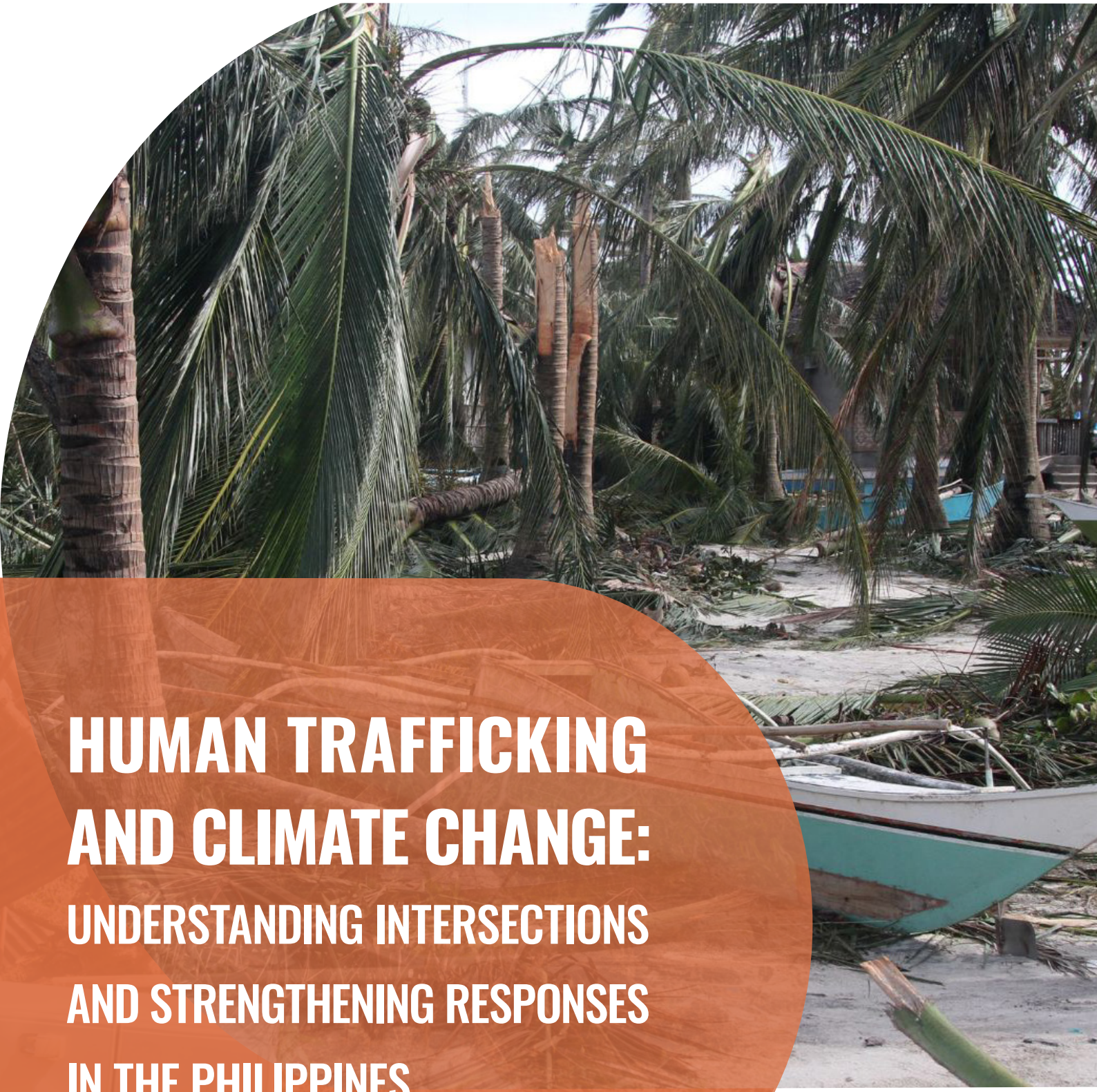
FREE THE SLAVES

JPIC-IDC, INC.



HUMAN TRAFFICKING AND CLIMATE CHANGE:

UNDERSTANDING INTERSECTIONS AND STRENGTHENING RESPONSES IN THE PHILIPPINES

Free the Slaves (FTS)

Free the Slaves (FTS) was founded in 2000 and has since committed itself to ending modern slavery. Today, FTS is widely recognized as a leader and a pioneer in the modern abolitionist movement. Through its work, FTS has driven systemic policy changes and empowered local communities to take leadership roles in their own protection. FTS prioritizes and fosters the creation of spaces for collaboration, serving as a catalyst that unites organizations, governments, and communities, thereby amplifying the collective impact of the anti-slavery movement. To advance its mission further and create a slave-free world, FTS has developed a unique multi-dimensional approach.

Justice Peace Integrity of Creation, Integrated Development Center, Inc. (JPIC-IDC)

is a faith-based Philippine NGO committed to strengthening families, protecting women and children, empowering communities, and addressing issues of human trafficking in the most vulnerable communities. JPIC-IDC believes in the holistic development of persons in their communities so that they are able to carve the kind of development they can pursue. JPICIDC is committed to work for: a continuing holistic education, the strengthening of families, protection and care of women and children, integral empowerment of communities towards sustainable development, and disaster preparedness and emergency response and rehabilitation.

Acknowledgments

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Authors: Dr Marta Furlan, Lianet Rosado

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Glossary

1 Child

A person below eighteen (18) years of age or one who is over eighteen (18) but is unable to fully take care of or protect himself/herself from abuse, neglect, cruelty, exploitation, or discrimination because of a physical or mental disability or condition (Republic of the Philippines, Republic Act 9208 or the Anti-Trafficking in Persons Act of 2003, as amended by RA 10364 also known as the Expanded Anti-Trafficking in Persons Act of 2012).

2 Climate Change

A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcing such as modulations of the solar cycles, volcanic eruptions, and persistent anthropogenic changes in the composition of the atmosphere or in land use (IPCC, 2018).

3 Forced Labor

Extraction of work or services from any person by means of enticement, violence, intimidation or threat, use of force or coercion, including deprivation of freedom, abuse of authority or moral ascendancy, debt-bondage or deception including any work or service extracted from any person under the menace of penalty (Republic of the Philippines, Republic Act 9208 or the Anti-Trafficking in Persons Act of 2003, as amended by RA 10364 also known as the Expanded Anti-Trafficking in Persons Act of 2012).

4 Human Trafficking

Recruitment, obtaining, hiring, providing, offering, transportation, transfer, maintaining, harboring, or receipt of persons with or without the victim's consent or knowledge, within or across national borders by means of threat, or use of force, or other forms or coercion, abduction, fraud, deception, abuse of power or of position, taking advantage of the vulnerability of the person, or the giving or receiving of payments or benefits to achieve the consent of a person having control over another person for the purpose of exploitation which includes at a minimum the exploitation or the prostitution of others or other forms of sexual exploitation, forced labor or services, slavery, involuntary servitude or the removal or sale of organs. (Republic of the Philippines, Republic Act 9208 or the Anti-Trafficking in Persons Act of 2003, as amended by RA 10364 also known as the Expanded Anti-Trafficking in Persons Act of 2012).

5 Sexual Exploitation

Participation by a person in prostitution, pornography, or the production of pornography in exchange for money, profit or any other consideration, or where the participation is caused or facilitated by any means of intimidation or threat, use of force, or other forms of coercion, abduction, fraud, deception, debt bondage, abuse of power or of position or of legal processes, taking advantage of the vulnerability of the person, or giving or receiving of payments or benefits to achieve the consent of a person having control over another person, or in sexual intercourse or lascivious conduct caused or facilitated by any means provided in this Act 5 (Republic of the Philippines, Republic Act 9208 or the Anti-Trafficking in Persons Act of 2003, as amended by RA 10364 also known as the Expanded Anti-Trafficking in Persons Act of 2012).

6 Slavery

Status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised (Republic of the Philippines, Republic Act 9208 or the Anti- Trafficking in Persons Act of 2003, as amended by RA 10364 also known as the Expanded Anti- Trafficking in Persons Act of 2012).

7 Vulnerability

In the context of trafficking, the term 'vulnerability' is often used to refer to intrinsic, environmental, or contextual factors that increase the susceptibility of a person or group to becoming a victim of trafficking. It is generally recognized that these factors include violations of human rights, such as poverty, inequality, discrimination, and gender-based violence (UNODC, 2013).

Acronyms

4Ps: Pantawid Pamilyang Pilipino Program
BCPC: Barangay Council for the Protection of Children
COVID: Coronavirus Disease
CSEC: Commercial Sexual Exploitation of Children
CSO: Civil Society Organization
DPWH: Department of Public Works and Highways
FGD: Focus Group Discussion
FTS: Free the Slaves
GAP: Gender and Development
IEC: Information, Education, and Communication
ILO: International Labour Organization
INGO: International Nongovernmental Organization
JPIC-IDC: Justice Peace Integrity of Creation, Integrated Development Center, Inc.
KII: Key Informant Interview
LGU: Local Government Unit
NGO: Nongovernmental Organization
OFW: Overseas Filipino Worker
OSEC: Online Sexual Exploitation of Children
PAGASA: Philippine Atmospheric, Geophysical and Astronomical Services Administration
PAR: Philippines Area of Responsibility
PHP: Philippine Peso
PWD: Person with Disability
STD: Sexually Transmitted Disease
TESDA: Technical Education and Skills Development Authority
TIP: Trafficking in Persons
TUPAD: Tulong Panghanapbuhay sa Ating Disadvantaged/Displaced Workers
USD: United States Dollar
VAWC: Violence Against Women and Children

Executive Summary

Introduction

Global estimates indicate that 49 million people are victims of modern slavery worldwide.[1] As is widely recognized by scholars and practitioners in the field, the vulnerability of individuals and communities to modern slavery is determined by factors such as conflicts, food insecurity and water insecurity, corruption, lack of access to education, inadequate healthcare, poverty, gender inequality, racial inequality, human rights violations, migration and displacement, and harmful cultural norms and practices. However, it is increasingly recognized that climate change also contributes to – and is contributed by – the reality of modern slavery, as was most recently emphasized by the UN Special Rapporteur on Trafficking in Persons.[2]

On the one hand, environmentally degrading industries, which most often rely on illegal exploitative labor, contribute to climate change.[3] On the other hand, climate change-related events such as droughts, floods, typhoons, earthquakes, and landslides might create and/or exacerbate factors of vulnerability to modern slavery.[4] Trapped into multiple, interconnected, and mutually-reinforcing conditions of vulnerability, communities become more exposed to the risk of exploitation by human traffickers. Having these considerations as its point of departure, this study proposes to explore the intersectionality between climate change and modern slavery and better illuminate how climate change-related hazards influence vulnerability to human trafficking. In fact, while some valuable studies on the connection between climate change and human trafficking have emerged over the past few years,[5] the topic continues to be relatively underexplored in the broader literature on modern slavery. More research is therefore needed to increase our knowledge and improve our interventions.

As part of a series of research papers that FTS, together with relevant local partners, is publishing on the topic of climate change and modern slavery, this study focuses on the Philippines – a country where climate change-related calamities and human trafficking are prevalent.

Methodology

This study aims to explore how climate change influences vulnerability to modern slavery in the Philippines. To do so, we adopted a qualitative approach and conducted field research in four communities located in the regions of Eastern Visayas and Caraga (Eastern Philippines). Semi-structured surveys, focus group discussions, and key informant interviews were the research methods employed to collect primary data. A total of 123 individuals including community members, government officials, law enforcement agencies, NGO/INGO representatives, and topical experts participated in the research. To strengthen the validity and reliability of our findings, we also referred to secondary data such as statistics, reports, and articles.

Findings

The regions of Eastern Visayas and Caraga, like much of the Philippines, have experienced a wide range of slow-onset hazards and rapid-onset hazards over the past decade, including heavy rainfall, floods, sea level rise, typhoons, earthquakes, tsunamis, and tornadoes. The communities that participated in our research have revealed that they implement some pre-hazard strategies to prepare for those events. However, a series of limitations affect the efficiency of those preparations:

- Preparation is primarily directed towards the mitigation of rapid-onset, as opposed to slow-onset, events.

- Preparation is dependent on financial resources, age, awareness, location, and exposure to previous disasters, which leads to significant variation in pre-disaster preparedness across community members.

- Preparations are inadequate to guarantee a thorough and comprehensive protection, especially when it comes to property damage, destruction of food sources, destruction of infrastructure, and loss of livelihoods.

Similarly, our conversations with community members, government officials, and NGO representatives have confirmed that post-hazard strategies are adopted to respond to calamities. However, they appear to suffer from important shortcomings:

- Recovery strategies are primarily focused on the clearing of debris, the distribution of short-term relief, and reconstruction. Conversely, access to food, water, safe shelter, decent work, healthcare, and education are not addressed properly.

- Recovery strategies tend to be untimely, unequal, and unjust, ultimately perpetuating existing hierarchies of power that result in different recovery outcomes.

- Recovery strategies fail to provide individuals with the tools necessary to better resist future hazards. Given the recurrence of environmental hazards in the observed regions, some families remain in a perpetual cycle of recovery.

In the context of these inadequate preparation and recovery strategies, climate change-related hazards have an adverse impact on communities in Eastern Visayas and Caraga. Specifically, natural hazards lead to the following conditions of vulnerability:

Facilitated by this post-hazard multi-dimensional vulnerability that affects many (when not most) community members, human traffickers can more easily engage in practices of exploitation. In the communities observed in this study, modern slavery mostly takes the forms of:

- Labor trafficking and forced labor
- Hazardous child labor
- Sexual trafficking
- Commercial sexual exploitation of children (CSEC)
- Online sexual exploitation of children (OSEC)

Recommendations

Building on these findings, a series of recommendations are offered to reduce vulnerability to human trafficking in settings affected by natural hazards:

- The government should devote more resources to building the capacity of local communities to prepare for, and respond to, climate change-related events.

- The government should enhance the quantity and quality of post-disaster assistance to reduce vulnerabilities.

- The government should introduce modern slavery considerations in sustainable development programs and climate change policies.

- The government should increase funding opportunities for programs that build communities' resilience to natural hazards and for programs that address informal economy sectors in which climate change and modern slavery intersect.

- Humanitarian NGOs working in the Philippines should enhance the quality and quantity of post-disaster assistance, especially among families that are excluded from government assistance.

- Development NGOs working in the Philippines should provide climate change-affected barangays with trainings on climate-resilient activities, climate-smart agriculture, as well as livelihood diversification and planning.

- Anti-trafficking NGOs working in the Philippines should establish, or enhance, awareness-raising campaigns about modern slavery in climate change-affected communities, especially among sub-communities most exposed to the impact of natural hazards.

- Anti-trafficking NGOs working in the Philippines should establish survivor networks in climate change-affected barangays and should pursue a meaningful engagement with them.

- Community leaders in hazard-affected barangays should address harmful cultural norms that typically prevail in times of natural hazards and related economic hardships.

- Community leaders in hazard-affected barangays should promote a culture of constructive solidarity and strengthen mutual support networks.

Introduction

Modern slavery is commonly conceptualized as an umbrella term that includes a wide range of practices in which one (or more) individual controls, abuses, and exploits another individual, or group of individuals, for material or immaterial benefit. In other words, modern slavery denotes all those situations in which a person is forced to provide labor or sexual services under the threat of violence or other serious harm, for little to no pay, and with no possibility of walking away. Modern slavery can thus take forms as different between them as forced labor, commercial sexual exploitation, debt bondage, domestic servitude, forced marriage, and the use of child soldiers.

Vulnerability to modern slavery at the individual and community level is determined by various social, economic, political, and cultural factors, such as conflicts, food and water insecurity, corruption, lack of access to education and healthcare, extreme poverty, unemployment, gender inequality, racial inequality, human rights violations, migration and displacement, and harmful cultural norms and practices. Importantly, these drivers of vulnerability are not mutually exclusive, but rather they can (and often do) coexist and reinforce each other. An example in this regard is observed in contexts of conflict, when armed confrontations often drive people into poverty and internal displacement/ international migration.

Besides the factors mentioned above, it is increasingly recognized that climate change also intersects with the reality of modern slavery in different ways. Specifically, research on the topic has suggested that illegal activities of resource extraction, which typically rely on forced labor, contribute dramatically to environmental degradation and climate change.[6] At the same time, climate change-related disasters create and exacerbate conditions of vulnerability that expose individuals to the risk of being exploited into forms of modern slavery.[7]

Proceeding from these considerations, this study aims to explore the intersectionality between climate change and modern slavery and better illuminate how climate change (and climate change-related hazards) influences vulnerability to human trafficking. In fact, while some valuable studies on the connection between climate change and human trafficking have been produced, the topic has remained relatively underexplored within the broader modern slavery literature.[8] This, to be certain, is not an isolated lacuna. Rather, it is part of a broader tendency within the modern slavery scholarship to dismiss the forces that underlie, exacerbate, and perpetuate factors of vulnerability to modern slavery. In other words, while a factor such as poverty is widely recognized as a factor of vulnerability to exploitation, much less attention has been devoted to identifying the forces that underlie poverty.

More research on the impact of climate change on vulnerability to modern slavery is therefore needed to increase our knowledge and improve our interventions. More specifically, there is a need for context-specific, participatory, and community-based research that prioritizes the experiences, perspectives, and needs of the affected communities. At the same time, there is a strong need for research that aims to offer realistic, implementable, and evidence-based recommendations aimed at benefiting those individuals and communities that are caught in the combined trap of natural hazards and exploitation.

To shed light on the reality of modern slavery in climate change-affected communities, this study begins by introducing the nexus between climate change, vulnerability, and modern slavery. It then applies this conceptual framework to the study of two regions in the Philippines, Eastern Visayas and Caraga. The findings from the two selected regions suggest that in communities without adequate pre-disaster preparation strategies and post-disaster recovery mechanisms, climate change-related hazards lead to multiple conditions of vulnerability that heighten the risk of exploitation by human traffickers – especially in the forms of labor trafficking and forced labor, child hazardous labor, sex trafficking, commercial sexual exploitation of children, and online sexual exploitation of children. This is further facilitated by the fact that in the two regions under investigation climate-related vulnerabilities intersect with gender inequalities, class inequalities, corruption, weak law enforcement, and harmful cultural norms.

Through its analysis, this study contributes to the anti-human trafficking literature, confirms some of the findings advanced therein, and adds to existing knowledge with new empirical insights. The study concludes with recommendations to better address the risk of modern slavery incidence in communities affected by climate change in the Philippines. Those recommendations are targeted to local authorities and CSOs, the Philippine's national government and national NGOs, international governments and international NGOs.

Methodology

As was noted above, this research focuses on the Philippines. According to the Global Climate Risk Index, the Philippines is one of the countries most impacted by climate change worldwide.[9] At the same time, according to the Global Slavery Index, the Philippines is a country significantly affected by modern slavery (784,000 victims).[10] Given these characteristics, the Philippines seemed to be an appropriate context where to unpack the mechanisms whereby climate change influences vulnerability to modern slavery.

Using the Philippines as case study, we focused specifically on the regions of Eastern Visayas in Visayas and Caraga in Mindanao, which are characterized by incidence of rapid-onset and slow onset hazards, incidence of human trafficking, and feasibility of conducting field research. Within the selected regions, we visited four local communities where we distributed 40 semi-structured surveys to community members and conducted 8 focus groups. The questions pertained to the effects of climate change, coping strategies, and vulnerability to modern slavery. We also conducted (on-line and in person) key informant interviews with local and regional government officials, law enforcement officials, NGO/INGO representatives, and climate change and modern slavery experts.

To strengthen the validity and reliability of our findings, we also referred to secondary quantitative and qualitative data in the form of statistics, policies, and reports.

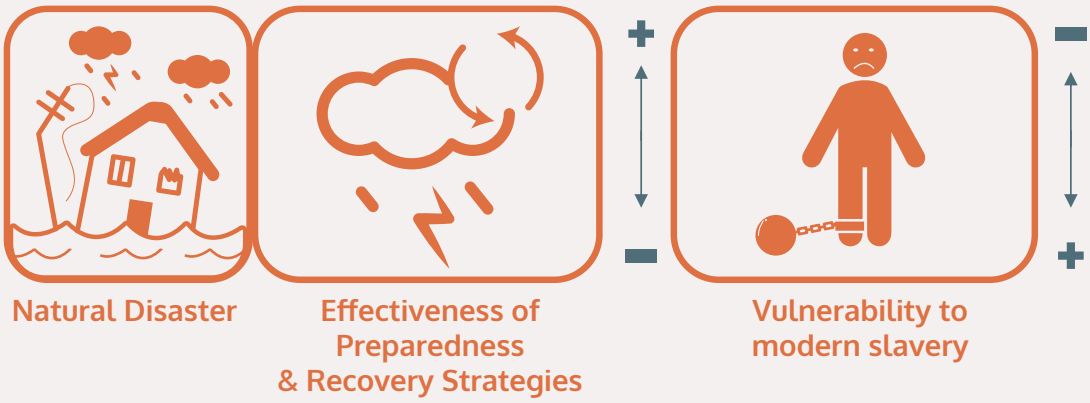
Deeply aware of the ethical concerns raised by any research that involves the participation of human subjects and that revolves around sensitive topics such as modern slavery, we decided to fully anonymize direct quotations of participants. Only their role (e.g. community member) is explicitly indicated throughout the report. This specification, in fact, is believed to be important to better understand local dynamics, while posing no risk to the security, well-being, and privacy of those who generously contributed to this research with their time and insights.

Finally, upon completion of the data collection process, we held a validation workshop with stakeholders based in the region to review the findings, discuss possible recommendations, and minimize the risk that researchers would inadvertently bias or misinterpret the findings. The stakeholders who participated in the validation process included local government officials, law enforcement officials, topical experts, and representatives of local NGOs and international NGOs.

Conceptual Framework

As noted above, scholars in the anti-human trafficking literature have increasingly recognized that climate change and modern slavery intersect in important ways and have suggested that the relationship between them is a bi-directional one. On the one hand, illegal activities of mining and logging by criminal organizations, gangs, and armed groups that typically occur in areas where the law enforcement arm of the State does not reach, most often rely on forced labor (including forced child labor) extracted from vulnerable, marginalized, and neglected communities. At the same time, those illegal activities of extraction are responsible for environmental degradation (e.g. deforestation, contamination of water resources, soil degradation), which "severely alters the ecosystem and exacerbates the effects of climate change."[11]

On the other hand, climate change-related events such as droughts, floods, typhoons, and landslides can create and/or exacerbate vulnerability to modern slavery.[12] Specifically, communities without adequate pre-hazard preparation strategies and post-hazard recovery strategies are adversely affected by calamities and are driven into poverty, migration and displacement, water and food insecurity, and health emergencies. In these conditions, they inevitably become (more) vulnerable to exploitation into forms of modern slavery. Conversely, communities that are equipped with effective preparation and recovery strategies are better positioned to resist the devastating impact of climate hazards. As such, they are less vulnerable to the risk of exploitation by human traffickers. Imagining vulnerability to modern slavery as a continuum, we suggest that the effectiveness of a community's preparation and recovery strategies in times of hazards contributes to determining its position along the spectrum.



[Authors: Marta Furlan, Lianet Rosado]

Figure 1. Vulnerability to Modern Slavery in Climate-Change Affected Communities

As depicted in Figure 1, communities that are hit by natural hazards and lack adequate preparation and recovery strategies find themselves in a condition of heightened vulnerability. This is even more so the case when the impacts of climate change intersect with factors such as gender inequality, race-based discrimination, caste inequalities, and human rights violations. Under these circumstances, the risk of individuals being exploited by human traffickers become especially pressing. Put differently, absent effective preparation and recovery strategies, hazards "heighten the risk [among survivors of climate change-related events] and create the right environment for traffickers to exploit the vulnerabilities of the affected population".[13]

For instance, following the flood that hit Thailand in 2011, migrants who were already struggling with language and economic barriers, unregulated markets, and discrimination, found themselves driven into situations of forced labor and debt bondage. Similarly, children who experienced separation from their parents, the closure of schools, and exposure to unfamiliar adults inside shelters became vulnerable to trafficking.[14] In Nepal after the 2015 earthquake, the adverse impact of the hazard interacted with pre-existing gender inequalities in the patriarchal culture and caste system that ultimately placed girls at high risk of trafficking, especially in forced prostitution.[15] In Bangladesh, children coming from flood-affected districts also became vulnerable to exploitation in the sex industry.[16] In India and in Malawi family affected by floods and impoverished by their impact sold their daughters as brides.[17] In the Indian Sundarbans, opportunistic traffickers have exploited the financial distress of hazard-affected people by advancing false promises of work or marriage, leading victims to embark on journeys that ended in situations of forced labor.[18]

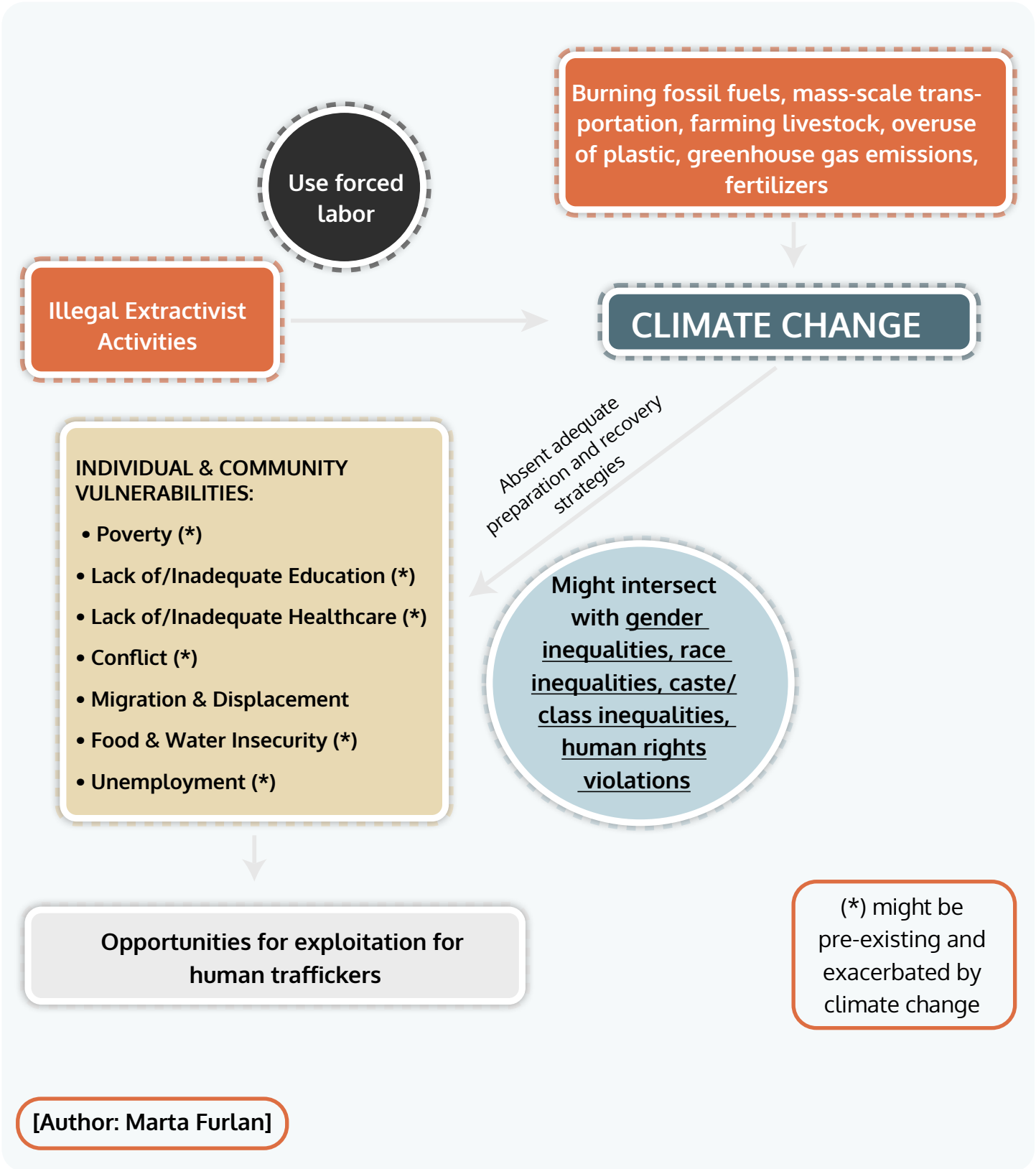


Figure 2. The climate change-human trafficking nexus

Climate Change in Eastern Visayas and Caraga

The regions of Eastern Visayas and Caraga are affected by natural hazards associated with climate change. According to most community members, those hazards are becoming increasingly more frequent and increasingly more severe.

> "In the past, we only had rain sometimes, and [it rained] on the expected time of the year ... there were very few typhoons. Now, a typhoon happens every month."
>
> Community member

Slow-onset events are those that unfold gradually over time, such as increasing temperatures, desertification, loss of biodiversity, land and forest degradation, glacial retreat, ocean acidification, sea level rise, and salinization.[19] Conversely, rapid-onset events are those that develop quickly and unexpectedly, such as earthquakes, volcanic eruptions, floods, cyclones, and tsunamis. In Eastern Visayas and Caraga, the most common hazards are heavy rainfalls, floods, droughts, rising temperatures, and sea level rise. Communities in Eastern Visayas are also affected by rising water levels. In Caraga, El Niño is responsible for lack of rainfall, droughts, hot temperatures, and water scarcity.[20] Typhoons are also common in both regions. During typhoons, rain might fall uninterrupted for 5 days, during which flooding typically occurs. In Eastern Visayas, earthquakes are also a recurrent event due to an active fault line that passes through the region.[21] Other common hazards in Eastern Visayas and Caraga include landslides, storm surges, tsunamis, and tornadoes. These are commonly triggered by typhoons and earthquakes,[22] but they have also been associated with increased rainfall activity during La Niña.[23]

Pre-disaster Preparedness

Despite the higher predictability of slow-onset events, individuals, organizations, and governments in Eastern Visayas and Caraga usually prepare less for those hazards. Different reasons explain this. First, because slow-onset hazards develop gradually, there is a widespread perception that an immediate response is unnecessary. Second, because the effects of slow-onset hazards are typically felt over the course of weeks, months, years, and even decades, the severity of those disasters is often underestimated and overlooked. Third, some community members that participated in this research reported that they are discouraged from preparing for slow-onset hazards due to financial constraints, a sense of security given from living in disaster-proof areas, and a lack of awareness on how to prepare. The only exceptions to this general tendency not to prepare for slow-onset events are preparations made for prolonged periods of heavy rainfall. For instance, some respondents described preparing meals in advance in anticipation of electricity cuts, wrapping clothes and food and storing them in protected locations, purchasing boots and raincoats, and staying indoors.

> "When that starts happening, like when it rained the whole day or night, I would start preparing. I will prepare a storage box to put the blankets, clothes and food for when the disaster arrives, I would be ready to evacuate when there's a need to evacuate."
>
> Community member

Considerably more preparation efforts are made in anticipation of rapid-onset hazards. However, it appears that preparations are mostly directed towards typhoons, while they ignore earthquakes, landslides, tsunamis, and tornadoes. This is probably explained by the high prevalence of typhoons relative to other events. Over the past decade, in fact, the two regions investigated in this research have been hit by two devastating typhoons – typhoon Bopha (locally known as Pablo), which hit Caraga in December 2012 and caused 1,901 fatalities, and typhoon Haiyan (locally known as Yolanda), which hit Eastern Visayas in November 2013 and caused 6,352 fatalities.

> "[...] when it was announced that there was a typhoon, that was Yolanda, I prepared alcohol, soap, Colgate[24], medicine, flash-light, then I had a small radio that is bro-ken now, battery operated. Then set aside a little money. Not in big quantities but in small ones. Then the rice. About a few kilos because there were just the two of us. And then the sardines, noodles, eggs. [...]"
>
> Community member

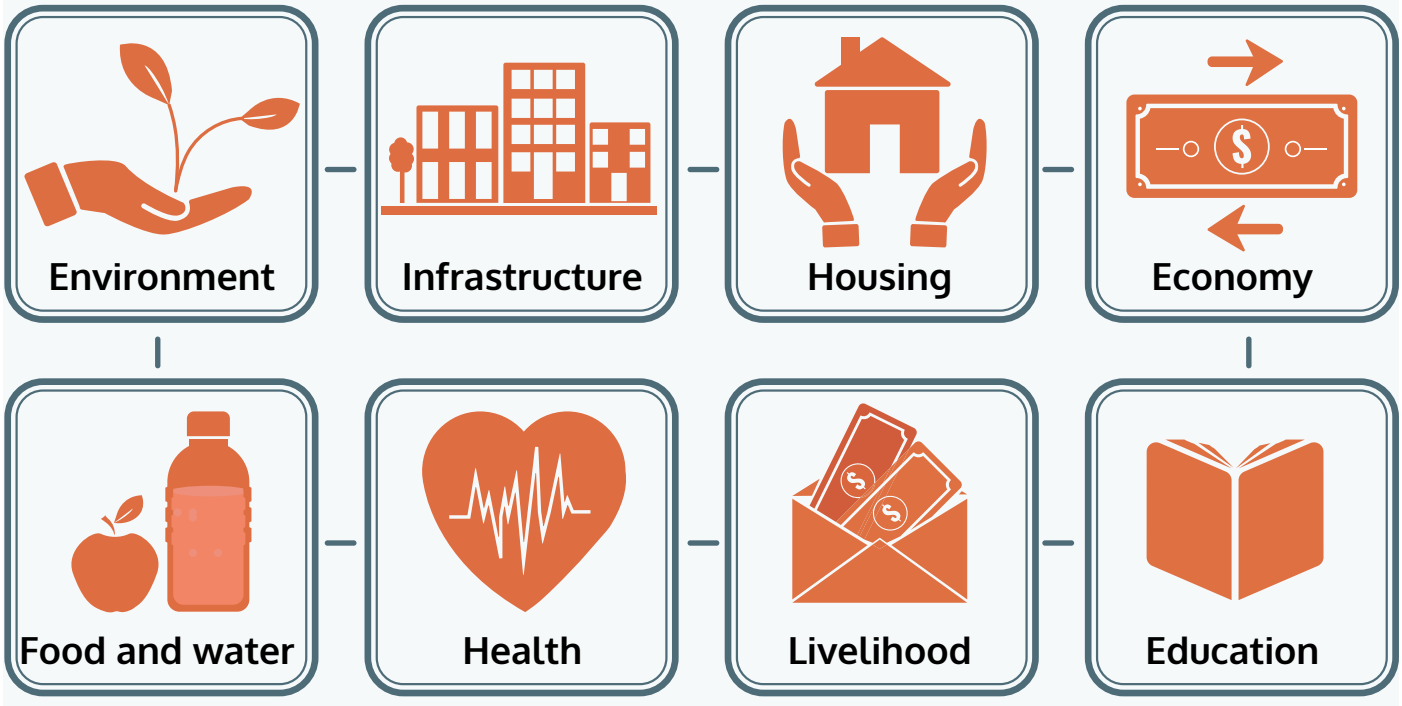
As far as preparations are concerned, people typically place heavy objects on the roofs of their houses to prevent them from being blown off, cover windows with plywood, gather medicine, clothes, mats, flashlights, mosquito nets, thermos, radios, and toiletries, wrap belongings in cellophane and place them in easily transportable bags or containers. Families who can afford a few days' supply of food, cook cassava, sweet potatoes, bananas, eggs, sardines, canned goods, rice, and noodles in advance. The very few ones who are financially stable also set money aside to purchase essentials in the post-hazard phase. Households from the most exposed areas relocate to safe shelters, such as schools, gyms, barangay halls, homes of friends, neighbors, and relatives, makeshift huts in elevated areas, and quarantine facilities (since the COVID-19 pandemic). What needs to be emphasized, however, is that preparations are not uniform across community members but rather depend on factors such as socio-economic status, age, awareness, location, experience of previous disasters, and family size.

> "[We would prepare] medicine, water, food even if it's just biscuits. Because if the barangay alerts us to evacuate, then we have them ready. Medicine is really important. Then food and flashlight because there would be no electricity. [...] Also, a pillow and mat, that's all."
>
> Community member

Throughout the pre-hazard preparation process, barangay officials and government officials monitor weather conditions through the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA). They typically inform communities on the scale of the hazard, the expected time of arrival, the best practices for preparedness, evacuation sites, and volunteer opportunities. They do so through house-to-house visits, gatherings, and announcements on speakers. From the moment a hazard is expected, the barangay communicates with government agencies to ensure appropriate conditions in evacuation sites, secure prepositioned relief packs, and obtain the necessary search and rescue equipment.

Multi-dimensional Hazard Impact

This study finds that slow-onset and sudden-onset hazards in Eastern Visayas and Caraga cause immediate shocks to eight main areas. Importantly, those climate change-related shocks are often interconnected, traveling from one sphere to another.



[Author: Lianet Rosado]

Figure 3. Multi-faceted shocks of climatic hazards

In Eastern Visayas and Caraga, hazards such as typhoons, earthquakes, and landslides typically destroy or damage infrastructure, including water wells, medical facilities, as well as electricity and communication lines. Houses might also be damaged or destroyed. Floods during the rainy season heavily damage houses and personal belongings, while typhoons and earthquakes rapidly demolish properties, with super typhoons damaging also houses built from concrete.

> “For us, […] during the flash flood, our house was washed out. And then Yolanda came and it was still the same […]. Even though we had a two story semi-finished concrete house, for the second time, our home was washed out.”
>
> Community member

Roads, canals, and bridges are also impacted. In severe cases, entire communities become inaccessible because of blocked or flooded roads. For instance, in December 2020 tropical cyclone Vicky flooded and destroyed the bridge of one community in Caraga. As a result, some people had to tread through water for hours to meet their basic needs.

> Mostly here, when there are typhoons, everything would be flooded, so there will be no exit for us going to the bridge. The bridge gets submerged. So, we are just stuck here.
>
> Community member

Damage and destruction extends also to schools and educational materials, as occurred in Eastern Visayas during typhoon Yolanda. Access to school, moreover, can easily be impeded by damages to roads, bridges, and other infrastructure crucial to mobility. Additionally, and as mentioned above when discussing pre-disaster preparation strategies, communities faced with the risk of typhoons often turn schools into evacuation centers. When these measures are taken, children from affected communities are temporarily unable to continue their studies.

> [after typhoon Pablo] schools were not allowed to immediately operate because there was still an evacuation. There were still people evacuating and there was still a lot of cleaning to do.
>
> Community member

Droughts, rising temperatures, heavy rainfall, floods, and landslides are also responsible for the destruction of crops. This devastation reduces farmers' livelihoods and the communities' food supply. Rising sea level and typhoons also pose a risk to fish populations, which negatively impacts the livelihoods of fisherfolk as well as the subsistence of populations with a fish-based diet. This effect is observed also during heavy rains, due to an inability to fish because of strong currents and murky waters.

Similarly, hazards such as heavy rainfall, typhoons, earthquakes, and landslides were found to negatively affect tunnel mining due to the increased risk of tunnel collapses as well as cuts to electricity and infringed mobility, which force miners to postpone their work and lose their income. In Caraga, for instance, miners recalled losing two months of work after a typhoon damaged the electricity line.

> "[If there is a flood] They [the miners] cannot work because they cannot go near the stream. And they also will not enter the tunnel out of fear of the tunnel collapsing."
>
> Community member

However, it is not only farmers, fisherfolk, and miners who suffer the economic impact of natural hazards. Damages to buildings and infrastructure also affect other workers and businesspeople. An example in this regard are sari-sari stores,[25] often forced to cease their activities after a disaster either because the store gets destroyed or because the merchandise gets irreparably damaged. Another example is that of vehicle drivers, who are unable to work if major infrastructure was destroyed by the hazard or if debris blocks the road.

As noted, in Eastern Visayas and Caraga natural hazards are responsible for the loss of food supplies, such as crops and fish, as well as for the damage to water wells. Infringed mobility also affects the capacity of individuals to provide food and water as well as the capacity of aid trucks to reach affected communities.

> "[...] you can't find food because you can't go to work or to where you need to go. [...] It's really difficult to find a source of water here, especially for drinking. It is affected [...] because it becomes dirty [...]."
>
> Community member

Calamities also affect communities' health. In Caraga, food supplies depleted by natural disasters compromised nutrition and placed individuals at risk of health complications. In both Caraga and Eastern Visayas, individuals recalled experiencing flu, coughs, and sore eyes in times of droughts. Following typhoon Yolanda, many community members reported respiratory infections, skin disease, diarrhea, fever, and hypertension. Typhoons, landslides, and earthquakes also expose individuals to the risk of physical injuries and death, due to falling trees, collapsing buildings, and hazardous debris. Moreover, and as noted before, damages to infrastructure can extend to clinics and hospitals.

Besides physical well-being, natural hazards are also responsible for fear and anxiety. Super typhoons Yolanda and Pablo caused significant trauma and post-traumatic stress disorder that continue to shape the lives of those affected.

> "Usually, here people suffer from trauma. [...] Trauma because they were afraid to die [...] That was the second traumatic event here in [the town of] Ormoc after the flash flood. That was really severe too."
>
> Community member

Post-Disaster Coping Strategies

Following natural hazards, community members and community leaders, civil society organizations, and government agencies proceed to engage in relief provision and recovery efforts. The clearing of debris is usually among the first responses. Following that, electricians, engineers, and construction workers strive to reestablish access to water, communication, and electricity. Coastal cleanups are also conducted, and trees and plants are planted to regenerate affected areas, facilitate a return to agricultural activities, and secure food supplies.

As far as food is concerned, food relief packs are provided in evacuation centers. However, respondents in Eastern Visayas and Caraga have noted that food packs are intended for mere sustenance or survival, not for long-term food security. At the same time, it has been noted that food relief is provided in a somewhat arbitrary way, irrespective of households' size, and without being informed by a needs' assessment. Although government representatives suggest that this is not the case, individuals from the communities surveyed believe that relief distribution occurs through unequal processes whereby people with a higher socio-economic standing and with better connections with the authorities are likely to receive better relief and to recover at a faster rate.

> "After Yolanda, they said that the typhoon showed that there was no distinction between the rich and the poor. But actually, when you go back a month after, you would see who was able to recover and who was not."
>
> Environmental NGO representative

The relief provided to communities, moreover, varies according to the type and severity of the disaster. In the aftermath of severe typhoons, food packs are typically provided. Conversely, there was no indication that food packs were provided during times of flooding. In addition, even in the case of comparable disasters, the quality and quantity of the relief provided varies. In the case of typhoon Yolanda in Eastern Visayas, the extent of the damage encouraged government agencies and international organizations to provide food and water for weeks and months following the hazard. In Caraga, conversely, most households did not receive food packs after typhoon Pablo.

Besides food assistance, in the post-hazard phase government agencies prepare lists of households that suffered damages and that, as such, qualify for housing assistance. As noted in the case of food relief packages, however, housing assistance is distributed unevenly among community members, with preferences allegedly made to the advantage of the most powerful and best connected. Instances of corruption among officials in charge of administering assistance were also reported.

> “[…] our house was completely destroyed […] but it was listed under ‘partially-damaged’. Then, the other houses that were okay were listed under ‘totally-damaged’. IOM [International Organization for Migration] was distributing materials but only the ones closest to them got the aid.”
>
> Community member

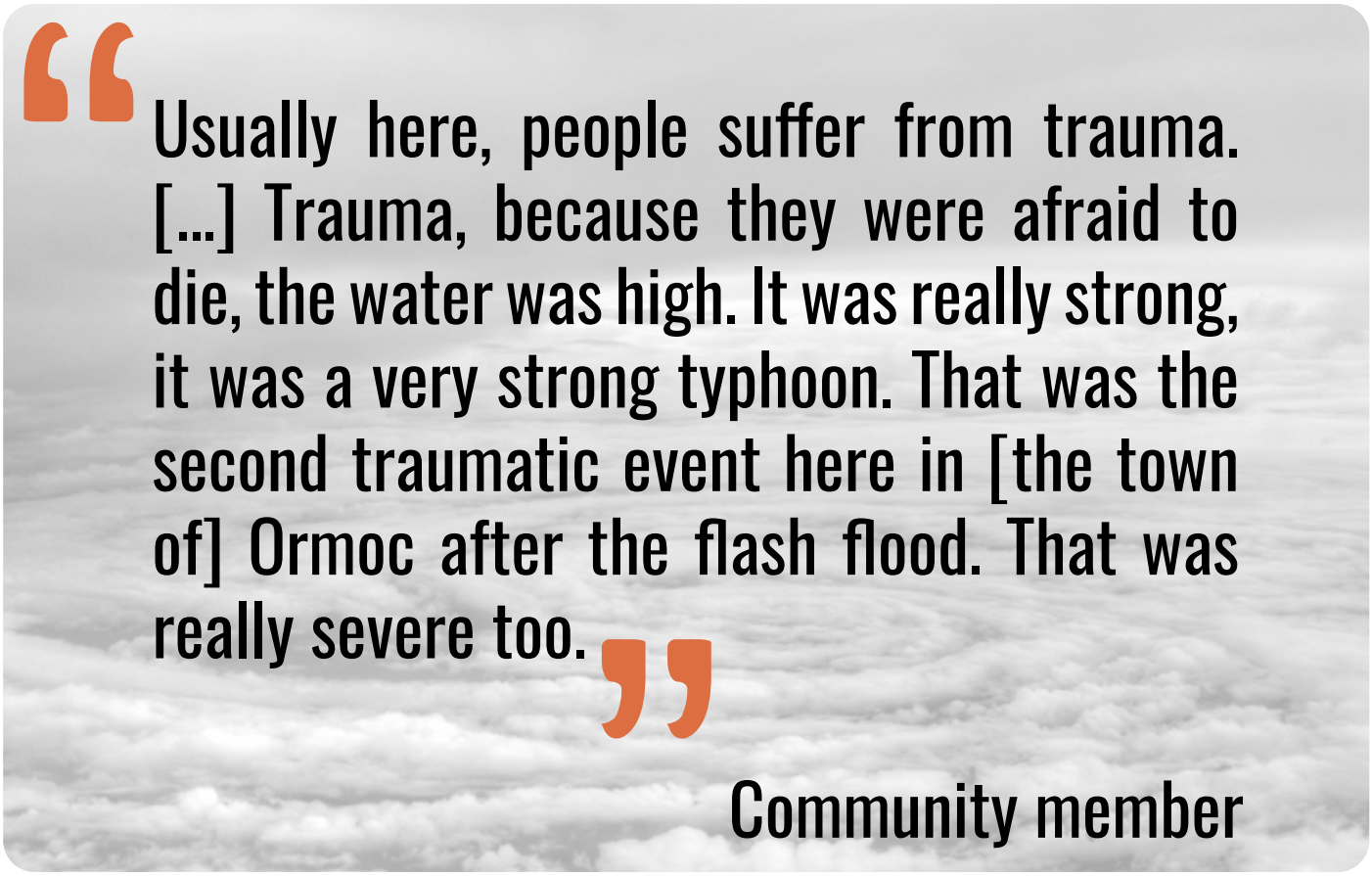
Housing assistance, moreover, depends on the type of disaster, with damages caused by typhoons more likely to be adequately compensated. In the aftermath of typhoon Pablo in Caraga and typhoon Yolanda in Eastern Visayas, those whose houses had been totally damaged were given 10,000-30,000 PHP (~174-523 USD). Conversely, after an earthquake in Caraga that caused major damages to properties, residents were provided with merely 4,000 PHP (~70 USD). Nevertheless, even in the case of typhoons, interviews revealed that assistance may take months to materialize and that the sums provided are insufficient to purchase proper housing materials.

To contribute to people's economic recovery, the government typically extends to affected persons cash-for-work programs such as TUPAD.[26] There is consensus among community members that these programs are beneficial. However, they are temporary, limited to a small group of workers, and exclusively geared towards men. Besides that, financial assistance is provided to business-owners, but it has been noted by respondents that it may take weeks or months to be delivered.

> "The number one effect of the disaster is really financial for us [...] That is why you become frugal with money...You need to budget everything...."
>
> Community member

Since several people experience injuries and health complications during and after hazards, emergency and medical assistance is one of the most pressing needs. However, access to long-terms healthcare does not seem to be a priority and the efforts invested in this area are largely insufficient.

Moreover, the psychological dimension remains little addressed, if at all. In Eastern Visayas, only a small number of individuals received psychosocial assistance after typhoon Yolanda to cope with the trauma.



In the field of education, the primary response is the reopening of schools. After typhoon Yolanda, organizations also provided children with school supplies. Besides this, the government attempts to extend educational assistance to discourage children from impoverished families to abandon their studies. However, it has been noted that this financial assistance is incomparable to the economic return that children can obtain from working.

Multi-Dimensional Vulnerabilities and Modern Slavery in Climate Change-Affected Communities

As illustrated in the conceptual framework above, when climate change-associated hazards (floods, heavy rainfall, typhoons, cyclones, droughts...) affect communities that do not have adequate pre-disaster preparation strategies and post-disasters recovery mechanisms, they tend to create and/or exacerbate conditions of vulnerability to modern slavery, both at the individual and at the community level. These conditions, moreover, might interact with factors such as gender inequalities, class/caste inequalities, and racial inequalities, condemning certain groups of people to especially vulnerable situations. In Eastern Visayas and Caraga, where effective preparation and recovery strategies are largely absent, we found that climate change-related hazards have exposed community members to multiple, interconnected conditions of vulnerability.

Perhaps the most evident, and widespread, condition of vulnerability observed in the surveyed communities is poverty. As noted, natural hazards in Eastern Visayas and Caraga tend to destroy, or significantly damage, the surrounding environment and infrastructure. While some initiatives are taken by government and communities to address the devastation, time is needed for the environment to be fully restored to its pre-hazard status and for damaged/destroyed infrastructure to be fully repaired. Therefore, individuals whose livelihoods depend on the environment (e.g. fishers, farmers, miners) and individuals whose economic activities require viable infrastructure (e.g. drivers) find themselves in a situation of economic uncertainty. Those who were suffering from some degree of poverty prior to the hazard might even experience extreme poverty.

As seen above, one of the responses offered by the government to the economic hardships that characterize hazard-affected communities is the provision of cash-for-work programs such as TUPAD. However, those cash-for-work programs are tailored exclusively towards men and no comparable initiative is developed for women. Thus, post-disaster economic insecurity intersects with pre-existing forms of gender inequalities, which condemn women from Eastern Visayas and Caraga to a condition of greater economic vulnerability.

Moreover, because the cash-for work programs offered by the government in Manila last for only a limited period of time, individuals who have lost their traditional activities and cannot return to them are exposed to the risk of unemployment in the long-term. Unemployment also affects those workers who find themselves having to wait for months before they can receive financial assistance from the government.

Besides public infrastructure, natural disasters also destroy, or damage, houses throughout the surveyed regions. When this happens, the government intervenes to provide housing assistance. However, our research in Eastern Visayas and Caraga revealed that this assistance may take a long time to reach its intended recipients and that monetary reconstruction assistance is not enough. Therefore, families that want to rebuild or repair their houses often find themselves forced to rely on pre-existing financial resources, which places a significant financial burden on them, depletes their savings, and further compromises their economic security.

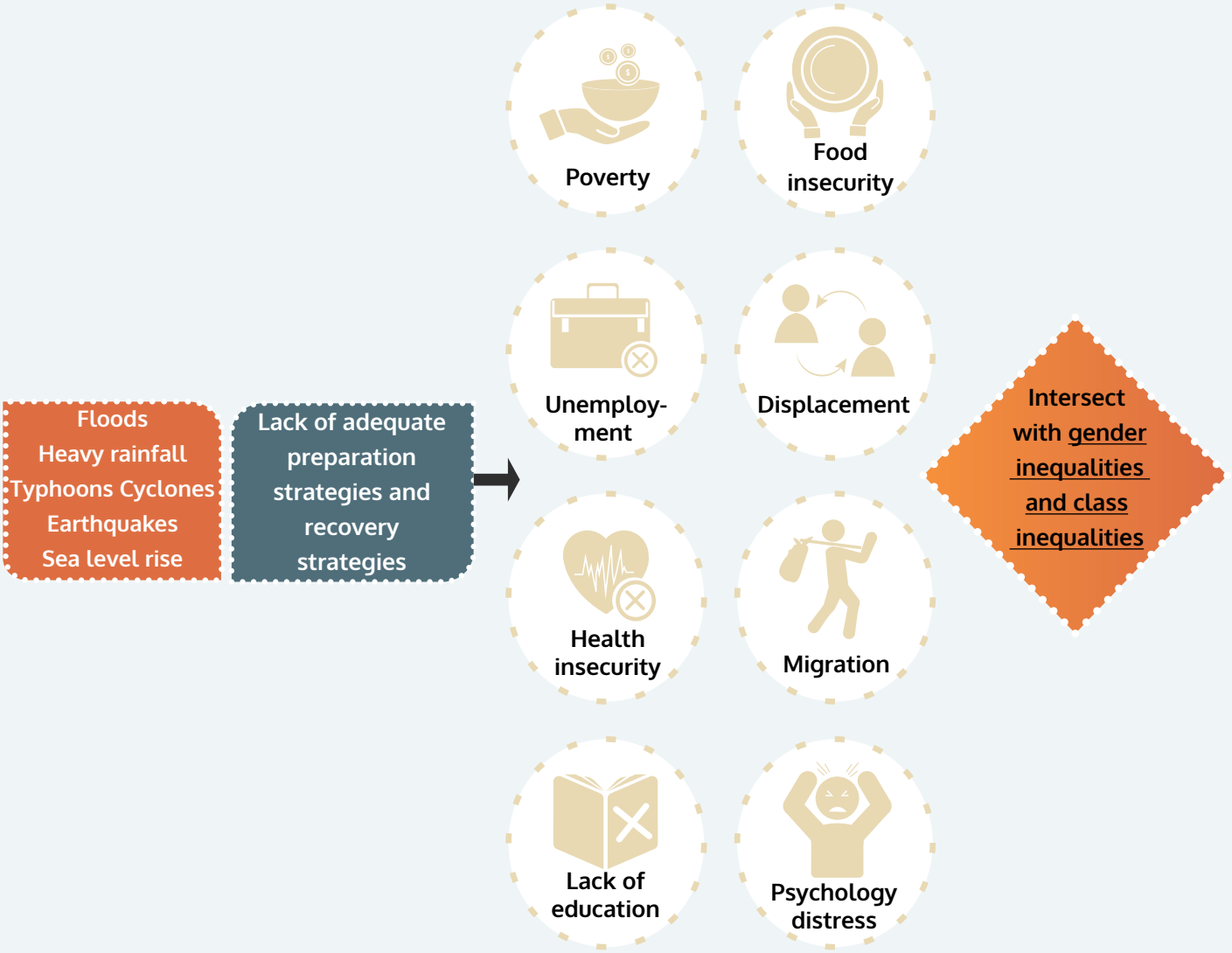
Those unable to repair their houses, perhaps because the extent of the damage suffered leaves no possibility for reparation, might find themselves forced into a condition of displacement and migration. Similarly, people who have lost their sources of income and have no credible expectations of recovering them (most notably, farmers and fisherfolks) as well as no realistic or desirable alternative to make a living, might also be forced to leave their hometowns, and look for better opportunities somewhere else, either in bigger cities within the Philippines or abroad.

Since natural hazards in Eastern Visayas and Caraga typically undermine the communities' food supplies and the communities' capacity to provide aliments, the government and civil society organizations intervene to offer relief food packs. These, however, are provided in an untimely and limited way. As a result, what is typically observed in the post-hazard phase is a situation of widespread food insecurity. Understandably, this is especially detrimental for poor families (especially those that were poor prior to the calamity), for families whose livelihoods have been affected most adversely by the hazard, and for families comprising many members, including children, elderly people, pregnant women, and people with disabilities.

Moreover, our conversations with community members have revealed that post-hazard housing assistance and post-hazard food assistance are often distributed arbitrarily, unjustly, and unequally. This benefits some individuals (usually those in a position of greater power and influence and those with better connections with the authorities) more than others and shows the extent to which post-hazard vulnerability interacts with pre-existing class inequalities.

Hazard-affected communities in Eastern Visayas and Caraga are also impacted in terms of healthcare because of the destruction of infrastructure and medical supplies and because of the direct damages that calamities have on people (injuries and health conditions). While in the post hazard phase government agencies and NGOs provide some medical assistance, respondents indicated that this is not sufficient to address the communities' needs. Participants also reported that post-hazard economic hardships often force people to cut their expenses, including medical expenses. As a result, most people find themselves in conditions of health insecurity. Moreover, post-hazard medical assistance does not extend to psychological needs, which means that people traumatized by the hazards find themselves in a condition of protracted psychological distress.

Finally, natural disasters also have an adverse impact on education. Here, governments and NGOs engage in efforts to provide school supplies, reopen schools, and incentivize affected children to return to class. However, respondents indicated that these attempts are inadequate and that in the aftermath of a natural hazard, when economic needs are at their highest, children from poorer households are most likely to abandon school to work and support their families. In this situation, children (and especially children from poor and badly affected families) are exposed to a lack of education opportunities.



[Author: Marta Furlan]

Figure 4. Natural Hazards and Conditions of Vulnerability in Eastern Visayas and Caraga

As discussed in the conceptual framework above, under these circumstances of (multidimensional) vulnerability, risks of exploitation by human traffickers are heightened. In other words, as communities and individuals find themselves in conditions of heightened vulnerability in the aftermath of a natural hazard, human traffickers are well-positioned to capitalize on those conditions and take advantage of affected individuals for purposes of exploitation. In Eastern Visayas and Caraga, hazard-affected communities experiencing multi-dimensional vulnerability have found themselves exposed to modern slavery. In the communities surveyed, modern slavery has taken the forms of forced labor, hazardous child labor, sex trafficking, commercial sexual exploitation of children (CSEC), and online sexual exploitation of children (OSEC).

Importantly, participants to our research have revealed that the existence of these practices is not exclusively associated with climate change-related events and is not exclusively observed during and/or after natural hazards. Nonetheless, our conversations with local communities, government officials, and topical experts have indicated that climate change-related hazards, their impacts on multiple areas of life, and the absence of adequate preparation and recovery strategies create vulnerabilities at the individual and community levels that do facilitate and heighten exploitation by human traffickers.

> "[...] when there is a disaster here, people need to support themselves. [...] There was news of Tacloban children being recruited for employment in Manila, after Yolanda. Immediately after [the] disaster."
>
> Barangay social worker

> "[...] definitely, when the natural disasters will cause displacement or will impact livelihood or economic stability of a certain population, that would really increase the push, or that would cause enabling factors for trafficking to be committed."
>
> Human trafficking INGO representative

[Authors: Lianet Rosado, Marta Furlan]

Figure 5. Forms of Modern Slavery in the Observed Climate Change-Affected Communities

Labor Trafficking & Forced Labor

Incidents of labor trafficking and forced labor are taking place both before and after natural hazards. After typhoons, however, when most families find themselves in precarious financial situations, opportunities for exploitation are considerably higher. In Eastern Visayas and Caraga, labor trafficking is observed in many sectors of the economy. For instance, a conversation with a nongovernmental organization shed light on the reality of labor trafficking in the fishing industries, with victims recruited from Eastern Visayas to work in fish farms in Luzon (Northern Philippines). In Caraga, labor trafficking cases were reported to us in the fishing sector and in agriculture.

> “Yes, it definitely happens that there is a connection between climate change and human trafficking. During Yolanda [...] there was an uptick of trafficking [...]. Between 2015-2018, 28 individuals were rescued [...] among the 28, 4 boys were supposed to go to a piggery in southern Luzon, and they were told that they won’t be able to come home in 2 years. [...]Others were supposed to be housemaids for a Filipina-foreign couple but were asked for whole body photos. [...]”
>
> Human trafficking NGO representative

Instances of labor exploitation were also reported in the construction industry and in the stream mining industry. Construction, in fact, is a sector of the economy that offers more job opportunities than most sectors in the aftermath of natural hazards. The same is partially true of stream gold mining, as heavy rainfalls facilitate the process of gold extraction. Respondents with inside knowledge of the construction sector reported that, despite the risk of injuries and death on the job, some firms do not provide health insurance, life insurance, or social security benefits. In some cases, workers are not paid on schedule and may go whole periods without pay. In most cases, moreover, workers are employed without any contract.

> “[...] when there are floods, typhoons - you will definitely be on standby. That's when I'll just help the carpenters and see if there's a vacancy. [...] [When the typhoon is over and people need to reconstruct their houses] the carpenter gets a bundled arrangement but me [as labor worker], I get a daily wage of 350 [PHP].”
>
> Occasional construction worker

As discussed above, following a natural hazard, impoverished individuals with no access to (safe) housing, no access to livelihoods, and no realistic expectation of recovery might see themselves forced to turn to domestic or international migration. Although most of the international migration abroad occurs through legal pathways, illegal recruitment involving a high risk of human trafficking also takes place. According to interviews conducted with local communities, both Caraga and Eastern Visayas are indeed the place of origin of several victims of illegal international recruitment. One of our focus groups revealed that in the aftermath of hazards recruiters come to the community and distribute leaflets with offers of jobs abroad. According to the focus group, many of those recruiters operate through illegal agencies. Another issue that was raised during the discussion is that many of those recruiters deduct from the workers' salaries the cost of their transfer abroad.

> "[I wanted to go abroad] so that I could have my own house, help my children finish school, help my husband. [...] I was in Manila, but only for one week. When we got there, it felt like we were imprisoned. It was a big house with a big gate. There was no office. It was so big and those they recruited were turned into their maids. Someone cooked. Another accompanied their child to school. When I got there, there were already many others....more than fifty women. [...] We had cell phones, but our female boss took them. [...] From thereon, it felt like a scam. [...]"
>
> Survivor of a labor trafficking attempt

> My eldest really wanted to [travel abroad to work] but upon arriving in Saudi [Arabia], I prayed a lot. My God! When I called to ask how she was doing, she told me that she felt like she was in prison in the big house. I think that was how it was. She really endured it for 2 years.
>
> Mother of a migrant worker

Hazardous Child Labor

Because following a natural hazard many families find themselves in situations of extreme poverty, they often opt to send their children to work. Conversations with community members in Eastern Visayas and Caraga indicated that child work is taking place in markets, department stores, agriculture, fishing, mining, and food stalls. Children engage in these work activities over the summer holiday or during the school year. In the latter case, work can be performed after school, or it can become a full-time substitute for education. While all forms of child labor are detrimental to a minor's development and well-being, what is most concerning is that many children in Eastern Visayas and Caraga are engaged in industries where hazardous labor is typically required. These include mining, construction, agriculture, forestry and logging, and manufacturing.

> Children are forced to work in hazardous occupations because they are saying that their parents need additional hands to put food on the table. [...] So children who are seeing parents that are finding it too difficult to put food on the table, they will try to look for ways [to help them], even if it is putting themselves in harm's way.
>
> NGO representative

Official government data suggests that from 2018 to 2021, at least 360 children (97 girls and 263 boys) were working in mining in Caraga. The conditions in which informal small-scale mining is taking place are unsafe and extremely hazardous for the children's health and development. Particularly dangerous is children's involvement in tunnel mining. Tunnels, in fact, are always exposed to the risk of collapse. This risk becomes considerably higher during the rainy season and in times of heavy rainfall. Tunnel miners, including children, often lack personal protective equipment, which increases the risk of injury and death. Moreover, a representative from an INGO active in those regions reported that children are commonly asked to light the dynamite in the gold mines' holes.

> "Children will be fooled because they don't know about money. This happened to my child. He used to go with a person to the mountain. [...] The person just gave him 20 PHP (~0.35 USD) per day and a pair of slippers. He worked until the evening carrying sand and gold mining. He couldn't sleep, got too thin, too used up. Now, he no longer goes to school. He just wants to work. He is 12 years old."
>
> Parent of a former child laborer

Instances of hazardous child labor are also taking place in the agriculture once the sector recovers from the impacts of hazards. Among the communities surveyed, the most severe cases of child labor in agriculture involve the coconut industry. There, children's labor occurs across multiple stages: harvesting, transportation, and husk removal. Some children are paid according to the number of coconuts that they de-husk. Conversations with community members suggest that children must remove 1,000 coconut husks to receive 200 PHP (~3 USD). To a lesser extent, communities also reported instances of hazardous child labor in sugar plantations and rice farms, where they work for long hours and are paid less than the minimum wage. Log cutting and hauling is also another dangerous agricultural activity in which children in two of the communities surveyed in Caraga are engaging.

When it comes to child labor, it is also relevant to emphasize that local communities and local authorities have appeared reluctant to label as "exploitation" situations in which children consent to work, including in hazardous activities. This misinterpretation of the law on human trafficking, and this misunderstanding of the notions of "consent" and "compulsion", indicate that the vulnerabilities that children are facing in the aftermath of a disaster intersect with preexisting gaps in law enforcement, which exposes them to a heightened risk of exploitation.

At the same time, the communities surveyed revealed a spirit of community support (bayanihan), which is accentuated in the aftermath of hazards. Community members expressed a concern that reporting cases of child labor – especially when those are encouraged by the parents themselves – would create greater economic insecurity for families. Lack of reporting among these communities is thus motivated by a certain empathy towards friends and neighbors. This suggests that the conditions of vulnerability observed among children in the aftermath of a calamity interact in concerning ways with pre-existing harmful cultural norms that facilitate – or at the very least do not deter – child labor exploitation.

> "[...] there is no report because it is accepted in the community of the child [...] it's part of the culture that the children should also do labor for their parents, especially if they are financially hard. [...] the families themselves tolerate that kind of system. Because the first instinct is to eat. That is what they need – to eat. If there is no money, they can't eat. Poverty itself, in general. So, it discourages them to report [child labor] [...]"
>
> Barangay official

Sex Trafficking

Trafficking for sexual exploitation occurs in Eastern Visayas and Caraga through various pathways. A key informant shared that the number of people engaged in sex work in establishments increased following typhoon Odette. As a result of the devastation of agricultural farms, and subsequent loss of incomes during typhoon Odette, women migrated from rural to urban centers, where they were exploited in the sex industry. According to our respondents, some women were lured by traffickers with promises of legitimate jobs in Cebu or Manila. Upon arrival there, they found themselves deceived, placed under the control of a pimp, and exploited for sex work. Other women were convinced to engage in the sex industry by friends who were perhaps unaware of the risk, rather than by traffickers themselves. According to barangay officials with whom we spoke, children and women – especially those coming from poor and large families – are those most exposed to the risk of falling victim to sexual trafficking.

> “[…] there were times I was able to ask why they [young girls] were doing it [falling into sex trafficking] when they were still so young. They reasoned because of a broken family, abandoned by the parents, and then because life was so difficult, there was nothing to eat.”
>
> Human trafficking NGO representative

One of our respondents who works for a local NGO engaged in anti-human trafficking activities reported that during typhoon Odette establishments were forced to close due to the lack of electricity. However, as electricity returned, those establishments re-opened and could benefit from a greater number of women who, adversely affected by the typhoon, found themselves looking for job opportunities and fell victim to trafficking traps.

> "Persons affected by disasters are more vulnerable to human trafficking. [...] some of our girls [with whom we work] their families are farmers. [...] And then their farms were destroyed by the typhoon [Odette] so the daughter will be the one trying to find a job, and without knowing, she will be at risk of trafficking."
>
> Human trafficking NGO representative

Importantly, in the communities surveyed, high-level individuals have been found to be complicit in human trafficking cases – indicating the high level of impunity among those with power. Labor inspectors, in fact, may accept bribes in return for clean records for work establishments. In these circumstances, it becomes evident how the conditions of vulnerability created by natural disasters interact with pre-existing corruption, which contributes to facilitating practices of modern slavery.

Commercial Sexual Exploitation of Children (CSEC)

In Caraga and Eastern Visayas, in the aftermath of natural hazards, communities reported instances of minors trafficked for CSEC in nightclubs, bars, brothels, hotels, and other establishments. Recruitment into CSEC occurs through diverse methods. Traffickers from establishments may lure children through deception with fake job offers and eventually force them into CSEC. Recruitment for CSEC also takes place through text messaging and group chats over the Internet. Interestingly, the profile of traffickers is diverse and ranges from parents, friends, neighbors, and other adults. Some people with whom we spoke expressed the suspicion that some parents in their community are trafficking children in CSEC to deal with economic hardships. Others recalled certain people interacting with adolescents around the age of 16 and transporting them in vans for suspected CSEC. In some cases of CSEC, adolescents may be complicit in the trafficking of other minors.

Post-Yolanda in Eastern Visayas, a former INGO employee recounted being approached by pimps who were trafficking girls as young as 16 and targeting male employees from INGOs involved in the disaster response. There is a perception that foreigners are also involved in CSEC, either because they frequent establishments where CSEC is occurring or because they run trafficking operations themselves. Community members also shared incidents involving foreigners who lured children into their homes. Interestingly, this was discussed to a greater extent in Eastern Visayas compared to Caraga, given the higher prevalence of foreign tourists in the former region.

Online Sexual Exploitation of Children (OSEC)

Various cases of OSEC were reported in the communities surveyed. Perpetrators are usually the victims' parents or relatives. In fact, in the words of an NGO representative with whom we spoke, "OSEC is a family-based crime." Perpetrators are driven towards this form of exploitation by the prospective of making big money over a short period of time, which seems especially appealing in times of hazard-affected economic hardships. As has been noted by our respondents, the involvement of parents and relatives in practices of OSEC most often deters children from reporting the abuse, either because they are unaware of the illegal nature of the activity or because they do not want to expose their family member.

> “[…] the #1 problem today is online sexual abuse. […] the #1 predators are parents. If not parents, then siblings […] #1 cause […] is poverty […] That's how their family can survive, and then it's really easy money […]. You just make the child undress there, show it on the internet and make instant money.”
>
> Community member

According to some respondents, OSEC is more prevalent in non-coastal communities and in urban areas, which tend to be better connected to the Internet. An important point that needs to be made in this latter regard is that immediately following a calamity that results in electricity cuts or weak Internet signals, OSEC activities might be forced to a halt. However, similarly to what was observed in the case of sex trafficking, as electricity and Internet access are reestablished, not only can OSEC activities restart again but they can also take advantage of a wider pool of potential victims, suddenly made vulnerable by the disaster.

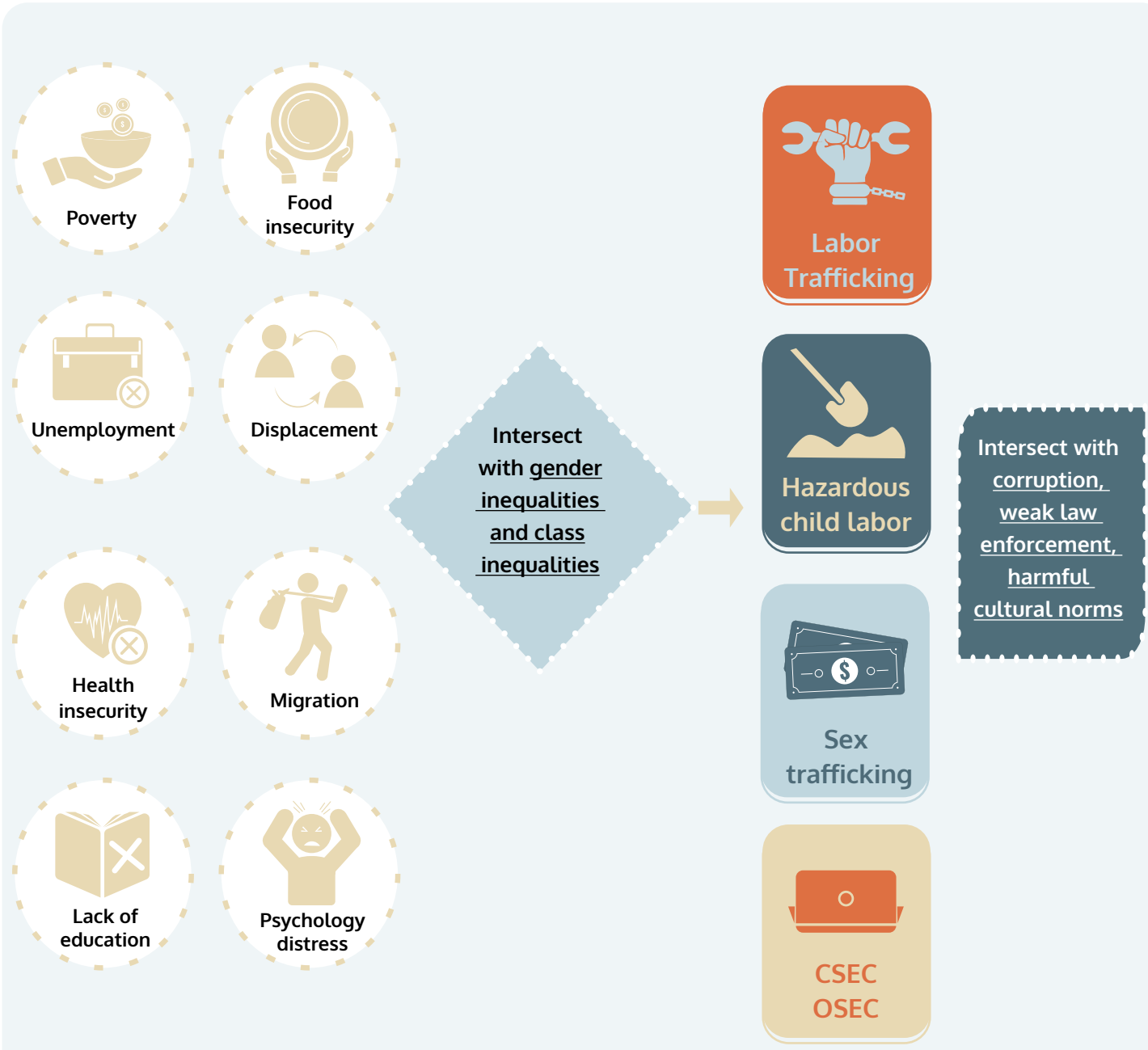


Figure 6. Post-Disaster Vulnerability and Modern Slavery in Eastern Visayas and Caraga

Conclusions

This research provides greater insight into how climate change influences vulnerability to modern slavery, with a specific focus on the Philippines.

Over the past decade, environmental hazards have occurred with greater frequency and severity in Eastern Visayas and Caraga. Among the slow-onset and rapid-onset hazards reported are heavy rainfall, floods, droughts, rising temperatures, sea level rise, typhoons, earthquakes, landslides, tsunamis, and tornadoes. These hazards often trigger one another and contribute to an environment characterized by multiple shocks.

The findings reveal that some pre-hazard preparation strategies are implemented in the regions surveyed. However, these are mostly insufficient as they tend to focus on mitigating the impact of rapid-onset events on food, water, and housing. Moreover, location, exposure to previous disasters, awareness, age, family size, and socio-economic status shape the kind of pre-hazard strategies adopted as well as their effectiveness. Following hazards, the government, NGOs, and communities engage in a range of recovery efforts. The strategies implemented in the short-term focus on the recovery of the environment, infrastructure, housing, and food supplies. Conversely, areas such as healthcare and education are insufficiently addressed, which poses serious limitations to the effectiveness of the overall post-disaster response. The provision of food relief, reconstruction assistance, and financial support is also insufficient, untimely, and discriminatory.

In a context characterized by inadequate pre-hazard preparation strategies and post-hazard recovery strategies, calamities are found to adversely affect the environment, infrastructure, housing, the economy, food and water, health, livelihoods, and education. Adverse impacts are interconnected and travel from one area to the other. For instance, direct shocks to infrastructure, are found to jeopardize health, food and water, livelihoods, and education. Affected by the devastating impact of natural hazards, communities are driven into conditions of multidimensional vulnerability. Most notably, our research found that hazard-affected communities in Eastern Visayas and Caraga are driven into poverty, unemployment, health insecurity, food insecurity, lack of education, displacement, migration, and psychological distress.

Under these circumstances, communities become exposed to the risk of exploitation by human traffickers. Exploitation can take different forms, but in Eastern Visayas and Caraga it is mostly labor trafficking and forced labor, child hazardous labor, sexual trafficking, CSEC, and OSEC. Moreover, it is noticeable that in the observed communities these forms of exploitation are further facilitated by widespread corruption among officials in charge of policing labor sites, weak enforcement of anti-trafficking law, and harmful cultural norms, especially when it comes to child labor and child exploitation as a strategy to cope with poverty.

Recognizing that natural hazards heighten the vulnerability of individuals and communities to exploitation by human traffickers, actions that address climate change-related vulnerabilities become a much-needed strategy to end the conditions that allow modern slavery to exist. In other words, building on the findings of this report that point to a connection between vulnerability to climate change and vulnerability to modern slavery, we suggest that actions capable of strengthening communities' resilience vis-à-vis the adverse impact of climate change are fundamental to ultimately strengthen communities' resilience to modern slavery.

As noted in the conceptual framework introduced above, climate change creates and/or exacerbates vulnerabilities to exploitation in those communities in which adequate pre-hazard preparation strategies and post-hazard response strategies are absent. Therefore, it is in the areas of hazard preparedness and hazard recovery that interventions need to be designed and implemented in order to effectively eradicate the risk of exploitation by human traffickers that is associated with environmental calamities. Recalling the vulnerability continuum proposed at the onset of this study, actions that address the capacity of communities to prepare for, and respond to, natural hazards will effectively help them to move along the spectrum towards a situation of lower vulnerability.

While much of the anti-modern slavery movement focuses on post-exploitation interventions that directly address the phenomenon of modern slavery, the findings of this report encourage preexploitation interventions that address those issues, such as climate change, that drive, exacerbate, and perpetuate vulnerability to modern slavery. As climate change-related hazards are increasing in frequency and severity worldwide, understanding climate change-related vulnerability to modern slavery and developing interventions that respond to the root causes of this vulnerability cannot be postponed further.

Recommendations

Building on the findings of this research, recommendations are offered to reduce vulnerability to modern slavery among hazard-affected communities. These recommendations are tailored to the specific characteristics of the Philippines' context. As such, they primarily address the Philippines' government, NGOs working in the Philippines, and community leaders in the Philippines' barangays. Nonetheless, national authorities, non-governmental entities, and community leaders in other countries may also find these recommendations relevant, subject to the proper adaptations.

Philippines' Government

- **Strengthen the capacity of local communities in hazard-affected areas.** In the barangays most exposed to climate change, the government should devote more resources to building the capacity of local communities to deal with natural calamities. Specifically, it should build their capacity to adequately prepare for natural hazards beyond securing food/water and protecting houses. It should also build their capacity to respond to natural hazards promptly and effectively across different affected sectors (e.g. healthcare, economy, education).

- **Enhance the quantity and quality of post-disaster assistance.** Following natural hazards, the government should improve the quantity and quality of assistance. Recovery should include cash-for-work programs for affected farmers, fisherfolk, and miners; financial assistance for housing reconstruction and other needs; scholarships and supplies for students; and holistic healthcare (physical and mental). Distribution processes should be equitable (i.e. informed by factors such as family size, gender, and disabilities) and just (i.e. implemented without discrimination). Finally, responsibility to fight modern slavery should be explicitly included in the mandate of relief and rehabilitation mechanisms.

- **Introduce modern slavery considerations in sustainable development programs and climate change policies.** The government should embrace a whole-of-government approach whereby the conditions that sustain vulnerability to modern slavery are addressed through intervention in different policy areas. Driven by this approach, it should introduce modern slavery considerations in the formulation of climate change solutions and developmental programs. In other words, the government should add a "modern slavery lens" to developmental policies and climate policies, rather than treating them as isolated matters.

- **Increase funding for initiatives that build communities' resilience to natural hazards.**

The government should provide increasing funding opportunities for programs at the barangay level that address the root causes of modern slavery among hazard-affected communities and increase the latter's multidimensional resilience to calamities and their impact. Those programs could include direct service provision, training and capacity building, as well as enhanced research, monitoring, and evaluation – especially with respect to those informal economy sectors in which climate change and modern slavery typically intersect in the Philippines (e.g. mining, logging, and construction).

NGOs working in the Philippines

- **Enhance the quality and quantity of post-disaster assistance, especially among families that are excluded from government assistance.**

Following natural hazards, humanitarian NGOs should enhance and increase assistance. This should focus on meeting basic needs such as food and water, safe shelter, health services, and reconstruction and it should extend to those populations that are excluded from government assistance. Distribution processes should be timely (i.e. deployed in the immediate aftermath of a disaster, when needs are highest), unconditional (i.e. based exclusively on need), just (i.e. implemented without discrimination), and adequate (i.e. capable of addressing people's needs).

- **Conduct trainings on climate-resilient activities, climate-smart agriculture, and livelihood diversification.**

In hazard-prone barangays, development NGOs should conduct skills development workshops that prepare people to occupations in non-climate-sensitive sectors, such as tailoring. They should also conduct workshops on climate-smart agricultural practices such as beekeeping, which helps mangroves grow into a barrier against floods. Finally, development NGOs should help communities to minimize the impact of hazards by diversifying and planning livelihood activities. Here, a useful tool is the "seasonal calendar", which displays each season's weather characteristics, with associated risks and opportunities.

- **Conduct awareness-raising campaigns about modern slavery in hazard-affected barangays.**

In climate change-affected barangays, anti-trafficking NGOs should conduct awareness raising campaigns on the intersection of modern slavery and natural hazards. Here, special attention should be devoted to those sub-communities that are more exposed to the adverse effect of calamities and, therefore, are at greater risk of exploitation (e.g. farmers, poor households, children). Importantly, awareness-raising campaigns need to be conducted before calamities occur. In fact, because hazards disrupt all public activities, conducting awareness campaigns exclusively in the post-hazard phase would be "too little, too late".

- **Establish survivor networks in climate change-affected communities.**

In climate change-affected barangays, anti-trafficking NGOs should encourage the establishment of survivor networks and meaningfully engage with them. Recognizing survivors' expertise-through-experience, they should provide survivors with the resources, space, and opportunities to raise awareness about modern slavery in times of natural hazards, educate the community on how to detect exploitation attempts in the aftermath of natural calamities, and lead the formulation of programs aimed at addressing the intersection between climate change and modern slavery.

Community leaders

- **Address harmful cultural norms that typically prevail in hazard-affected barangays.**

Religious leaders, business leaders, and educators should capitalize on their influence to condemn harmful cultural norms that typically prevail in hazard-affected and povertystricken communities, such as those norms that encourage children's engagement in labor and in the sex industry.Community leaders should educate families on the negative effects of hazardous labor and sex trafficking, should deter parents from forcing their children out of school and into exploitation, and should encourage alternative strategies to cope with the adverse effects of calamities.

- **Promote a culture of solidarity and strengthen mutual support networks.**

In hazard-affected barangays, community leaders should promote a culture of solidarity among community members. Contrary to what is often observed, however, solidarity should not encourage people to justify those neighbors, friends, and relatives who adopt negative practices to cope with natural hazards (e.g. sending their children to work). Rather, solidarity should encourage people to come together and cooperate to better deal with hazards (e.g. initiating a joint saving scheme to support reconstruction at the neighborhood level).

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19. The classification of slow-onset events reported here was proposed by the United Nations Framework Convention on Climate Change (UNFCCC): https://unfccc.int/wim-excom/areas-of-work/slow-onsetevents?gclid=CjwKCAjw67ajBhAVEiwA2g_

20. El Niño is the warm phase of the El Niño Southern Oscillation (ENSO), which is an irregular periodic variation in wind and sea surface temperatures over the Eastern Pacific Ocean.

21. Data from Lumina: https://www.lumina.com.ph/news-and-blogs/blogs/fault-lines-in-the-philippines-list/.

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23. La Niña is the cool phase of ENSO.

24. Filipino word for any kind of toothpaste.

25. Convenience stores.

26. Tulong Panghanapbuhay sa Ating Disadvantaged/ Displaced Workers