extreme AND rain) OR (heavy AND rain) OR (flood)
- (Storm) OR (hurricane) OR (cyclone) OR (El Niño) OR (La Niña) OR (El Niño-Southern Oscillation) OR (-ENSO)
- (Dry AND shock) OR (drought) OR (dry AND spells)
- (Heat AND waves) OR (heat AND shock) OR (heat AND spells) OR (heatwave)
- (Bushfires) OR (wildfires)

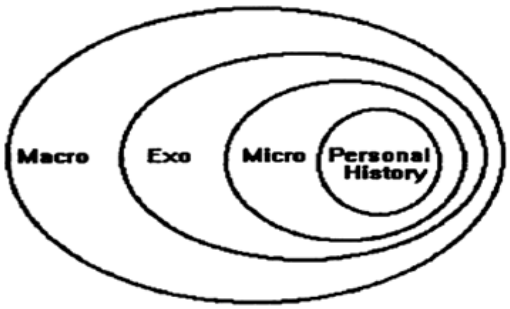
Gender-based violence

- (Gender-based AND violence) OR (GBV) OR (Intimate AND partner AND violence) OR (IPV)
- (Domestic AND violence) OR (Interpersonal AND violence) OR (violence AND home) OR (violence AND household)
- (Violence AND women) OR (Violence AND girls) OR (Violence AND sexual) OR (Violence AND gender AND minority)
- (Rape) OR (forced AND sex) OR (Sexual AND coercion) OR (Sexual AND harassment) OR (Sexual AND assault) OR (verbal AND harassment) OR (physical AND harassment)
- ((Child OR girl OR women) AND abuse) OR ((child OR girl OR women) AND violence) OR ((child OR girl OR women) AND hitting) OR ((child OR girl OR women) AND aggression) OR ((child OR girl OR women) AND assault) OR ((child OR girl OR women) AND threat)
- (Child AND marriage) OR (early AND marriage) OR (forced AND marriage) OR (CEFMU) OR (Incest)

- Femicide OR ((child OR gender OR women) AND killing) OR (Female AND Genital AND Cutting) OR (Female AND Genital AND Mutilation) OR (FGM) OR (FGC) OR (unwanted AND pregnancy) OR (dowry) OR (bride AND price)

Mechanisms

- ((Marital OR relationship) AND (conflict OR quarrelling OR fighting) OR ((Marital OR Relationship) AND stress) OR (stress AND home) OR (stress AND household)
- (Food AND security) OR (hunger) OR (starvation) OR (nutrition) OR (malnutrition) OR (food AND stress) OR (stunting) OR (Wasting) OR (Under-weight) OR (deficient) OR (food AND scarcity) OR (water AND scarcity)
- ((Income OR Money OR Finance OR Financial) AND (stress OR loss))
- ((Low OR Affected) AND yield) OR ((damage OR destroy) AND crop)
- (Mental AND stress) OR ((alcohol OR drug OR tobacco) AND use) OR (Emotional AND stress) OR (Emotional AND reactivity) OR (risky AND behaviour) OR (Mental AND health) OR (Chronic AND stress) OR (Depression) OR (Trauma) OR (isolation) OR (anxiety) OR (fatigue)
- (Social AND norms) OR (patriarchy) OR (household AND dynamics) OR ((women OR female) AND (autonomy OR agency OR control OR decision)) OR (family AND honour) OR (gender AND role) OR (masculinity)



Personal History

- Witnessing marital violence as a child
- Being abused oneself as a child
- Absent or rejecting father

Microsystem

- Male dominance in the family
- Male control of wealth in the family
- Use of alcohol
- Marital/verbal conflict

Exosystem

- Low socioeconomic status/unemployment
- Isolation of woman and family
- Delinquent peer associations

Macrosystem

- Male entitlement/ownership of women
- Masculinity linked to aggression and dominance
- Rigid gender roles
- Acceptance of interpersonal violence
- Acceptance of physical chastisement

Figure 1: Factors related to violence against women at different levels of the social ecology

Source: HEISE, 1998

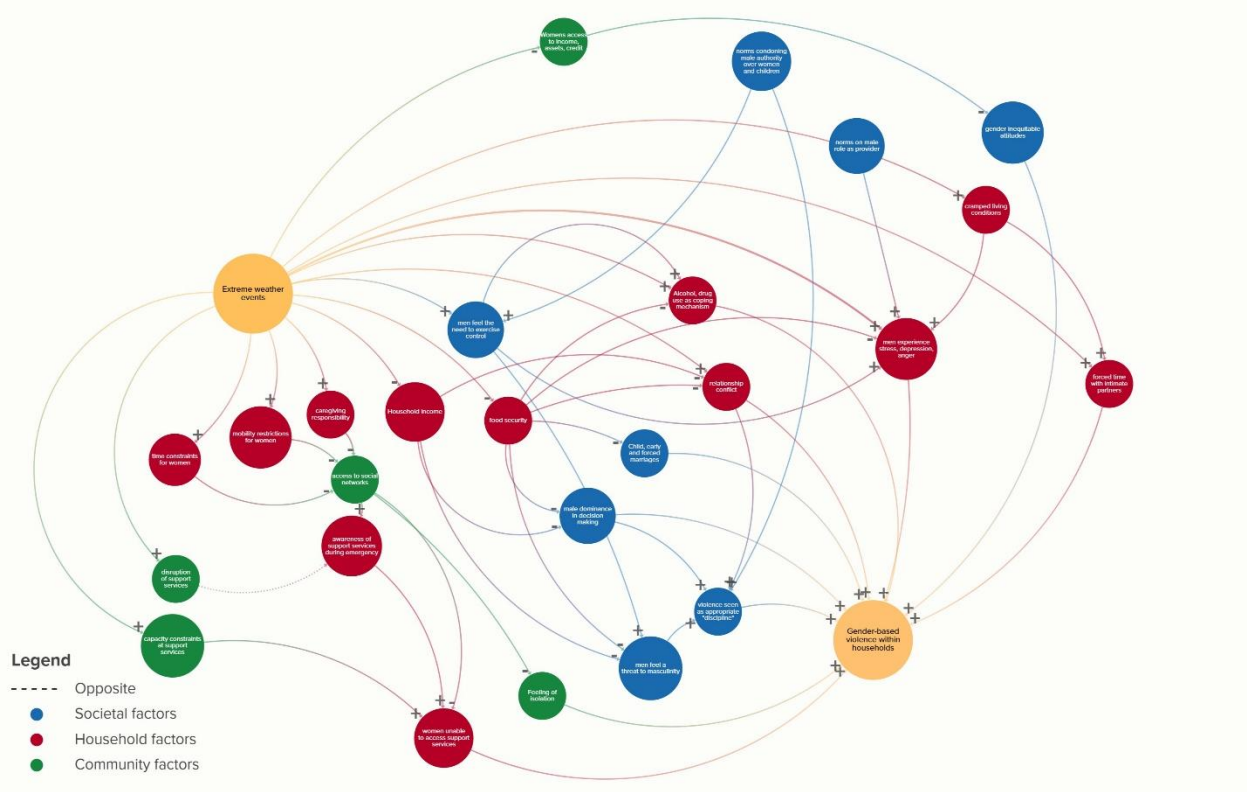


Figure 2: Systems Map of risk factors for gender-based violence within households linked to extreme weather events

Appendix 2 – The evolution of Intimate Partner Violence and its three types in Peru

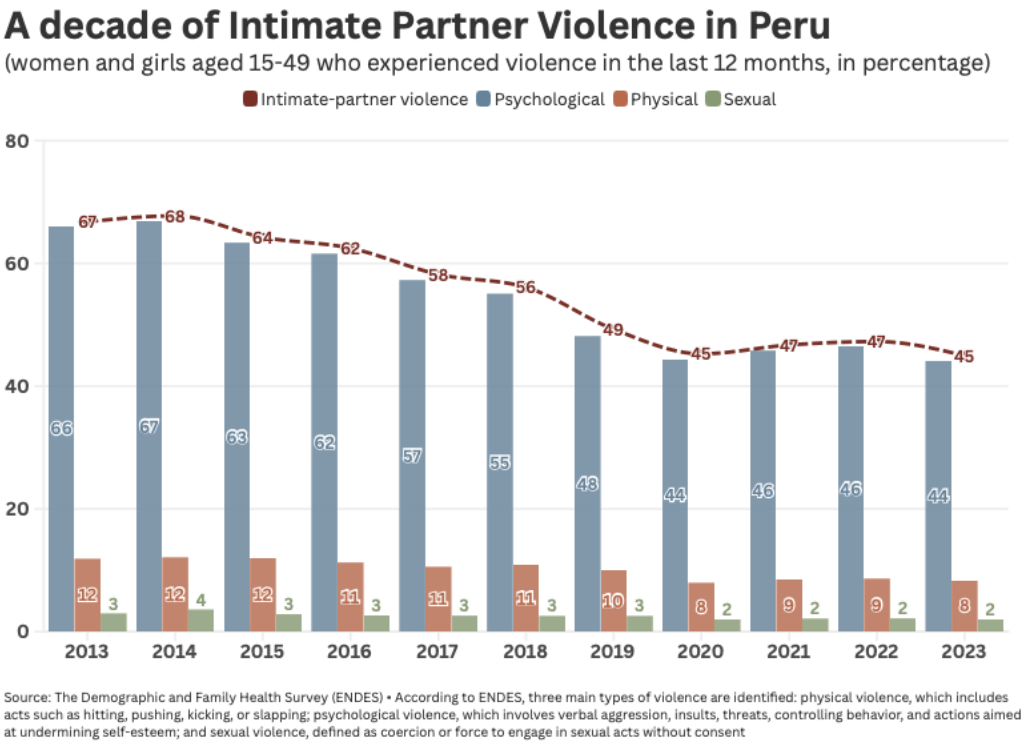


Figure 1: A decade of Intimate Partner Violence in Peru

Appendix 3 – Impact of the 2017 shock on IPV prevalence

Regression Results

	(1)	(2)	(3)
	Model 1	Model 2	Model 3
treated	-0.0337**	-0.0308*	0.0214
	(0.0164)	(0.0174)	(0.0230)
post_shock	-0.124***	-0.125***	-0.171***
	(0.0235)	(0.0241)	(0.0120)
treated_post	0.0349	0.0347	0.0340**
	(0.0281)	(0.0293)	(0.0139)
Urban		0.0337***	0.0514***
		(0.00821)	(0.00651)

Years of education	-0.00815***	-0.00870***
	(0.000694)	(0.000628)
Employed	0.0523***	0.0419***
	(0.00625)	(0.00493)
Poorest	0	0
	(.)	(.)
Poor	0.0153*	0.0157**
	(0.00818)	(0.00617)
Middle	-0.00241	-0.00184
	(0.0110)	(0.00714)
Wealthy	-0.0352**	-0.0366***
	(0.0135)	(0.00898)
Richest	-0.0886***	-0.0920***
	(0.0148)	(0.00992)
Married	0	0
	(.)	(.)
Cohabitating	0.0545***	0.0663***
	(0.00589)	(0.00542)
Widowed	0.121***	0.114***
	(0.0284)	(0.0275)
Divorced	0.275***	0.283***
	(0.0382)	(0.0385)
Separated	0.310***	0.322***
	(0.0118)	(0.0111)
Amazonas		0
		(.)
Ancash		0.129***
		(0.0298)

Apurimac	0.236***
	(0.0291)
Arequipa	0.172***
	(0.0233)
Ayacucho	0.0415**
	(0.0177)
Cajamarca	0.0339
	(0.0321)
Callao	0.117***
	(0.0292)
Cusco	0.190***
	(0.0282)
Huancavelica	0.146***
	(0.0285)
Huanuco	0.127***
	(0.0219)
Ica	0.0527***
	(0.0135)
Junin	0.0716***
	(0.0211)
La Libertad	0.0167
	(0.0246)
Lambayeque	-0.00259
	(0.0176)
Lima	0.0722***
	(0.0140)
Loreto	0.0254
	(0.0319)

Madre de Dios			0.0820**
			(0.0337)
Moquegua			0.105***
			(0.0234)
Pasco			0.117***
			(0.0253)
Piura			0.0922***
			(0.0130)
Puno			0.206***
			(0.0270)
San Martin			-0.0262
			(0.0197)
Tacna			-0.0356
			(0.0268)
Tumbes			0.0576***
			(0.0132)
Ucayali			0
			(.)
2015			0
			(.)
2016			-0.0193**
			(0.00829)
2018			0.0705***
			(0.0111)
2019			0
			(.)
Constant	0.651***	0.615***	0.513***
	(0.0141)	(0.0171)	(0.0213)

r2	0.0122	0.0624	0.0809
N	87933	87929	87929

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 1: Impact of the 2017 Rainfall Shock on IPV: Full table of the regression analysis

Appendix 4 – Mechanisms to explain IPV

Alcohol-related regressions

	(1)	(2)	(3)
	Model 1	Model 2	Model 3
treated	-0.0533***	-0.0438***	-0.0234
	(0.0146)	(0.0141)	(0.0209)
post_shock	-0.0485***	-0.0528***	-0.0571***
	(0.0152)	(0.0130)	(0.0101)
treated_post	0.0755***	0.0775***	0.0753***
	(0.0196)	(0.0194)	(0.0119)
Urban		0.0324**	0.0274*
		(0.0139)	(0.0138)
Years of Education		0.00542***	0.00555***
		(0.00112)	(0.00112)
Employed		-0.0158	-0.0173
		(0.0104)	(0.0107)
Poorest		0	0
		(.)	(.)
Poor		-0.0509***	-0.0466***
		(0.0144)	(0.0140)
Middle		-0.0585***	-0.0548***

	(0.0180)	(0.0183)
Wealthy	-0.109***	-0.110***
	(0.0192)	(0.0213)
Richest	-0.144***	-0.146***
	(0.0237)	(0.0270)
Married	0	0
	(.)	(.)
Cohabitating	0.142***	0.142***
	(0.0116)	(0.0113)
Widowed	-0.243***	-0.246***
	(0.0231)	(0.0229)
Divorced	-0.173***	-0.173***
	(0.0414)	(0.0421)
Separated	-0.0497***	-0.0476***
	(0.0131)	(0.0130)
Amazonas		0
		(.)
Ancash		0.0358*
		(0.0184)
Apurimac		0.0390**
		(0.0171)
Arequipa		0.0777***
		(0.0211)
Ayacucho		0.0224
		(0.0171)
Cajamarca		-0.0125
		(0.0220)
Callao		0.0680**

	(0.0303)
Cusco	0.0333**
	(0.0160)
Huancavelica	0.0578**
	(0.0229)
Huanuco	0.0107
	(0.0157)
Ica	0.0206
	(0.0230)
Junin	-0.0114
	(0.0212)
La Libertad	0.0169
	(0.0180)
Lambayeque	0.0585**
	(0.0224)
Lima	0.0597***
	(0.0196)
Loreto	0.139***
	(0.0149)
Madre de Dios	0.0788**
	(0.0376)
Moquegua	0.00732
	(0.0247)
Pasco	0.0286**
	(0.0131)
Piura	0.0638**
	(0.0254)
Puno	0.0593***
	(0.0182)

San Martin			-0.0101
			(0.0259)
Tacna			-0.0164
			(0.0163)
Tumbes			-0.0423*
			(0.0242)
Ucayali			0
			(.)
2015			0
			(.)
2016			0.0129
			(0.00872)
2018			0.0218***
			(0.00807)
2019			0
			(.)
Constant	0.377***	0.306***	0.259***
	(0.0122)	(0.0178)	(0.0197)
R2	0.00206	0.0450	0.0511
N	11671	11671	11671

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 1: Full regression table of alcohol-related aggressions as a mechanism

Mechanism Regressions: Agriculture employment and employed partner

	Agriculture employment		Employed partner	
	(1)	(2)	(3)	(4)
	Model 1	Model 3	Model 1	Model 3
treated	0.0372	0.221***	0.000126	-0.000729
	(0.0607)	(0.00702)	(0.00126)	(0.00179)
post_shock	-0.00889	-0.0122**	0.00310***	0.00461***
	(0.0433)	(0.00612)	(0.000932)	(0.000945)
treated_post	-0.0120	-0.00880	-0.000441	-0.000388
	(0.0851)	(0.00615)	(0.00149)	(0.00114)
Years of Education		-0.0258***		-0.0000360
		(0.000756)		(0.0000816)
Employed		0.0696***		0.00185**
		(0.00569)		(0.000778)
Poorest		0		0
		(.)		(.)
Poor		-0.363***		0.00147**
		(0.00717)		(0.000667)
Middle		-0.508***		0.00129
		(0.00847)		(0.00105)
Wealthy		-0.542***		0.000912
		(0.00843)		(0.00116)
Richest		-0.542***		0.000686
		(0.00961)		(0.00126)
Married		0		0
		(.)		(.)

Cohabitating	-0.0300***	-0.000198
	(0.00317)	(0.000488)
Widowed	0.0252	0.0000807
	(0.0221)	(0.00374)
Divorced	-0.00330	0.00430***
	(0.0176)	(0.000498)
Separated	-0.0755***	-0.00399***
	(0.00626)	(0.00105)
Amazonas	0	0
	(.)	(.)
Ancash	0.109***	0.00125
	(0.00604)	(0.00150)
Apurimac	0.0975***	-0.00182
	(0.0151)	(0.00147)
Arequipa	0.0821***	-0.000417
	(0.00966)	(0.00150)
Ayacucho	-0.0948***	-0.000333
	(0.00904)	(0.00179)
Cajamarca	-0.0889***	0.000106
	(0.00818)	(0.00153)
Callao	-0.0290***	-0.00663***
	(0.00785)	(0.00170)
Cusco	0.0790***	-0.00256
	(0.00806)	(0.00169)
Huancavelica	-0.103***	-0.000781
	(0.00575)	(0.00163)
Huanuco	0.145***	-0.00115
	(0.0101)	(0.00171)

Ica	-0.0422***	-0.00433**
	(0.00825)	(0.00178)
Junin	-0.121***	0.0000206
	(0.0114)	(0.00129)
La Libertad	0.0633***	-0.00178
	(0.00615)	(0.00186)
Lambayeque	-0.139***	-0.00269
	(0.00760)	(0.00177)
Lima	-0.180***	-0.00166
	(0.00742)	(0.00137)
Loreto	-0.0306***	-0.00505***
	(0.00615)	(0.00169)
Madre de Dios	-0.00944	-0.00114
	(0.0195)	(0.00135)
Moquegua	0.0987***	-0.000756
	(0.00750)	(0.00183)
Pasco	0.131***	0.0000161
	(0.0121)	(0.00150)
Piura	-0.105***	-0.000659
	(0.00642)	(0.00206)
Puno	0.108***	-0.00110
	(0.00619)	(0.00196)
San Martin	-0.0292***	-0.00428
	(0.00716)	(0.00446)
Tacna	0.0769***	-0.00775**
	(0.00802)	(0.00324)
Tumbes	-0.149***	0.00154
	(0.0175)	(0.00121)

Ucayali		0		0
		(.)		(.)
2015		0		0
		(.)		(.)
2016		0.00808*		0.00298***
		(0.00413)		(0.000862)
2018		0.00559		-0.0000122
		(0.00456)		(0.000722)
2019		0		0
		(.)		(.)
Constant	0.326***	0.829***	0.994***	0.993***
	(0.0316)	(0.00897)	(0.000747)	(0.00212)
R2	0.00137	0.434	0.000436	0.00211
N	87933	87929	87891	87887

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 2: Regression table of mechanisms: women or partner employed in agriculture, and partner's employment

Appendix 5 – Scoring criteria for prioritization of policy recommendations

Evaluation criteria		Low	High
Operational feasibility	Mission alignment	The recommendation benefits children indirectly and is an extension of Save the Children's core programming areas	The recommendation is targeted directly to children and Save the Children has core programming in the area
	In-house capacity	Save the Children does not have the in-house capability to implement the recommendation	Save the Children has capability in-house to implement the recommendation
	Efficiency	Save the Children would need significant additional budget or need to hire specialized staff to implement the recommendation	Save the Children can implement the recommendation with minimal additional budget and investment in specialized staff
Effectiveness	How likely	The link between implementing the recommendation and reduced risk to children and women is less certain (e.g., effects may be longer term)	The outcomes from implementing the recommendation are certain and will directly mitigate the risk to children or women experiencing GBV
	Size of impact	The recommendation impacts children or women directly targeted by the intervention (Smaller scale impact)	The recommendation impacts children or women on a broader scale (beyond direct impact on individuals)

Political supportability	Save the Children senior leadership may have some concerns with implementing the recommendation (e.g., due to possibility of backlash from the government or local community)	Save the Children senior leadership is likely to support implementing the recommendation

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