ISSUE BRIEF

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Cohort 4: Climate-related security risks and sustaining peace

Exploring the pathways from climate-related risks to conflict and the humanitarian-development-peace nexus as an integrated response

Guatemala case study

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The relationship between climate-related security risks and conflict is difficult to determine. The IPCC Fifth Assessment Report emphasizes, with medium confidence, that “climate change can indirectly increase risks of violent conflict by amplifying well-documented drivers of these conflicts, such as poverty and economic shocks” (IPCC, 2014:73).

In this regard, the Pathways for Peace document points out that climate change, especially related to droughts, food insecurity and migration, contributes to increasing tensions that can cause violent conflict (World Bank-UN 2017:11). Going deeper into this argument and based on the review of 44 quantitative and qualitative studies examining this issue in East Africa, Mobjörk et al. identify five factors or pathways related to climate risks and, specifically, those related to climate change that increase the possibility of violent conflict. These factors, which are generally present at the same time, are related to: deteriorating livelihood conditions; increased migration; changes in pastoral mobility patterns; and, elites’ exploitation of local grievances, often related to the disputes among local political interests and armed groups’ tactical considerations (Mobjörk et al, 2016:17-20).

Based on their research, the authors point out some aspects for consideration, both to analyse this indirect relationship in other contexts and to offer an appropriate response to the situation. These aspects are related, on the one hand, to the institutional governance structure and its capacity to adapt and respond in the face of these risks. On the other, given that climate risks interact with other types of risks across time and space, some risks—such as natural disasters—develop rapidly. Climatic pressures, such as sea level increase
and decreasing crop productivity, are experienced slowly and require different governance responses.\(^1\) In addition, certain areas may be affected by what happens in other locations. The interaction of these risks requires an integrated response. It is thus fair to ask how relevant these findings might be to the Guatemalan context. Specifically, how can we outline the pathways from climate-related risks to conflict in Guatemala and how might we design an integrated response to this complex situation?

### Outlining the pathways from climate-related risk to conflict

These pathways can be better identified when climate-related security risks are understood within a socio-ecological system, which includes environmental, social, economic and institutional dynamics and their interactions. This approach understands environmental problems as both the facts and circumstances reflected in the depletion, degradation and pollution of the environment and the impacts of climate change on the environment. These environmental problems may have impacts on social welfare and the stability of the country’s political, economic and social system and may take lives or threaten them permanently. Thus, the interactions of these dynamics determine the livelihood conditions and the overall vulnerability that the country and its inhabitants face. In this context, if the institutional response does not address the situation holistically, climate-related risks can reach crisis proportions (UN Guatemala, 2018:3).

Taken together, these elements and the Mobjörk et al. study suggest that the following pathways or factors could link climatic-related risks with increased risk of conflict: (1) high levels of inequality and vulnerability and precarious living conditions; (2) increased human mobility; (3) fragile institutional response to managing environmental and climate-related risks; (4) increased conflicts related to land access and natural resources exploitation; and, (5) tactical considerations related to organized crime.

### 1. High levels of inequality and vulnerability and precarious living conditions

Socio-economic dynamics determine levels of inequality and vulnerability and livelihood conditions affecting a large part of the population. According to the country’s most recent official census (2018), Guatemala’s indigenous population is one of the continent’s largest, representing 43.75 percent of the total population (14.9 million (INE, 2019)). As emphasized in the UN Common Country Analysis, Guatemala’s relative macroeconomic stability has not translated into improved living standards for most of its citizens. The income Gini coefficient is around 0.63 and land inequality is 0.85 (a score of 1.00 denotes absolute inequality) (UNDP, 2016). Analysis has shown that “the income of the richest 1.0 percent of Guatemalans in 2006 and 2014 amounted approximately to the income of 40 percent of the poorest Guatemalans combined” (ICEFI, 2017:32). Poverty and extreme poverty in Guatemala are concentrated in rural areas (71 percent and 42 percent, respectively) as opposed to urban areas (42.1 percent and 11.2 percent, respectively). Economic inequality among women, who represent only 29.5 percent of the country’s economically active population (INE, 2019) and whose unpaid household work represents a value equivalent to 20 percent of GDP (INE 2014), is equally worrisome.

The country’s poverty statistics are staggering. Despite improvements in the region, Guatemala’s national poverty rate has worsened, rising from 56.2 percent in 2000 to 59.3 percent in 2014, while extreme poverty increased from 15.7 to 23.4 percent in the same time period (SEGEPLAN, 2015:52). Most concerning, extreme poverty among indigenous people increased by 12.7 percent, compared to 5 percent among the non-indigenous. Similarly, multidimensional poverty, which covers areas of deprivation such as lack of education or employment, inadequate housing, poor health and nutrition, low personal security and social isolation, is found to be most acute in rural areas (87.5 percent in 2014) and among indigenous people (86.6 percent) (UNDP, 2016: 31–3). As underlined by a UNWOMEN study, “[W]omen are particularly affected by these inequalities as a result of historic practices and an entrenched patriarchal system prevalent in both indigenous and non-indigenous contexts. As a result, the structural vulnerabilities of indigenous girls and women, in particular, are further exacerbated, contributing to a vicious circle of inequality and dependence of indigenous women, with broader impacts in terms of their empowerment, civic and political participation, among other” (UNWOMEN, 2019:6).

Small agricultural producers are impacted severely by droughts associated with climate change. According to an evaluation by the Ministry of Environment and Natural Resources, farmers lose an average of 55 percent

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1 As Matti Lehtonen points out, it is important to keep in mind that extreme weather events are hazards (when a torrential rain hits, the potential risk can be realized), while accumulated risk is a complex set of underlying issues, which usually build over time. These include land-use change (such as illicit shantytown construction), deforestation and poor water canalization. These involve slow-onset disasters, such as loss of agricultural productivity, that are more relevant and where risks are not as easily detected. On the other hand, Lehtonen refers to other perspectives, which emphasize that extreme weather events such as cyclones are natural hazards, but that disaster is what men make out of them, usually by not being prepared. Lehtonen, Matti. 19 March 2020. Personal communication.
of the production of basic grains during a drought. Their response capacity is very low, since only 16 percent of farmers can take specific adaptation actions (MARN, 2015).

The Humanitarian Needs Overview 2019-2020 found that 2.3 million Guatemalans experience moderate to severe food insecurity, including 450,000 children under 5 years old. Some 481,000 have immediate food assistance needs, including about 125,000 children under 5 years old, 1.5 million lack access to safe drinking water and 195,000 lack access to sanitation services (latrines) in departments with high food insecurity rates (UNOCHA, 2019: 6). According to the Overview, the number of Guatemalans who required humanitarian assistance rose from 1.6 million to almost 3 million in just two years. The 2018 census reveals the inequality and precariousness in which large sectors of the population live (particularly in rural areas), including indigenous people, Afro-descendants and peasants. They also face difficulties accessing quality and culturally-relevant social services, access to land, decent working conditions, and an adequate standard of living (specifically with regard to housing and food rights) in line with international human rights standards (UNOCHA, 2019: 6). Humanitarian needs are also expected to increase, including among corn and bean subsistence farmers, small coffee producers, day laborers, children suffering from chronic malnutrition, and migrants (UNOCHA, 2017).

2. Increased human mobility

Human mobility into and out of Guatemala is propelled by a complex mix of violence, poverty, economic inequality, human rights violations, natural disasters and extreme weather events caused by climate change. It has severe implications for safety and well-being, particularly for marginalized people and communities. According to the International Organization for Migration (IOM), the number of Guatemalans leaving the country is continuous and increasing.\(^2\) Most migrants originate from the country’s western region, an area inhabited mainly by indigenous peoples, where poverty rates are high and basic public services are scarce (UN Guatemala, 2019:7-8). While migration from Guatemala to Mexico, the United States and Canada has increased, the number of returnees to Guatemala has also risen. Between January and December 2018, an estimated 94,306 people returned to Guatemala from the United States and Mexico (IOM 2018), compared to 26,963 people in 2017. Guatemala is also a transit country for migrants and refugees. It is estimated that at least 375,100 migrants travelled through the country between January and December 2018 (INM 2018).

Studies by academic institutions there identify at least three causes of forced human mobility: insecurity and violence; impacts of climate change; and investment projects, whether extractive, hydroelectric or agro-industrial (UN Guatemala 2020).

As a UNWOMEN document notes, climate change in the Central American Dry Corridor has caused food insecurity and migration from rural areas to populated urban centres, as well as migration to North America (UNWOMEN, 2019:19). Research by Oxfam establishes a significant statistical correlation between the prevalence of moderate food insecurity and migration. This study demonstrated a clear relationship between the deterioration of food security in households and migration as a strategy to deal with the crisis (OXFAM, 2019). In this context, the study indicates that 86.5 percent of the women in the study population migrated to the interior of the country. Likewise, as households experience more acute food insecurity, leading to moderate food insecurity, migration by women increases. According to the study, this constitutes “the last defense against hunger for the households of the Dry Corridor” (OXFAM, 2019: 1).

3. Fragile institutional response

According to the 2016 Environmental Report of the State of Guatemala, the index that evaluates environmental policies ranked Guatemala 88th out of 180 countries, with a score of 69.64 out of 100. Although regulations have been strengthened, the country has not yet implemented them efficiently. In addition, there is a lag between promulgating environmental regulations and managing the country’s natural resources, which are increasingly contaminated, degraded and scarce. Various state actors are responsible for environmental management; each has different functions, specific interests, geographical areas and technical, human and financial capabilities. Although the legal framework assigns national environmental leadership to the Ministry of Environment and Natural Resource, in practice, environmental issues are broken down into three groups: environmental protection, natural resource management and natural resource extraction. Four to eight government entities \(^3\) are responsible for each group. This points to institutional overlaps, duplication of competencies, and thematic and geographical dispersion among the different actors. Issues of

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2 See https://mic.iom.int/webntmi/guatemala

3 In addition to the Ministry of Environment and Natural Resource, the other government entities are: the National Council of Protected Areas, Institute of Seismology, Volcanology, Meteorology and Hydrology, Ministry of Energy and Mines, Ministry of Agriculture, Livestock and Food, Ministry of Communications, Infrastructure and Housing, Planning and Programming Secretariat of the Presidency and the National Forest Institute.
autonomy, hierarchy and contradictions among state institutions limit the efficiency of government activities, resulting in fragile institutions, inconsistent policies, inadequate long-term vision, financial and technical weaknesses (including in terms of establishing management and monitoring systems and protecting and extracting natural resources), and deficient governance (MARN, IARNA-URL and UNEP, 2009).

4. Increased conflicts related to land-access and natural resources exploitation

Inequality, exclusion and marginalization fuel social conflicts in Guatemala (UNDP 2016; World Bank-United Nations 2017). Unequal distribution of land is particularly worrying in this regard: 2 percent of the population owns 72 percent of arable land (Mason, Ramirez Gröbli and Sguaitamatti 2016: 82) and only 8 percent of women have access to land (UN Guatemala 2019: 34). These conflicts have increased in number, complexity and diversity, creating negative consequences for human rights, democratic governance and human development. A 2015-2018 comparative analysis shows that social conflicts (excluding agrarian conflicts) rose from 1,704 to 2,196 (SAA 2018; COPREDEH 2018). Agrarian conflicts alone total more than 1,500 (SAA 2018). Based on data collected up to June 2014, the Secretariat of Agrarian Affairs reported 1,495,855 people involved in agrarian conflicts; 49.92 percent were women and 50.06 percent were men. However, women represented only 10 percent of those present at negotiating tables (UN Guatemala 2020). In other words, women have much less access to land than men. However, they are involved in agrarian conflicts in the same proportion as men and their voices are not generally taken into account in resolving these conflicts.

Most of these conflicts are related to land distribution, natural resources and public policies that fail to address related structural causes. This is explained, in part, by the failure to recognize the different types of property in the country, particularly those based on communal land arrangements and collective properties, which generate constant disputes and confrontations. This represents one of the country’s main structural problems and, based on the lack of legal certainty, has resulted today in 1,501 agrarian conflicts. Such social conflicts are the largest category of conflicts in Guatemala. Related to this, the justice system has evicted many people from private property, protected areas and state property.

5. Tactical considerations related to organized crime

Organized crime is increasingly prevalent in the country’s social, political and economic life. A recent public opinion survey found that 43 percent of Guatemalans think that drug trafficking has increased in the last four years (CID-Gallup. January 2020). Analysts and political actors have emphasized the growing influence of organized crime in state structures, especially at the local level (UN Guatemala 2020). This situation must be considered because it directly affects what is referred to as the “P factor” (politics and policies). Some key informants interviewed noted that the influence of and pressure imposed by organized crime in some municipalities means that policy decisions are taken based on those interests, not on the public good. Consequently, adequate and effective responses to climate-related risks cannot be implemented. This increases institutional fragility and reduces the political space needed to build the legitimacy of municipal government.

Finally, it is important to emphasize the environmental context that defines climate-related risks facing the country. First, Guatemala is among the 15 countries worldwide most affected by climate change (UN Guatemala, 2019). As noted in the UN Common Country Analysis, Guatemala faces major challenges and is vulnerable and poorly prepared to deal with the effects of climate change (Germanwatch, 2019: 33; INFORM, 2019). According to studies by the Institute for Agriculture, Natural Resources and the Environment at Rafael Landivar University (IARNA-URL) the bioclimatic conditions of more than 50 percent of the territory are expected to change by 2050, affecting 90 percent of the country by 2080 (IARNA-URL, 2011, 2012b). This is coupled with latent environmental degradation linked to the over-extraction of natural resources and its impact on the environment. With 4.8 tons of natural resources extracted per hectare per year, extraction rates in Guatemala rank among the highest worldwide, exceeding the average among countries with similar economic indicators (IARNA-URL, 2012c: 70, 97).

Access to water and forest degradation are particularly acute in Guatemala. According to the Second National Communication on Climate Change, water availability projections show that availability will be reduced by between 5 percent and 30 percent in 2050, compared to 2010. Specifically, areas of the Dry Corridor (from the El Salvadoran and Honduran borders to the Mexican border) and in Petén will have less water availability by 2050 (MARN, 2015). In addition, although the country has enough water, management capacity is weak
(IARNA-URL, 2012a). As a result, nearly 40 percent of the population lack access to safe drinking water, mainly in rural areas (WHO, 2017). Five percent of the territory is also at “very high” and “extremely high” risk of drought, particularly in the eastern and central valleys (UN Guatemala, 2019). Fourteen of the country’s 38 main rivers are contaminated (IARNA-URL, 2012a, 2012b), exacerbating water stress across the country (IARNA-URL, 2017: 30).

Deforestation also contributes to these threats: forests accounted for 34.2 percent of Guatemala’s territory in 2010, a significant drop from the 35.5 percent in 2006 (INAB, CONAP, UVG and URL, 2012: 37; MARN, 2013; IARNA-URL, 2013: 3). Deforestation is caused by a combination of factors, including extensive livestock grazing and small-, medium- and large-scale agriculture (IARNA-URL 2009:5). These developments have negatively impacted the life and well-being of Guatemalans. Between 1996 and 2015, 140 deaths and USD 401.54 million in lost property were attributed to climate change (Germanwatch, 2017: 6). Five thousand people are projected to die annually, on average, over the next decade due to phenomena associated with climate change (DARA, 2012).

In this context, the degradation of natural resources has particularly negative effects for women. According to the Economic Commission for Latin America and the Caribbean (ECLAC), empirical evidence shows that the impacts of climate change are different for men and women. As a result of socially constructed norms and gender roles and associated structural gaps, women suffer more severely from the consequences of global warming” (ECLAC 2017, quoted in UN Guatemala 2019).

The humanitarian-development-peace nexus as an integrated response

Although the evidence needed to determine a direct relationship between climate-related risks and conflict is not yet sufficient, by outlining the pathways that link them, we can see that these scenarios will be increasingly complex and difficult to address. However, the most important aspect of this outlining may involve conducting an integrated analysis of a complex dynamics. Therefore, proposals for integrated responses are essential because the vulnerability facing Guatemalans is increasingly difficult to address.

In this context, the humanitarian-development-peace (HDP) nexus emerges as a unique opportunity to address vulnerabilities in an integrated manner. The challenge is to make this nexus concrete programmatically. The diagram below (Figure 1) offers a way to better conceptualize the nexus and, thus, to improve the programmatic approach.

Citizens’ vulnerabilities are at the centre of the HDP nexus. This raises the question of how to address those vulnerabilities before, during and after crisis situations in terms of each pillar. What synergies must be generated or created in the interactions among the three pillars? These interactions suggest points at which the HDP nexus can be conceptualized and, subsequently, materialized in terms of programming.

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Figure 1 The Synergies of the Humanitarian-Development-Peace Nexus

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6 Brooks (Brooks, 2003) develops a conceptual framework that seeks to reconcile different approaches and definitions of vulnerabilities so that this concept can be applied to a wide range of context, systems and hazards. This framework contributes to a better understanding of this proposed diagram of the triple nexus.
As shown in Figure 1, development vulnerabilities are addressed by implementing the 2030 Agenda and the Sustainable Development Goals (SDGs). Humanitarian vulnerabilities are tackled by strengthening individuals’ capacity to cope, while peace-related vulnerabilities are addressed through the restitution of rights.

Creating a synergistic link between implementation of the 2030 agenda and the SDGs (development pillar) and strengthening individuals’ coping capacities (humanitarian pillar) increases the resilience of people, communities, cities, countries and regions.

Vulnerabilities associated with the peace pillar can generate social unrest, leading to grievances and social protests, and may, ultimately, produce social conflicts. The link between implementation of the 2030 Agenda (development pillar) and restitution of rights (peace pillar) leads to a process of conflict transformation; grievances and social protest are thus treated as an opportunity to achieve changes that positively affect the livelihood conditions of people.

Finally, the synergistic link between the restitution of rights (peace pillar) and strengthening people’s coping capacities (humanitarian pillar) strengthens social cohesion. This is achieved when the state, its entities and society at large grant civic-political and cultural recognition to affected populations. Civic-political recognition refers to protecting or restoring a citizenship condition and cultural recognition involves protecting the cultural identity of affected populations. The deeper the humanitarian crisis, the more it strips away the citizenship condition and the cultural identity of the affected people.

In summary, the three elements below can provide programmatic entry points through which to create an integrated response before, during and after crisis situations and, in particular, when dealing with a context characterized by increasing climate-related risks:

1. increasing the population’s resilience by implementing the SDGs and, simultaneously, supporting people’s coping capacities;
2. strengthening conflict transformation by implementing the SDGs and managing social protest from a restitution-of-rights approach; and,
3. strengthening social cohesion by working to restore rights and supporting coping capacities.

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Joint UNDP-DPPA Programme on Building National Capacities for Conflict Prevention
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https://peaceinfrastructures.org/

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