CLIMATE ADAPTATION IN THE NORTHERN TRIANGLE
How the United States Can Foster Locally Led and Sustainable Change

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I am pleased to present "Climate Adaptation in the Northern Triangle: How the United States Can Foster Locally Led and Sustainable Change," by Nate Graham, interim director, MK Vereen, assistant, and Allison Woolverton, intern, of the Inter-American Dialogue's Energy, Climate Change & Extractive Industries Program.

Central America’s "Northern Triangle" countries of El Salvador, Guatemala, and Honduras face significant barriers in adapting to the major droughts, floods, storms, and other impacts of climate change that disproportionately affect their region. The effects of climate change aggravate a context of poverty, insecurity, and corruption that is driving migration within and from the region. As the Biden administration implements policies to address the root causes of migration in the Northern Triangle, climate change adaptation should be a fundamental focus.

To that end, in 2021, the Dialogue launched a special project to provide recommendations for US climate adaptation assistance to the region, convening a Task Force on Climate Change in the Northern Triangle to source regional perspectives on this critical policy nexus. This task force includes a diverse group of representatives from the Northern Triangle, including representatives of environmental civil society, rural, Indigenous, and Afro-descendant communities, youth activists, and prominent former government officials and business leaders, as well as technical experts.

This is the third and final report in a series of three publications informed by the indispensable input and expertise of task force members. The first installment in this series, a policy brief released in November 2021, provided broad recommendations for the US strategy on climate change adaptation in the region, including to strengthen partnerships with local organizations, create economic opportunities for vulnerable groups, and involve the private sector in adaptation programs. The second report, published in February 2022, outlined the impacts of climate change on key sectors in the Northern Triangle, including agriculture and forestry, infrastructure and energy, and finance, as well as implications for communities and vulnerable groups. This final report analyzes the central challenges and opportunities for making climate adaptation projects more effective and sustainable in the region, particularly through local engagement and leadership. It outlines recommendations for US assistance in four key areas: engagement with civil society, support of educational programming and access to climate information, strengthening of subnational government adaptation planning, and partnerships with the private sector.

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Introduction

The countries of Central America’s “Northern Triangle”—El Salvador, Guatemala, and Honduras—face disproportionate vulnerability to the impacts of climate change (including major droughts, floods, and storms) and significant barriers to adaptation. Many of the conditions behind this reality (as detailed in the previous report in this Inter-American Dialogue series, Climate Threats in the Northern Triangle: How the United States Can Support Community Resilience) are highlighted by a 2022 report by the Intergovernmental Panel on Climate Change (IPCC) on climate impacts, risks, and vulnerability.¹

In its global analysis, the IPCC describes numerous challenges for adaptation that are endemic to the Northern Triangle. These include systemic development issues such as “poverty, governance challenges and limited access to basic services and resources, [and] violent conflict.” According to the IPCC, urban areas with rapidly growing informal settlements will face heightened risks, and in the Northern Triangle, many such settlements are built on steep slopes or in low-lying areas, increasing their susceptibility to disasters. In rural areas, factors like “high emigration, reduced habitability, and high reliance on climate-sensitive livelihoods” will make adaptation more difficult. Inequality and marginalization linked to ethnicity, gender, and income are additional risk factors prevalent in the region.

The effects of climate change have already begun to manifest in the Northern Triangle, reducing food and water security through droughts, floods, and changes in seasonal timing and increasing the risk of catastrophic storms. These impacts exacerbate a host of other factors driving mass migration within and from the region, including to the United States. More than two million people are estimated to have left El Salvador, Guatemala, and Honduras since 2014, many fleeing violence and economic hardship,² and climate change increases vulnerability to these issues while amplifying the consequences of systemic issues³ such as a lack of education and employment opportunities, poor water management, and inequality and marginalization, as described in the previous report. These factors in turn hamper the ability of Northern Triangle countries and communities to adapt to climate change.

In 2021, the administration of US President Joe Biden developed a “Root Causes Strategy” as the central component of its plans to stem migration from the Northern Triangle. This plan recognized that previous migration policies had created short-term solutions and failed to tackle the systemic drivers of migration from the region. It acknowledges climate change as part of this system of drivers and proposes building regional resilience to climate impacts, including by ameliorating food insecurity. The plan has so far brought in $1.2 billion in private sector commitments aiming to generate new opportunities and employment and invest in climate adaptation in areas ranging from infrastructure to farming.⁴ (Although not the focus of this report, it is worth noting that supporting adaptation in the Northern Triangle can also in many cases contribute to climate change mitigation. This is important both to Northern Triangle countries’ own climate goals and to US foreign policy objectives in climate leadership.⁵ For example, the previous report in this series recommended support for non-hydro renewable energy, energy efficiency measures, and improved forest management practices, all of which have important effects for reducing emissions.)

This report, which is based on inputs from the Task Force on Climate Change in the Northern Triangle coordinated by the Inter-American Dialogue, analyzes the core challenges to making climate adaptation projects more effective and sustainable in the region. While task force members cite general structural problems of weak governance, corruption, crime, and violence, including against environmental defenders, as some of the greatest obstacles, this report largely focuses on ways that US assistance can more specifically support sustainable and locally led climate adaptation. To that end, it outlines recommendations in four key areas: engagement with civil society, support of educational programming and access to climate information, strengthening of subnational government adaptation planning, and partnerships with the private sector.

The report urges the United States, in designing and implementing aid programs, to involve local civil society as lead actors in climate change adaptation efforts. This includes investing in outreach and accessibility of funding opportunities, especially for particularly vulnerable regions and populations, and ensuring that efforts have community buy-in and reflect local needs. To make climate adaptation aid in the Northern Triangle more sustainable, this report recommends developing the capacity of civil society organizations, particularly those run by or advocating for Indigenous peoples, women, and youth, and filling capacity gaps in the meantime. These organizations are most familiar with both local adaptation needs and assets, yet in many cases they lack the technical, financial, and/or administrative capacity to apply for, receive, and execute development assistance funds. As the report explains, numerous civil society groups are already tackling a range of climate impacts, representing a host of potential US partners.
Youth are the group poised to inherit the worst impacts of climate change, and this report specifically recommends setting up incubators to strengthen youth climate organizations and networks to connect them to each other and to broader civil society. For Indigenous groups and others, raising the region’s low rates of land tenure is foundational to sustainable land and water management and the ability of communities to adapt.

The Biden administration should also help to mainstream climate adaptation into all levels and modes of education and improve access to and literacy in climate information. To that end, existing programs established by the region’s governments (national and subnational), universities, and other organizations can be built upon, expanded, and replicated with the technical expertise and financial resources of US agencies. Resources should be dedicated to increasing both supply of, and demand for, professionals trained in adaptation-related fields such as disaster risk management, resilient buildings, nature-based solutions, and distributed renewable energy.

Subnational governments should also be supported in the development and implementation of climate change adaptation plans rooted in local priorities. Engaging directly and transparently with local governments can mitigate the bureaucracy and corruption that reduce the effectiveness of working with national governments in the region, according to some task force members. Much implementation also takes place on the local level, meaning that adaptation plans already developed on the national level should be tailored to local contexts. This can be accomplished with US technical assistance.

The United States should also foster local businesses and private sector partnerships to support the financial sustainability of adaptation efforts. Strengthening the local private sector in areas such as climate-resilient agriculture and creating partnerships to leverage private funds in the service of adaptation-related workforce development, research and innovation, climate information, and economic diversification can embed adaptation into local economies for the long term. Some such initiatives already exist in the region.

Finally, the report recommends that the United States foster the creation of intersectoral alliances to unite the diverse efforts that communities, civil society, governments, universities, private companies, and other groups are already undertaking in areas such as agriculture, water management, and environmental human rights. A lack of national and intersectoral collaboration is a barrier to large-scale, high-impact efforts, and dialogues and partnerships that recognize these issues as interrelated aspects of adaptation can strengthen advocacy initiatives and generate a myriad of coordination benefits.

These strategic recommendations are meant to complement the more thematic recommendations made in the previous report in this series (see Box 1) in order to make such interventions more sustainable beyond US involvement, and more effective through local leadership.

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**BOX 1: THEMATIC RECOMMENDATIONS OF PRECEDING REPORT**

1. Support sustainable, resilient agricultural practices that avoid forest degradation and bring adaptation benefits.
2. Help small-scale agricultural and forest workers with training on supply chain management and market access for sustainable, climate-resilient products.
3. Strengthen agricultural associations, Indigenous organizations, and community-based forest management.
4. Provide capacity building to governments and organizations to improve land governance, land planning, and management of protected areas.
5. Implement clean water and other adaptation programs using nature-based solutions in urban areas.
6. Support design and enforcement of climate-resilient building regulations.
7. Provide risk assessments for infrastructure systems.
8. Advance investment in diversified, sustainable, and reliable energy generation.
9. Provide technical assistance to governments and civil society organizations to apply for and execute international climate finance.
10. Stimulate private sector investments in adaptation.
11. Work with banking sector to “green” and “democratize” access to capital.
12. Support governments to provide direct assistance to the most vulnerable.
Civil Society Engagement

Partnering with local actors is essential to fostering effective and sustainable climate adaptation in the Northern Triangle. Specifically, civil society actors (defined by the World Bank as: “community groups, non-governmental organizations [NGOs], labor unions, Indigenous groups, charitable organizations, faith-based organizations, professional associations, and foundations”) are essential for bridging the gap between broad plans (such as the Root Causes Strategy) and concrete local realities. This is especially true given significant governance issues in the Northern Triangle, where lack of capacity, weak institutions and rule of law, and corruption can reduce the suitability of national governments for partnership as well as their ability to implement their own domestic climate change adaptation agendas, according to some task force members. (However, working directly with subnational governments in addition to local civil society has the potential to be more effective in creating relevant changes at the local level, as explained in a proceeding section.)

In this context, engagement with local civil society can lead to greater project efficacy and sustainability through community buy-in and ownership, an understanding of local needs and conditions, and the leveraging of local knowledge and capacities. In the adaptation field, the highly variable and uneven impacts of climate change over time and across different geographies and demographic groups create an even stronger mandate for tailoring projects to local conditions, as well as striving for local leadership, an essential ingredient in the sustainability of efforts beyond direct US support. The critical nature of local leadership for adaptation programming is recognized by the Principles for Locally Led Adaptation, whose development was led by the International Institute for Environment and Development (IIED), the World Resources Institute (WRI), and the International Centre for Climate Change and Development (ICCCAD) and which have been endorsed by over 70 organizations, including the US Agency for International Development (USAID), one of the key agents in carrying out the Root Causes Strategy (and hence a repeated focal point of this paper).

One important reason to prioritize local civil society engagement is that a lack of local buy-in and support, and a lack of understanding of local conditions and needs, can mean that communities do not actually benefit from adaptation projects (or that the benefits received are negligible or superficial). For example, microgrids are a key technology in providing electricity access to rural and disconnected parts of the region, and their ability to operate independently of utility-scale grid systems bolsters resilience to disasters such as hurricanes. However, a 2017 study of microgrid development in Latin America found that rural communities were often skeptical, preferring grid-connected and fossil fuel generation to off-grid and renewables, mainly due to concerns about reliability. Thus, it is important to clearly communicate the benefits of a proposed project, hear community concerns, and jointly determine whether a particular solution is actually the best fit for a community. The consequences of a lack of understanding of local conditions in the Northern Triangle are underscored in a finding from an analysis of US foreign aid to the region from 2014 to 2019 that “requests for proposals from the US government are often too narrowly focused on specific metrics that do not accurately reflect on-the-ground realities... [particularly] in the case of understanding local power dynamics and the time needed to establish activities in a given community.”

Another key reason to engage with local civil society on climate adaptation is to ensure that the realities of marginalized groups are understood, their interests advanced, and their capacities leveraged. In the Northern Triangle, Indigenous groups are particularly affected by climate change, partly due to greater dependence on subsistence agriculture than the general population. Elevated rates of poverty and limited rates of education also present barriers to adaptation. In recent years, the poverty rate for Indigenous people in Guatemala has hovered around 79 percent (around 30 points above the national average), and even before the COVID-19 pandemic, only 60 percent of Indigenous youths in Guatemala finished primary school (only one in ten attended university). It is important to understand these and other central challenges to adaptation and how they manifest in each community.

Cultural context is also important in order to propose adaptation approaches relevant to Indigenous customs and perspectives and that leverage local knowledge. For instance, a chapter on Indigenous knowledge and climate change produced by the Guatemalan System of Climate Change Sciences (SGCCC) includes numerous illustrations of Indigenous knowledge relevant to adaptation. One example is the use of Indigenous practices for community water storage to mitigate drought in a Cuyquel community in Tactic, Alta Verapaz. Another is the cultivation of 1,000 coconut trees of three different varieties by Garifuna people in Livingston, Izabal, in order to mitigate the effects of high winds but also for the trees’ cultural significance in food, spirituality, and medicine.

In recognition of the importance of Indigenous participation and buy-in for project success, some entities have institutionalized engagement with Indigenous communities on development projects. Just south of the Northern Triangle,
in Nicaragua, the Emergency Social Investment Fund (FISE), a rural water and sanitation services agency, has issued guidelines for effective engagement with Indigenous and Afro-descendant groups. These include a methodology for carrying out consultations and a monitoring strategy to ensure inclusion of Indigenous authorities in decision-making processes, implementation of trainings in local languages, and community buy-in and ownership of projects.14

Women are another group facing differentiated climate risks, as detailed in the previous report in this series. Civil society groups led by women or representing women’s interests should thus be prioritized for engagement. In urban areas of the Northern Triangle, women struggle to access land tenure, public services, and financial services and subsidies, as well as to participate in markets and local politics. In rural areas, many women rely on subsistence agriculture (on land that they typically do not own) with little or no alternative source of income. They are thus left vulnerable to food insecurity and extreme poverty in the aftermath of events such as landslides, droughts, and floods. Additionally, cultural norms limit women’s ability to learn skills that may be lifesaving in emergencies, such as swimming or driving.15 Thus, engaging specifically and intentionally with the women in a community can lend important insight into their unique challenges and vulnerabilities. Moreover, given that women are often assigned the caretaker roles for children and the elderly within a community, working directly with women can bring wider benefits to these groups as well.

**Challenges of Working with Local Civil Society on Adaptation**

Despite the benefits of working with local civil society partners, local engagement is a historically underutilized development strategy, including in the climate sphere—it is estimated that “less than 10 percent of climate finance from global climate funds between 2003 and 2016 were dedicated to local action.”16 USAID has for years sought to increase local partnership and strengthen local leadership (see Box 2), yet local organizations still account for just six percent of its funding.17

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**BOX 2: ONGOING USAID LOCAL ENGAGEMENT EFFORTS**

USAID has launched a number of programs seeking to increase local involvement in projects over the years. Current Administrator Samantha Power has made this effort a central feature of her tenure, announcing targets to direct 25 percent of funding to local organizations within the next four years (up from six percent currently), and for 50 percent of USAID programming to “place local communities in the lead” by 2030.18 In pursuit of these goals, in 2021 the agency drafted a Local Capacity Development Policy which aims to center local actors as “leaders in efforts to improve their communities.”19 This policy takes a systems-level view to understand which local actors are best positioned to advance development goals and lays out an “assets-based” approach to recognize their existing strengths.

Among USAID’s other initiatives seeking to expand local engagement is the Local Works program. Local Works uses five-year discretionary funds to allow missions to “develop and test flexible solutions to overcome operational challenges to advancing locally owned development within USAID, explore and use ‘systems approaches’ to achieve sustainable outcomes with local actors,” elevate and test approaches to local leadership, and facilitate local ownership.20 The three countries of the Northern Triangle are among the 32 missions with Local Works programming.

USAID’s New Partnerships Initiative (NPI) also fosters partnerships with new and diverse local actors.21 By collaborating with a variety of small businesses, faith-based organizations, cooperatives, diaspora groups, and civil society organizations, NPI aims to enhance access to information and resources regarding USAID funding opportunities. To do so, the program has launched web pages22 and training videos23 on how to access funding, reduced funding application requirements, set “fixed-amount” awards, and launched a Partnership Incubator. The Women's Global Development and Prosperity Initiative, which includes activities in Guatemala and Honduras, has received NPI funding.24

Finally, specifically in service of the Biden administration’s Root Causes Strategy, in 2021 USAID announced the Centroamérica Local Initiative, a five-year program of up to $300 million focused on “engaging, strengthening, and funding local organizations to implement programs to advance sustainable and equitable economic growth, improve governance, fight corruption, protect human rights, improve citizen security, and combat sexual and gender-based violence.”25
One reason for this trend is that large development contractors possess the implementation capacity, technical expertise, and experience to execute large and diverse projects, as well as familiarity with funders’ administrative procedures. Working with these traditional partners thus offers a sense of efficiency when faced with the mandate to mobilize massive quantities of funding. By contrast, working with many smaller local organizations can present a vast management and compliance burden, pushing the limits of funders’ capacities and resources. However, the use of large contractors can also contribute to a stagnation and even loss of local capacity as the higher salaries offered by these firms draw away talented local staff.

In the Northern Triangle specifically, a 2021 report by the USAID Office of Inspector General identified several challenges inherent to working with new partners in the region (which are also relevant to US efforts beyond USAID). These included “reputational risk, limited partner capacity to implement programming and measure success, and limited USAID capacity to manage these efforts and effectively assess their impact.” The report flagged financial management issues including “$2.3 million in questioned costs” between 2016 and 2021. It also identified other budgetary issues such as “implementers charging expenses over budget and unsupported expenses, failing to reconcile expenses to bank statements, using USAID funds to pay for non-USAID expenses, failing to properly account for cost-sharing funds, and overstating indirect costs.” In other words, despite its advantages in producing effective and sustainable adaptation outcomes, increasing engagement with civil society in the Northern Triangle will not be without its hurdles.

By developing greater institutional capacity, local organizations can more successfully recruit and retain local talent, improving the self-sustaining nature of local programming.

Adaptation Challenges Faced by Civil Society

In order for US government funding to be channeled into locally led adaptation measures, local organizations must be equipped to access and execute such funds. However, as described below, civil society groups in the Northern Triangle often lack the administrative capacity to access funding and face barriers such as language, a lack of financial literacy, and a lack of inclusion in the networks needed to learn of and apply for grants. They may also lack the technical and/or institutional capacity to effectively execute funds they are awarded, a hurdle cited repeatedly by task force members. Furthermore, a widespread lack of education and structural inequality throughout the region means that many marginalized groups such as Indigenous peoples, women, and youth struggle to participate in civil society at all. Finally, Indigenous communities and others are also threatened by displacement, due to a lack of formal land titles, compromising their ability to engage in adaptation planning on the most fundamental level.

A major hurdle for local organizations seeking to access international aid is the quantity of paperwork required to support financial oversight and regulatory compliance. In an analysis of USAID programming in the Northern Triangle from 2014 to 2019, smaller and locally based organizations reported feeling significantly disadvantaged because of the complexity of USAID reporting requirements, which were not accompanied by sufficient training. The administrative costs associated with these requirements made accepting US funding almost cost prohibitive.

Another barrier to greater partnership with local organizations is that they may lack the resources and networks to learn of funding opportunities. Funding opportunities are often circulated in international nongovernmental organization (INGO)-dominated networks. Limited accessibility of application documents is a challenge as well. Proposals are not always accepted in Spanish, let alone in Indigenous languages. A lack of sufficient financial literacy to submit a budget proposal, or a lack of internet access, are additional potential hurdles.

In addition to barriers related to accessing funds, local civil society organizations may also lack the technical or institutional capacity to implement projects. The capacity to effectively utilize highly trained staff is essential to maximize the impact of local organizations and of training programs related to key climate change adaptation sectors such as forestry, watershed management, nature-based solutions, agriculture, and food security. By developing greater institutional capacity, local organizations can more successfully recruit and retain local talent, improving the self-sustaining nature of local programming.
One successful example of building technical and institutional capacity comes from Guatemala, where Catholic Relief Services (CRS) launched a USAID-funded project called “Food Security Focused on the First Thousand Days” (SEGAMIL in Spanish) aimed at reducing chronic malnutrition and improving food access for farming communities. The project used a seven-year transition period to shift resources to local NGOs. To do so, CRS set up field schools to train farmers, especially women, in agricultural best practices, nutrition, and health and thus improve food security and resilience. The schools provided a central mechanism to integrate all learning and promote behavioral changes. The plan was developed in close consultation with the community and featured focus groups. Savings and internal lending community (SILC) groups were also organized for participants to access loans and invest in productive activities like animal-rearing, thus diversifying sources of income. These SILC groups were expected to be self-sustaining in the project’s final evaluation. By building and institutionalizing capacity within local communities through field schools and SILC groups, CRS sought to ensure that key impacts would last past project close. A program like SEGAMIL would be highly relevant in the context of climate adaptation through the inclusion of climate-resilient agricultural practices, and its example demonstrates how the existing capacities of a large NGO can be leveraged to build local capacity and transition a project to long-term local leadership.

On top of accessibility barriers, capacity gaps, and disparities in education and economic opportunity, a crucial challenge for Indigenous communities seeking to adapt to climate change in their territories is a lack of formal land titles. In addition to threatening Indigenous livelihoods, water sources, and culture, a lack of legal land title poses a threat to the sustainability of any US adaptation assistance measure, such as support for community-based forest management, as proposed in the previous report. Indeed, a lack of formal land titling is a significant problem in general for the countries of the Northern Triangle, with high rates of land tenure insecurity for Indigenous groups, women, and small-scale farmers. The LandMark Global Platform of Indigenous and Community Lands estimates that while roughly 16.6 percent of Guatemalan territory is acknowledged by the government as Indigenous land, another 13.3 percent of the country consists of unrecognized Indigenous land. In Honduras, as of 2015 only 10 percent of Indigenous territory had a guaranteed property title. (In El Salvador, the country with the smallest Indigenous share of its population, LandMark has not identified an estimate of the amount of Indigenous-held land.) Globally, up to two-thirds of all land held by Indigenous peoples under informal or customary systems is not legally recognized by states, despite the 2007 United Nations Declaration on the Rights of Indigenous Peoples, which enshrined the rights of communities to the land and resources traditionally held by their peoples.

Land tenure insecurity in the Northern Triangle increases the vulnerability of Indigenous groups and others to displacement by large-scale development and extractive projects, agriculture and ranching, and incursions by other land-insecure groups as well as criminal organizations. In Honduras, drug trafficking gangs have violently invaded Indigenous territories, especially those of the coastal Garifuna Afro-Indigenous population, in order to establish transportation routes. A 2016 ruling by the Inter-American Court of Human Rights also declared the Honduran state responsible for collective ownership rights violations against the Garifuna people. Reparations ordered by the court include granting Garifuna communities clearly defined collective land titles on their traditional territory. In Guatemala, the Group to Promote Communal Lands, made up of academics, Indigenous leaders, and NGOs, is one organization advocating for communal land rights. The lack of Indigenous land tenure security in the region and the consequent threat of displacement creates risk for a community’s investment in its resilience to climate change and presents a barrier to effective natural resource management in general.

A lack of Indigenous land tenure security and the consequent threat of displacement creates risk for a community’s investment in its resilience to climate change.

Given the disproportionate vulnerability of women to the effects of climate change, as described in the previous report in this series, making funding more accessible to civil society organizations run by women and advocating for women’s interests is paramount. High rates of unemployment, labor informality, and self-employment, coupled with lower rates of land ownership, leave women with fewer safety nets than men. Limited inclusion of women in formal economic, financial, and political systems exacerbates the aforementioned general limitations to...
applying for, accessing, and managing funds or loans from national or international sources. In El Salvador, for example, only 23.5 percent of women had an account at a bank or another financial institution in 2017, compared to 36.3 percent of men (a gap of almost 13 percentage points). This disparity is less pronounced, although still present, in Guatemala and Honduras, where the corresponding gaps are of 5.4 and 7.7 percentage points, respectively (see Figure 1). Climate finance has also failed thus far to adequately prioritize women’s civil society groups at the global level. In a survey of development finance from 2017 to 2018, only 1.5 percent of climate-related official development aid identified gender equality as a primary objective, and a third identified gender equality as not significant for its work. According to data from the Organization for Economic Cooperation and Development, from 2018 to 2019, of all climate-relevant official development aid that had a gender focus, just $43 million, or 0.2 percent went to feminist, women-led, and women’s rights organizations. Despite the global increase in gender equality spending, women-led organizations still often find themselves starved for resources. Organizations run by youth, who are poised to bear the most long-term and severe impacts of climate change, also face some unique challenges in accessing climate change adaptation funding and carrying out climate-related advocacy in the Northern Triangle. In Europe and the United States, youth-led climate movements have gained significant momentum over the past five years and are playing a significant role in bringing climate change to public’s attention and the political agenda. However, in the Northern Triangle, youth activists have had difficulty communicating the urgency of climate change amid a plethora of other societal ills. Furthermore, according to task force members, major organizations sometimes fail to recognize the contributions and capabilities of youth organizations and perceive them merely as activists, even when they possess technical expertise. In addition to this lack of recognition, some youth-led organizations also lack the capacity to design, evaluate, and manage projects, as well as the financial resources to execute their vision, coordinate efforts, and recruit talent. This leads to a high turnover of young people in youth organizations, further diminishing their ability to execute and complete projects. Given these conditions in the region, increasing the capacity of youth organizations to access international donor funds is essential.

FIGURE 1: ACCESS TO FINANCIAL SERVICES IN THE NORTHERN TRIANGLE, 2017
Existing Civil Society Adaptation Efforts in the Region

US government efforts to strengthen climate adaptation capacity in the Northern Triangle can build upon the work of numerous pre-existing civil society organizations, alliances, and networks that are working toward a more resilient region from a variety of angles. Technical, administrative, and financial support from the United States can empower these groups to create more effective and larger-scale outcomes while strengthening the civil society ecosystem so that it can endure into the future, including by diversifying its funding sources.

A series of 2021 reports by the El Salvador-based Fundación PRISMA (Regional Development and Environmental Research Program) provides a detailed mapping of the actors responding to climate change in each of the three Northern Triangle countries, as well as in certain particularly vulnerable subregions. PRISMA lays out a regional civil society ecosystem consisting of NGOs, professional associations, universities and research centers, and other organizations focusing on numerous fields related to climate adaptation, including food security, natural resource protection and management, rural development, territorial rights, risk management, and equity for marginalized groups. Some of these groups partner with other local actors in areas such as technical assistance, administrative capacity building, organizational development, legal aid in areas such as human and territorial rights, research and contextual analysis, and policy advocacy and other communications efforts. Diverse alliances and networks exist in specific areas to amplify the impact of individual organizations. Many civil society efforts that are thematically linked to climate change adaptation do not explicitly recognize themselves as such, although doing so could create even broader spaces for coordination. A sample of existing civil society efforts related to adaptation in the region, largely based on PRISMA analysis, is described below (see the annex for a table containing a wider sample).

In Guatemala, civil society groups are raising awareness about local changes in livelihoods and exploring resilience measures in areas such as food security, as well as advocating for amelioration of the underlying causes of climate vulnerability and the empowerment of marginalized groups in climate adaptation. Coordination of NGOs and Cooperatives (CONGCOOP) and the National Network in Defense of Food Security (REDSAG) are two local entities that advance such initiatives and push for the incorporation of local perspectives in adaptation efforts. Organizations of farmers also participate in such efforts. Community forestry organizations such as the Utz Che’ Association seek to strengthen sustainable livelihoods and management of natural resources, especially forests and water sources, through the strengthening of local value chains and markets, political advocacy (such as for recognition of collective land rights), and inclusion of gender- and youth-based perspectives.

In Guatemala’s southwestern highlands, which face acute vulnerability, including from landslides and crop-damaging frosts, community- and municipal-level organizations are working to increase resilience to climate change through community agricultural systems and improved water and forest management systems, as well as to tackle other contributors to vulnerability such as weak territorial rights. However, these efforts lack the large-scale, formal organization that can yield more significant outcomes, including on the policy level.

A similar “fragmentation” of efforts is present in the northern lowlands, which increasingly suffer from both floods and forest fires (the Guatemalan government has attributed a large share of forest fires in Petén department to land clearing by drug trafficking groups). In the northern lowlands, innovative community forest management mechanisms that incorporate traditional practices in northern Petén contrast with significant barriers to collective action in other areas. A PRISMA study found that community forest concessions in Petén were highly effective in reducing forest fires. Both the southwestern highlands and the northern lowlands of Guatemala have large Indigenous populations which, on top of climate risks themselves, suffer from additional climate vulnerability for the reasons described above and in the previous report.

Civil society efforts related to climate resilience in Honduras include initiatives related to productive or subsistence agriculture, protection of water sources, and co-management of protected areas. Important strides have been made in territorial governance as well, such as the granting of collective titles to Miskito and Garifuna community lands in 2012. This is key, for example, for Miskito communities in the far eastern part of the country, where displaced settlers from neighboring areas invade and deforest large areas for agriculture and other purposes. The Honduran Climate Change Alliance (AHCC) is an important group of organizations and networks that represent Indigenous, agroforestry, smallholder farming, and climate justice interests, among others, including in government consultation spaces.
Honduras’s extensive share of Central America’s Dry Corridor is a major hotspot of climate vulnerability. Intense droughts increasingly threaten agricultural livelihoods in areas like the southern part of the Lempira department. There, past successes in improved agricultural practices that reduce soil degradation and increase drought resilience have yet to be scaled, a potential area for civil society empowerment. On the other hand, a campaign by farmers, religious leaders, water boards, and educators successfully led to municipal measures banning agriculture burns in certain areas. This effort also gave rise to important organizations such as the Lempira Central Pro-Water and Integral Development Committee (COCEPRADIL) and Community Technical Institutes (ITCs). The Foundation for Research and Conservation of Ecosystems and Biodiversity (INCEBIO) is an organization providing conservation-related technical assistance to rural and Indigenous groups in the southwestern Dry Corridor as well as in the southern Choluteca department and the Miskito region.

In El Salvador, as in Guatemala and Honduras, civil society efforts related to climate change are centered on more specific issues, as exemplified by leading organizations such as the Water Forum, the Food Sovereignty Roundtable, the National Family Agriculture Committee, and the Permanent Roundtable on Risk Management. These organizations not only lead national campaigns, but also more localized efforts such as territorial roundtables. Nationally, organizations without an explicit environmental focus are increasingly incorporating a climate lens, including investigative and independent journalistic outfits.

The Dry Corridor is an area of particular climate vulnerability in El Salvador, as in its neighbors. The Ahuachapán department in the country’s southwest is among the areas with the highest poverty and food insecurity rates, while also suffering from both increasing droughts and floods. Civil society in that region confronts its adaptation issues from various angles.

Some organizations such as Communal Development Associations (ADESCOs) and water boards tackle subsistence challenges, while agricultural associations and cooperatives emphasize diversification and commercialization. Other organizations support ecosystem restoration and biodiversity conservation.

Extreme poverty is also prevalent in the Cacahuatique region of northeastern El Salvador, where a high degree of soil degradation is detrimental to agriculture and contributes to flash floods and landslides. Climate change has also facilitated the spread of the “coffee rust” fungus, weevils, and forest fires. In this region, organizations like the Local Economic Development Association of Morazán have facilitated local technical assistance initiatives and spaces linking civil society with government officials. Water funds are also an innovative mechanism being used to increase resilience by pooling resources between users, governments, and other actors to finance protection of water sources. Other actors in the Cacahuatique region work on reforestation, forest fire prevention, forest management, and environmental education.

These examples (and others included in the annex) are merely a sample of existing civil society efforts related to climate resilience in the Northern Triangle. Yet, they provide a sense of the diverse partners that US government entities can work with and strengthen to drive durable adaptation rooted in local priorities and abilities.

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Education, Research, and Climate Information

Educational programming is central to building climate adaptation capacities from the national to the community level. However, education levels in the Northern Triangle are low overall, hampering the ability of countries and communities to respond to climate change (particularly in the case of marginalized groups) and thereby increasing vulnerability. In 2019, the average amount of schooling completed in Guatemala and Honduras was 5.9 and 7.1 years, respectively; in El Salvador the 2017 figure was 6.8 years.

On the national level, this lack of capacity contributes to an inability to carry out the planning and execution of adaptation measures envisioned in countries’ Paris Agreement Nationally Determined Contributions (NDCs)
and in the National Adaptation Plans described in the previous report. Formal education programs are necessary for efforts such as training a workforce capable of installing and operating clean energy technology. On the local level, formal and informal climate education and the building of relevant technical capacity are necessary to facilitate greater understanding of the ecological impacts of climate change and support the development and implementation of solutions unique to community needs. Finally, generation of and access to climate information, including at the local level, is also a key prerequisite to many forms of adaptation. The following sections provide examples of how national and local governments, universities, and nongovernmental and intergovernmental entities are building the knowledge and skills for the Northern Triangle to adapt to climate change in ways that can be expanded.

**National and Local Governments**

All three of the Northern Triangle’s national governments have environmental education efforts underway. In Guatemala, a comprehensive 2017 policy under the discretion of the Ministry of Environment and Natural Resources provided for the inclusion of environmental education throughout formal and informal education systems. The policy includes plans for public awareness campaigns and integration of Indigenous knowledge. Environmental education workshops and training programs implemented by the Ministry reached an estimated 147,000 people between 2020 and 2021. As one example, in 2021, the Guardianes Ecológicos conservation program trained 15,000 youth in climate adaptation and mitigation best practices and helped them to establish recycling, rainwater harvesting, and soil management projects. Through the National Seismology, Volcanology, Meteorology, and Hydrology Institute (INSIVUMEH), the Guatemalan government is also improving access to and use of climate information at the local level. In certain regions, INSIVUMEH promotes agroclimatic roundtables to generate local knowledge of climate conditions and recommendations for risk reduction. These roundtables are partnerships, led by the National Coffee Association (Anacafé) in the central-south region, and by civil society in the highlands, for example. However, in the vulnerable northern Petén region these roundtables are absent. Guatemala’s National Climate Change Information System (SNICC) is another means of disseminating climate information. This user-friendly online tool provides reliable climate information and data digestible for citizens and experts alike. The website has a section devoted to data on the vulnerability and adaptation of various sectors of society.

In El Salvador, the Environmental Education Program, published by the Ministry of Environment and Natural Resources in 2018, directs resources to universities and to technical training outside of universities and in informal spaces. It aims to launch public awareness campaigns and boost technology facilitating access to information. Under national frameworks such as this, several local policies have emerged. For example, the 2019 Plan for Environmental Education of the municipality of San Pablo Tacachico, La Libertad, established in response to the National Environmental Strategy, aims to shift broader environmental attitudes and values through formal and informal education systems and awareness campaigns that leverage local public radio, television, and urban murals.

In Honduras, the Special Environmental Education and Communication Law passed in 2009 aims to form public awareness around environmental issues; develop a culture of respect, protection, and conservation of nature; and promote disaster risk management. Under this law, several agencies have been established, including the National Environmental Education and Communication Council and the Department of Environmental and Health Communication and Education (DECOAS). DECOAS has established a national program of Green and Safe Education Centers which promote sustainable development, disaster risk management, and environmental health and orient the culture towards environmental protection. The program operates a training and certification program to help elementary and high schools adopt risk management education.
Universities

Universities in the Northern Triangle are increasingly offering programs and carrying out research focused on climate adaptation and risk management. Though climate-specific curriculum is often offered only as a specialization or concentration within agriculture or engineering departments, universities in all three countries are advancing the research and technical capacity needed for climate solutions. Several examples are listed below.

In Honduras, the Zamorano Pan-American School of Agriculture, considered the top agricultural school in Central America and a hub for adaptation research because of its location in the Dry Corridor,74 has released a series of publications that address the impact of climate change on agriculture, carbon capture, and biodiversity.75 The university also offers a master’s degree in Sustainable Tropical Agriculture and publishes articles on the subject free for public consumption.76 The university is also leveraging partnerships with international aid organizations. For example, in conjunction with Swiss development agency COSUDE, the university has launched a project to strengthen the capacities of 21 other Honduran universities in climate change adaptation and disaster risk reduction by creating a network of researchers, study plans, and a diploma course.77 Zamorano has also done work on rainfall harvesting for irrigation with support from USAID and in partnership with the International Center for Tropical Agriculture (CIAT).78 Other universities, such as the National Autonomous University of Honduras (UNAH) are focusing on the impacts of climate change through programs such as Earth science.79

Universities in the Northern Triangle are increasingly offering programs and carrying out research focused on climate adaptation and risk management. received the Accreditation in Disaster Risk Management and Climate Change Adaptation through the Central American Agency for Accreditation of Architecture and Engineering Programs (ACAAI).80 Additionally, the Guatemalan System of Climate Change Sciences (SGCCC) demonstrates the potential of intersectoral climate research and education. A consortium of universities, government institutions, social science research centers, private entities, and NGOs, the SGCCC produces and reviews scientific information in order to advise government bodies, particularly the National Council of Climate Change.81 The SGCCC, which includes an adaptation and vulnerability working group, also plays an important role in dissemination of information about climate change to the general public, students, professors, journalists, and private entities through newsletters, educational materials, trainings, and events.

Finally, in El Salvador, the University of Dr. José Matías Delgado, through its Agriculture and Agricultural Research Department, supports research and instruction on innovative agricultural practices, offering degrees such as engineering with a focus on environmental management.82 Several universities in El Salvador offer a master’s degree in environmental management, such as those at the José Simeón Cañas Central American University and the University of El Salvador. Both of these programs offer a wide, interdisciplinary view of environmental issues and solutions.83,84 The Catholic University of El Salvador also offers a master’s degree in environmental management within its school of Engineering and Architecture.85 This program includes a unit on vulnerability and adaptation to climate change as well as others that relay information essential to climate adaptation in El Salvador such as sustainable energy and integral water and waste management.

Nongovernmental and Intergovernmental Programs

Nongovernment and intergovernmental programs are also playing a key role in climate education and research and access to climate information. These efforts span a range of actors including NGOs, multilateral and intergovernmental organizations, and foreign government agencies. As noted in the proceeding Private Sector Engagement section, private entities have also demonstrated value in providing climate-related technical assistance and generating climate information.
Founded in 1946, the Costa Rica-based Tropical Agricultural Research and Higher Education Center (CATIE) is an important institution that has established considerable climate change adaptation programming throughout the region. 86 CATIE’s programs provide a variety of technical and academic training for experts and professionals, as well as rural communities, on agriculture, conservation, environmental management, and sustainable use of natural resources. In Honduras, the organization has launched a field school, teaching 500 families about food security, land management, and community forestry, and provided trainings to over 2,000 professionals and technicians on agriculture and natural resources. 87 In Guatemala, the institution has trained almost 10,000 families since 2014 and has formed more than 100 strategic partnerships throughout the country. 88

The International Center for Tropical Agriculture (CIAT) is another research organization making important contributions to climate change adaptation in Central America. Part of CGIAR (formerly the Consultative Group on International Agricultural Research), a global partnership of research organizations with an emphasis on food security, CIAT has operated in the region since the 1970s. CIAT’s work includes testing of climate-smart agricultural practices in Honduras and Guatemala in collaboration with policymakers and stakeholders at all levels, and creating and strengthening climate information systems in Honduras, including through building meteorological capacity for climate and crop modeling and establishing local agroclimatic committees. 89

On the intergovernmental level, the Central American Integration System (SICA), the principal regional organization, has launched a series of user-run database apps through its Centro Clima platform to help citizens understand and make decisions related to climate variables. These include Clima Pesca, which provides meteorological and oceanographic information to those whose livelihoods depend on fishing, Coffee Cloud, which is run by the major coffee institutions in the region and helps farmers understand the state of coffee plantations, and Hidroclima, which tracks water flow rates to provide information to hydroelectric engineers. 90 Other multilateral organizations such as the Inter-American Development Bank (IDB) have also implemented educational adaptation programs. For example, an IDB project focused on sustainable livelihoods in Guatemala’s vulnerable Dry Corridor region included trainings on poultry production to diversify food and income sources, as well as on strategies to combat desertification such as soil conservation. 91

Foreign governments are also working on improving access to and literacy in climate information, including through partnerships with SICA. These partnerships build scientific knowledge and develop technology and local capacity to make climate forecasts. In 2018, the European Union (EU)’s EUROCLIMA+ program hosted meteorology workshops throughout Central America to heighten understanding of climate conditions and enhance forecasting capabilities. 92 In partnership with SICA, the EU’s Earth-observation program Copernicus launched Copernicus Centroamérica in 2018 to conduct a series of climate change webinars and workshops based on open source Copernicus data. 93 In 2019, the US National Aeronautics and Space Administration (NASA) deepened its own collaboration with SICA in signing a joint statement. Among other efforts, this collaboration includes instructing locals in interpreting and analyzing NASA’s data in order to enhance climate risk management. 94

**Government Engagement**

While aid from US agencies and other international partners is crucial to advancing climate adaptation in the Northern Triangle, robust national and local policies are also essential. Governments play an important role in regulating, planning, and funding development in a range of relevant areas including land use, infrastructure, research, energy, and education—as well as creating conditions that make aid more effective. However, as emphasized by some task force members, partnering with national governments on adaptation projects in the region is complicated by corruption, bureaucracy, and in some cases, a lack of political interest or will. Additionally, the highly centralized nature of national governments in the Northern Triangle can stymie widespread democratic participation and incorporation of local knowledge. Thus, in some cases, subnational governments present a promising alternative for partnerships in strategic adaptation planning and programming.

National governments play an important role in defining national and sectoral strategies, such as National Adaptation Plans (as outlined in the previous report in this series), and international commitments, such as Paris Agreement NDCs. These high-level policies can serve as a guide in defining strategic priorities and key adaptation measures. Still, implementation often happens on the subnational level and adaptation actions must be
tailored to local contexts. To that end, some subnational governments in the Northern Triangle have completed their own local adaptation plans, facilitating coordination between local entities in order to set attainable targets and bridge the gap between high-level rhetoric and concrete action. These plans, many of which have been designed with international support, can be used to inform the design of similar ones in other localities.

Working with subnational governments is important because development assistance programs alone cannot ensure locally led adaptation. A 2020 report on localization of development explains that beyond community-led initiatives, climate adaptation solutions must be made sustainable by public policies and broader strategic plans. Thus, US agencies should look to local government partners to create local-level policies that support, regulate, and incentivize climate change adaptation measures.

Beyond community-led initiatives, climate adaptation solutions must be made sustainable by public policies and broader strategic plans.

Across the region, some local governments have complemented national adaptation plans with their own local counterparts. In Honduras, the Municipal Climate Change Adaptation Plan of Cabañas, Copán, developed with support from CIAT and other NGOs, describes how to improve the adaptive capacities of diverse sectors like agriculture, food, health, and sanitation, as well as how to mitigate risks for the most vulnerable populations, emphasizing communication and education related to climate risks. This group of NGOs, with support from the US Department of State, also developed a climate adaptation plan with the municipality of San Juan, Intíbucá, focused on ecosystems and water recharge, food security, human health, education, and infrastructure. Similarly, the mayor’s office of Tegucigalpa, the national capital, has laid out a Framework for Environmental and Social Management, guided by the national Urban Climate Change Adaptation Program. This local framework details how the office will carry out the national plan by advancing climate adaptation projects such as flood control and retaining walls and investing in infrastructure such as bridges and parks. The municipal government of San Pedro Sula has also expressed interest in measures such as nature-based solutions and early warning systems, particularly for specific areas like the flood-prone riverside suburb of Chamelecon.

Local governments are also issuing their own climate adaptation plans in Guatemala. For example, in 2016 the Municipal Plan for Adaptation to Climate Change of San Gaspar Chajul, El Quiché, was devised with broad participation by civil society organizations, government entities, private initiatives, municipal authorities, and international organizations. The plan focuses on how to adapt to the most concerning local impacts of climate change—drought, frost, soil erosion, landslides, forest fires, and strong winds. In 2017, with USAID support, the municipality of San Miguel Ixtahuacán, San Marcos, issued a Municipal Climate Change Adaptation Plan that aims to ensure the long-run operation of adaptation investments within the municipality and direct governmental and nongovernmental investments toward reducing current and future climate vulnerability. It also articulates how the city will increase local institutional capacity for climate adaptation through interinstitutional coordination, development of tools for monitoring and evaluation, and sector-specific short- and long-term goals. In 2021, the department of Santa Rosa began to develop a climate adaptation plan through the Ministry of the Environment and Natural Resources and with the support of Rainforest Alliance.

In El Salvador, the capital city of San Salvador created a multi-sectoral and inter-institutional adaptation plan in December 2018 that focuses on concrete mechanisms for adapting to primary climate challenges (an increase in extreme rain, changes in annual rain, and an increase in temperature) as well as a focus on education, building institutional capacity, and knowledge to adapt to climate change more broadly. The Ministry of Agriculture and Livestock has also helped two cities in the department of Santa Ana (Texistepeque and Candelaria de la Frontera), to issue a climate adaptation plan. The plan focuses specifically on reducing land degradation in fragile micro-watersheds in collaboration with the United Nations Food and Agriculture Organization.
Private Sector Engagement

Private sector actors committed to sustainable development and the rule of law, including local businesses, business associations, cooperatives, and financial institutions, can play a key role in the financial sustainability of climate adaptation efforts in the Northern Triangle. Expanding efforts to strengthen local private markets and capacities in areas such as climate-resilient agricultural products should be a key component of making aid efforts more locally led and sustainable. Private actors can also drive innovation and make adaptation-related investments where businesses and communities have shared interests, as well as support efforts to diversify economies away from climate-sensitive activities like agriculture. In the field of climate adaptation, strengthening the local private sector’s awareness of climate risks and its ability to adapt to them is also an important step toward long-term resilience. Finally, it is important to note that governments also play an important role in facilitating investments in a more resilient private sector through factors such as regulation, incentives, political stability, and rule of law (including land tenure security), and US engagement with both governments and the private sector should keep this in mind.

Strengthening small businesses and building the local private sector is key to integrating adaptation into Northern Triangle economies. These objectives can be pursued through the expansion of efforts such as the USAID Partnering to Accelerate Entrepreneurship (PACE) Initiative. This initiative aims to catalyze private-sector investment in early-stage enterprises, helping them to grow large and stable enough to secure investors. Such efforts are especially important in regions like the Northern Triangle where a large share of the population (at least 75 percent) works in the informal sector and thus lacks a social safety net. By working with intermediaries like incubators, accelerators, and impact investors, PACE has proven effective in accelerating the growth of small businesses. As of 2020, PACE had supported businesses in El Salvador and Guatemala. Many homegrown partnerships also already exist to foster businesses that are linked to adaptation or seeking incentives to adapt to climate change, including through nature-based solutions and early warning systems. The private sector in this area, which is prone to floods and landslides, suffered large losses due to Hurricanes Eta and Iota in 2020. San Pedro Sula is also the point of departure for many migrant caravans. An organization called the Center for Business Development (CDE) is working in the Sula Valley to strengthen small and medium-sized enterprises (SMEs) through platforms that include USAID support. However, besides financing for entrepreneurs affected by the storms, these efforts have little focus on climate change adaptation.

Existing partnerships between associations and SMEs, such as CDE’s, can be leveraged to provide financial, technical, communication, and coordination support to foster businesses that are linked to adaptation or seeking to incorporate adaptation measures and climate risk into their planning. Agricultural and fishing cooperatives are another coordination mechanism that can be leveraged to channel technical and financial assistance. In Guatemala, for example, these include the Federation of Agricultural Cooperatives of Guatemala (FEDECOAG), the Federation of Coffee Producer Cooperatives of Guatemala (FEDECOCAGUA), the Federation of Fishing Cooperatives of the Pacific (FEDEPESCA), and non-federated cooperatives.
Partnerships between large companies and small entrepreneurs can also be utilized in pursuit of greater climate resilience, as demonstrated by the Súper Selectos grocery chain in El Salvador. Through its “Cultivating Opportunities” program the firm has gone from importing 95 percent of its fruits and vegetables to 40 percent, with 60 percent of its supply coming from more than 2,000 small producers to which it provides consistent market access, technical assistance, inputs, and seed development. Producers supported by the program have benefited from climate-smart practices such as covered agriculture and drip irrigation. In partnership with USAID, an agribusiness in Guatemala, Agropecuaria Popayán, set up the Agriculture Center for Prosperity and Opportunity (CAMPO) in the western highlands in 2021. CAMPO is expected to train more than 36,000 small-scale farmers on practices such as use of greenhouses and rainwater reservoirs and link them to markets. Such partnerships can be expanded with an explicit climate-smart focus.

The private sector is also uniquely able to drive innovation and the adoption of new technologies. Private sector innovation can benefit communities at large in areas where private interests overlap with more general vulnerability. Expanding awareness of climate risks and the need of the regional private sector to adapt can lay the groundwork for this process and is something that the Honduran Private Enterprise Council (COHEP) is engaging in, for example. Partnering with businesses and cooperatives on research and climate information, workforce development, and promoting new markets (such as for more climate-resilient agricultural products) can create adaptation outcomes that are embedded in local economies and provide benefits both for companies and communities at large. Sugar and coffee producers, for instance, have a clear interest in promoting the generation of more accurate hydrometeorological information that can inform their practices. The Guatemalan sugar industry association has set up 20 meteorological stations that produce real-time data on a number of variables, identify their relationships with production, and make forecasts.

Finally, private ingenuity can also be capitalized upon in service of diversification into alternative sustainable income sources in places such as the Dry Corridor, where agricultural livelihoods are increasingly under threat. An example of this comes from the Gulf of Fonseca region on Honduras’s southern coast, where factors including agricultural deterioration from soil degradation and drought have produced outward migration for years. In light of this situation, the Union of Social Sector Businesses of the Environmental Economy of Marcovia (UEDESAMAR) was formed to generate alternative economic opportunities that play to the region’s comparative advantages. These include development of hotels and restaurants for beach tourists as well as sea turtle viewing accompanied by a breeding and reintroduction program. UEDESEMAR’s efforts have been supported and accompanied by the Global Environmental Facility’s Small Grants Program, which seeks local and locally led development, and carried out in partnership with municipal and national officials and the shrimp harvesting association, among others. It has been carried out with a focus on integration of women and youth, social inclusion, and transparency.

In sum, a range of private actors, from informal entrepreneurs to associations, cooperatives, and large companies are already carrying out initiatives in the Northern Triangle that either expressly respond to the stresses of climate change already or could be leveraged to do so with US government support. Strengthening the regional private sector in a way that builds resilience to climate change goes hand-in-hand with addressing more generalized development challenges contributing to migration from the Northern Triangle, such as poverty, a lack of economic opportunities, and high labor informality. In the longer term, such efforts can also drive organic economic growth that is sustainable and resilient, mitigating the root causes of migration from the region while eventually limiting the need for US support.
As this report has described, the countries of the Northern Triangle are home to a variety of groups and programs seeking to build resilience to the impacts of climate change from different perspectives and at different scales. These include civil society, Indigenous groups, universities, subnational governments, and private companies and cooperatives. These actors are those most familiar with adaptation needs in their countries and communities and those positioned to ensure adaptation capacities eventually persist and grow in a self-sustaining way. However, given the vulnerability of this region to climate change, the scale of the challenge ahead, and national contexts complicated by weak governance, corruption, violence, poverty, and inequality, these groups need assistance, which is often poised to be most effective on the local level. The US government, through USAID, the International Development Finance Corporation (DFC), technical agencies (such as NASA), and other actors, can take a number of steps to ensure the efficacy of local adaptation programs, engage with and strengthen local partners, and embed climate change adaptation into educational systems, government plans, economies, and national, intersectoral movements.

Ensure that climate adaptation projects have community buy-in and reflect local needs

The commitment of the US government to deepening engagement with local actors, particularly through USAID, is well documented by multiple policies and initiatives. Still, it must be underscored that applying this approach is essential for successful climate adaptation programming in the Northern Triangle. Local actors possess nuanced, expert understanding of what their communities require to become more resilient to climate change and what assets their communities hold that can contribute to such efforts. These actors must thus be consulted extensively throughout project design and implementation, such as through co-creation processes. USAID and other relevant US agencies should place local civil society organizations in the lead wherever possible given their familiarity with local knowledge and needs. Such is the mission of the Inter-American Foundation, an independent agency that accepts community-led development proposals from local organizations year-round, with a focus on small, manageable grants (see Recommendation #2) and capacity building (see Recommendation #3). Despite a perception of efficiency, working too quickly, and on too large of a scale, can create inferior outcomes and jeopardize the US government’s own objectives in the region.

Collaborative and open-minded engagement with local partners at all stages of programming contributes not only to the effectiveness of interventions, but also to a sense of local trust, buy-in, and ownership that ensures that a project and its impacts live on beyond US government involvement (provided that local capacity is also developed, and financial sustainability is secured). Programs like USAID’s Local Works, which is already present in all three Northern Triangle countries, should be expanded to continue generating learnings on how best to prioritize local needs and leverage local abilities as USAID and other agencies increase their focus on locally led development, climate adaptation, and the Northern Triangle.
Invest in outreach and increase accessibility of funding opportunities for climate adaptation, especially in vulnerable regions

For local organizations to be central actors in climate adaptation projects, they must be made aware of funding opportunities and be able to access and apply such funding according to their unique needs. Expanding outreach efforts to make funding opportunities known and accessible to a greater number of local partners should thus be a priority, for example through dissemination networks and workshops. USAID’s New Partnerships Initiative (NPI) has sought to achieve this through streamlined application processes, the WorkwithUSAID.org site, and other resources and events. However, in the Northern Triangle, truly reaching local communities, and marginalized groups in particular, may require additional steps. For instance, to engage Indigenous communities in efforts such as community-based forest management and increasing land tenure security (see Recommendation #4), making documents available in Indigenous languages or creating dissemination schemes that reach areas without internet access may be necessary.

Working with new local partners may also require more flexible forms of funding in order to empower local actors, especially those with limited administrative capacity, to best address the challenges they face and adapt to new developments. For instance, NPI has explored alternative funding mechanisms such as “fixed-amount awards” which reduce paperwork vis-a-vis reimbursement schemes. Smaller-scale, sequenced programming may also be more suitable to local organizations and provide for adaptability to the changing conditions inherent to the evolving climate crisis.

Promisingly, within the Centroamérica Local framework, USAID/Guatemala has professed a commitment to both improved outreach (including “expanding use and support of local and Indigenous communication channels”) and increased flexibility, including through piloting new funding mechanisms. This capacity for creativity and strategic risk taking, which is also demonstrated by NPI efforts, should be encouraged and expanded throughout the Northern Triangle in support of local climate adaptation priorities.

US government efforts to expand local partnerships and build local capacity (see Recommendation #3) should especially invest in additional outreach in areas suffering from particular climate vulnerability due to geographic factors such as risk of drought or floods, and/or socioeconomic factors such as poverty or high dependence on agriculture. Several such regions have been cited in this report, including the Dry Corridor (in all three countries), the low-lying and populous Sula Valley in Honduras, Guatemala’s western highlands and northern lowlands (largely the fire-prone Petén department), and the northeastern Cacahuatique region and western Ahuachapán department of El Salvador. Key areas for water production, regulation, and conservation should also be prioritized for greater local engagement.
Develop the administrative capacity of civil society organizations, particularly those run by or advocating for Indigenous peoples, women, and youth, and fill capacity gaps in the meantime

Civil society is the key repository of local knowledge that enhances project success, and the sector that is poised to take up the mantle of addressing local climate adaptation challenges in the future. However, civil society organizations in the Northern Triangle, particularly those run by and/or advocating for vulnerable groups, frequently lack the administrative capacity and experience to win grants from organizations such as USAID and to comply with rigorous reporting standards and other compliance measures. USAID can build this capacity by issuing calls for development in strategic planning, operations, fundraising, and financial management, as described by the USAID-funded Stopping as Success (SAS) initiative. This capacity can empower organizations to diversify their funding sources and contribute to a self-sustaining model.

The SAS initiative has also published guidelines for transitions in which a traditional implementing partner designs projects in concert with local organizations, eventually passing ownership of the project to local actors. Such partnerships or “accompaniments,” especially between international NGOs with an established presence in the country, knowledge of its context, existing relationships with local groups, and a willingness to take risks on innovative efforts can lead to a re-envisioning of climate change adaptation efforts in the Northern Triangle as local capacity-building processes rather than solving problems through projects—with a focus on results and indicators that reflect this innovative approach. While these processes take place, urgent adaptation needs can still be addressed by engaging local actors within their current capacities, for instance by contracting experienced implementing partners to provide services related to compliance and other areas.
4 Strengthen land tenure, especially for Indigenous groups

Legal security of land ownership is a prerequisite to climate change adaptation efforts to reach their full potential for vulnerable communities in the Northern Triangle, including Indigenous groups. However, many Indigenous communities in the region lack legal recognition of their traditionally inhabited lands, putting them at risk of displacement by development projects and encroachment by actors such as landless farmers and criminal groups. This poses a serious threat to their ability to manage their lands in a way that optimizes their resilience to climate change and creates sustainable growth. Women also suffer from low rates of land ownership, limiting their capacity to adapt to climate change and their safety net in the event of a catastrophe.

The US government can work both with national governments and Indigenous communities themselves to improve Indigenous land security and land tenure overall. These efforts could include supporting national governments in improving data on Indigenous land tenure, identifying gaps in the legal framework that reduce tenure security and stymie the resolution of land conflicts, and implementing titling programs that provide for traditional Indigenous forms of land ownership, such as communal ownership. From the perspective of communities, USAID can carry out programs to elevate Indigenous peoples’ knowledge of their land rights and strengthen their ability to advocate for greater land tenure security themselves. In the meantime, innovative mechanisms could be employed to facilitate the execution of projects without the need for a formal land title. For increasing land tenure security overall, and particularly for women, other solutions could include creating land banks and credit for purchasing land and supporting governments in implementing joint land titling and registration programs, as has been done in several Latin American countries, including nearby Nicaragua.126

5 Set up incubators to strengthen youth climate organizations and networks to connect them to each other and to broader civil society

Youth climate activists in the Northern Triangle cite numerous needs to advance their missions, including greater recognition by established civil society groups, technical assistance to apply for funding and execute projects, more effective communication strategies and political discourse to elevate the profile of climate change on national agendas, and coordination of efforts between themselves. The United States could create incubators to provide technical and financial assistance to youth climate organizations and networks to facilitate dialogues and partnerships between youth organizations, as well as between youth organizations and more established civil
society groups. Such relationships can be fostered from the local to the regional level, and even beyond the Northern Triangle, and can help youth organizations align their efforts within a broader strategy and promote each other’s work. In addition to helping individual youth groups get their efforts off the ground, such initiatives could foster national and regional ecosystems that strengthen youth movements as a whole while integrating youth perspectives and contributions into more established civil society agendas.

6
Mainstream climate change adaptation into all levels of education and improve access to and literacy in climate information

Climate change is already having a profound impact on the Northern Triangle, and even if global efforts to mitigate climate change exceed expectations, the population of these countries must be well prepared to adapt for the foreseeable future. The United States can provide assistance to enhance this preparedness from the household to the workforce level. This could include the development of curriculum on climate change and its impacts in formal education (from the elementary level to technical, vocational, professional, and non-professional education programs) and informal and community education, tailored to national and even subnational contexts. Partnerships with regional and US universities can be leveraged to this end. Creating awareness of climate change and the urgency of adaptation from an early age is critical for infusing adaptation efforts into the societies of such a vulnerable region and preparing the workforce to tackle the challenges that climate change presents (see Recommendation 7).

At the same time, communities need access to and literacy in climate information now. Such information includes crop forecasts, hydrological and meteorological predictions, disaster early-warning systems, and risk assessments. The tools of US government agencies such as NASA, the National Oceanic and Atmospheric Administration (NOAA), the Department of Agriculture (USDA), the US Forest Service (USFS), and the Federal Emergency Management Agency (FEMA) can be leveraged to make such data available. Efforts should be made to ensure that information is readily accessible at the local level, for instance by directly partnering with subnational governments to house climate data. The United States can also provide free workshops or courses on how to interpret and use such data for actionable adaptation measures, with the curriculum passed on to communities so that they can conduct such education for future generations themselves.

Accessibility considerations are paramount to ensure that educational initiatives on climate change adaptation and climate information reach the most vulnerable communities—for instance, those without Internet access, Indigenous communities who speak only local languages, women suffering from education gaps, and those who struggle to find time to invest in new skills because they cannot afford to lose work or need to attend to their family.
Increase both supply of, and demand for, professionals trained in adaptation-related fields

Within the context of a need for greater knowledge of climate impacts and adaptation measures on the societal level, formal training in adaptation-related fields must be underscored as it can drive climate resilience that is accompanied by economic growth and thereby more sustainable. While universities, governments, and regional organizations have begun developing and implementing degrees and training programs in adaptation-related fields in the Northern Triangle, the scale of the challenges ahead leaves plenty of room for additional programming, which the United States government could provide.

Areas such as disaster risk management, “green” disaster recovery and reconstruction, early-warning systems, resilient buildings and land-use planning, nature-based solutions, climate-resilient agriculture, and distributed renewable energy will all require hosts of professionals trained in these fields and the innovative technologies that underpin many of them in the future. The United States can build on existing efforts by partnering with universities, governments, and regional organizations (such as SICA organizations) to continue to strengthen education in these areas (see Recommendation #6), especially for women, Indigenous peoples (which may mean providing programming in Indigenous languages), and other marginalized groups. This could include through USAID funding, knowledge exchanges with US agencies such as the Department of Energy, USDA, NASA, NOAA, USFS, and FEMA, scholarships, and partnerships with US universities to train Central American students committed to enhancing resilience in their home countries.

At the same time, newly upskilled professionals must be able to depend on a job market in their home countries in order to prevent a “brain drain” of talent. This market could be secured through stimulating private sector investments in adaptation and partnering with private companies to ensure jobs for program alumni (see Recommendation #9), strengthening civil society (see Recommendation #3), bolstering national and subnational adaptation planning (see Recommendation #8), and improving the capacity of relevant national and subnational government institutions to leverage and retain professionals with such skills. At the same time, it is recognized that in the region the prevalence of the informal economy and weak government institutions present challenges to such efforts that are beyond the scope of this particular report.
8 Support subnational climate change adaptation planning that is rooted in local priorities

While the three countries of the Northern Triangle all have National Adaptation Plans tailored to their national contexts, adaptation planning has yet to be integrated into many key government decisions taking place on the subnational level in areas like infrastructure, economic development, energy, land use, and education. The United States can support subnational governments, through financial and technical assistance and capacity building, in the development and implementation of climate change adaptation plans that are crafted in close consultation with local communities and civil society and reflect the greatest local adaptation priorities. Support could also be provided to ensure that updates of National Adaptation Plans reflect the local needs identified by subnational governments.

Subnational adaptation plans should be data-driven, implying a greater need for localized climate information and risk data, which US agencies such as NASA, NOAA, and USDA could help provide. Local governments will also require financial and technical assistance implementing their adaptation plans through their integration with other local policies and the development of projects. Such assistance should be provided in concert with robust transparency and monitoring measures to ensure that funds are being used effectively and that efforts are improving local outcomes as intended. Creating subnational government knowledge and ownership of climate change adaptation, as well as an ongoing dialogue with local civil society to ensure alignment with local realities, is an important measure to ensure the effectiveness and sustainability of climate change adaptation efforts well into the future.

9 Foster private sector partnerships and SMEs to support the financial sustainability of adaptation efforts and embed adaptation in local economies

Government spending and development assistance alone will not cover the immense costs of adaptation. However, the region’s private sector has strong incentives to adapt to climate change, and the resources of private companies committed to sustainable development and the rule of law can thus be mobilized to increase community resilience. USAID and the DFC can make de-risking investments in innovative areas such as climate-resilient agriculture and nature-based solutions in order to leverage much greater investments from the local private sector. The United States can also catalyze the establishment of local public-private partnerships to advance shared adaptation priorities, as well as partnerships with local universities in areas such as workforce development, research, and climate information. Additionally, as emphasized in the recommendations of the previous report of these series, more work can be done with the private banking sector to broaden access to capital, specifically for adaptation-related investments.
The US government can also expand support for small and medium-sized enterprises (SMEs) in the Northern Triangle through efforts like USAID’s PACE initiative. This could be done specifically with climate change adaptation capacities in mind, as well as with a mandate to increase financial inclusion, particularly for women, Indigenous peoples, and other marginalized groups. Importantly, efforts to strengthen the local private sector should also be accompanied by technical assistance to build business capacities—not just in terms of general hard skills (financial management, accounting, human resources) and soft skills (communication, leadership, networking)—but also in terms of evaluating and mitigating climate risks.

Finally, also as noted in the previous report in this series, local cooperatives in the Northern Triangle play an essential role within the private sector ecosystem. USAID’s Cooperative Development Program strengthens the capacity of local cooperative businesses, credit unions, and other cooperative groups. This program, which has yet to be used in El Salvador and Honduras, but has been used five times in Guatemala, could be expanded to support climate change adaptation in the Northern Triangle, for instance through assisting cooperatives in marketing new and more climate-resilient agricultural products or broadening access to adaptation-related finance.

**10 Support the creation of adaptation-oriented, intersectoral alliances**

While many communities, civil society organizations, governments, universities, private companies, and other groups recognize climate change as a challenge from their particular standpoint, and are taking steps to confront it, task force members cite a lack of national and intersectoral collaboration as a barrier to large-scale, high-impact resilience efforts. The creation of national, intersectoral alliances and networks is essential for climate change adaptation and for environmental action more broadly. This collaboration can cut across numerous planes. For instance, dialogues and partnerships can be created between civil society, academia, the private sector, and government; between urban and rural communities, including youth, women, and Indigenous and other ethnic groups; and between actors involved in thematic areas such as water management (on the watershed or sub-watershed level), agriculture, defense of human rights (including land rights), and others related to climate change.

The United States can facilitate and coordinate the creation of such networks through initial funding, capacity building, and outreach to potential participants. US agencies could finance and assist in organizing meetings that strengthen relationships across sectors and geographies. Agencies with relevant technical expertise, as well as international NGOs and US universities, could also participate in such exchanges and partnerships, with deference to the priorities and capacities already possessed by local groups. This integrated approach, uniting diverse perspectives and contributions, can lead to stronger advocacy initiatives, reduce duplication of efforts, take advantage of complementary capacities, and scale efforts where appropriate.
Annex: Sample of Local Civil Society Actors Relevant to Climate Adaptation

The following tables categorize a sample of civil society organizations working in the climate adaptation field in the Northern Triangle. They are based primarily on stakeholder mapping resources produced by Fundación PRISMA and supplemented with organizations represented and recommended by Dialogue task force members (by no means should this be considered an exhaustive representation of the relevant civil society ecosystem in the region).

**El Salvador**

<table>
<thead>
<tr>
<th><strong>INDIGENOUS ORGANIZATIONS</strong></th>
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<tbody>
<tr>
<td>Citizen Council of Indigenous Peoples of Tacuba (Consejo Ciudadano de Pueblos Originarios de Tacuba)</td>
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<tr>
<td>Indigenous Peoples’ Roundtable on Climate Change (Mesa de Pueblos Indígenas Frente al Cambio Climático)</td>
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<tr>
<td>Salvadoran National Indigenous Coordinating Council (CCNIS)</td>
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<tr>
<th><strong>WOMEN’S ORGANIZATIONS</strong></th>
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<tr>
<td>Agricultural Association &quot;Women Producing on the Land&quot; (AMSATI)</td>
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<tr>
<td>Agroecological Women's Network (RAMOES)</td>
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<td>Barra de Santiago Women's Association (AMBAS)</td>
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<td>Mérida Anaya Montes Women's Association (Asociación de Mujeres Mérida Anaya Montes)</td>
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<th><strong>YOUTH ORGANIZATIONS</strong></th>
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<td>Network of Environmental Researchers (REDIA) of El Salvador</td>
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<tr>
<td>World Life Youth Network (Red Juvenil Mundo Vida)</td>
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<tr>
<td>Apaneca-llamatepec Biosphere Reserve Management Committee (Comité de Gestión de la Reserva de Biosfera)</td>
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<tr>
<td>El Aguacate Micro-Watershed Association (ACMA)</td>
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<tr>
<td>PRO-BOSQUE Communal Association (Asociación Comunal)</td>
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<tr>
<td>Ahuachapán Roundtable for Environmental Sustainability (MESAMA)</td>
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<tr>
<td>Climate Change Roundtable (Mesa de Cambio Climático) of El Salvador</td>
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<tr>
<td>Climate Justice Roundtable (Mesa de Justicia Climática) of El Salvador</td>
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### OTHER RELEVANT ORGANIZATIONS

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<tbody>
<tr>
<td>Food Sovereignty Roundtable (Mesa por la Soberanía Alimentaria)</td>
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<td>National Association of Agricultural Workers (ANTA)</td>
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<tr>
<td>National Committee for Family Farming (CNAF)</td>
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<tr>
<td>National Roundtable Against Metallic Mining (Mesa Nacional frente a la Minería Metálica) of El Salvador</td>
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<tr>
<td>Permanent Risk Management Roundtable (MPGR)</td>
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<tr>
<td>Water Forum (Foro del Agua) of El Salvador</td>
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<tr>
<td>Association of Community Projects of El Salvador (PROCOMES)</td>
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<tr>
<td>Center for Trade and Investment Research (CEICOM)</td>
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<td>ECOS El Salvador</td>
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<tr>
<td>Foundation of Studies for the Application of Law (FESPAD)</td>
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<tr>
<td>PRO-VIDA Salvadoran Humanitarian Aid Association (Asociación Salvadoreña de Ayuda Humanitaria)</td>
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<tr>
<td>Regional Environmental Research Program (Fundación PRISMA El Salvador)</td>
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<tr>
<td>Salvadoran Center for Appropriate Technology (CESTA)</td>
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<tr>
<td>Salvadoran Ecological Unit (UNES)</td>
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Source: Fundación PRISMA El Salvador, own elaboration

### Guatemala

#### INDIGENOUS GROUPS

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<tr>
<td>Ak’ Tenamit Association</td>
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<td>Guatemalan Association of Indigenous Mayors and Authorities (AGAAI)</td>
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<td>Indigenous Roundtable on Climate Change in Guatemala (MICCG)</td>
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<td>Sotz’il Association</td>
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<td>48 Cantones de Totonicapán</td>
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#### WOMEN’S ORGANIZATIONS

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<td>Fundación Guatemala</td>
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### Community Forest Management Organizations

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<tr>
<td>Alliance of Community Forestry Organizations of Guatemala (Alianza OFC Guatemala)</td>
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<td>Association of Forest Communities of Petén (ACOFOP)</td>
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<tr>
<td>Association of Organizations of Los Cuchumatanes (ASOCUCH)</td>
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<tr>
<td>Chortí Regional Campesino Association (ASORECH)</td>
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<td>Federation of Agroforestry, Environmental, and Agro-Ecological Associations of Western Guatemala (FEDERAFOGUA)</td>
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<td>Fundalachuá</td>
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<tr>
<td>Guatemalan Communities in Defense of Mangroves and Life (COG-MANGLAR)</td>
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<td>Ut’z Che’ Community Forestry Association of Guatemala</td>
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### Alliances

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<tr>
<td>National Association of Non-Governmental Organizations for Natural Resources and Environment (ASOREMA)</td>
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### Other Relevant Organizations

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<tr>
<td>Association of Private Nature Reserves (ARNPG)</td>
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<td>Environmental Development and Sanitation Association (ADSA)</td>
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<td>Fundación Solar</td>
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<td>Mesoamerican Center for Studies on Appropriate Technology (CEMAT)</td>
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<td>National Network for Environmental Training and Research (REDFIA)</td>
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<td>National Network in Defense of Food Security (REDSAG)</td>
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<td>National Union of Campesino Associations (UNAC)</td>
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Source: Fundación PRISMA El Salvador, own elaboration
Honduras

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<tr>
<td>Central American Indigenous and Campesino Coordinator of Communal Agroforestry (ACICAFOC)</td>
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<td>Honduran Black Fraternal Organization (OFRANEH)</td>
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<th><strong>YOUTH ORGANIZATIONS</strong></th>
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<th><strong>FORESTRY ORGANIZATIONS</strong></th>
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<tr>
<td>Honduran Climate Change Alliance (AHCC)</td>
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<tr>
<td>National Network of Communities Threatened by Mining in Honduras (RENACAMIH)</td>
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Source: Fundación PRISMA El Salvador, own elaboration
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REFERENCES


5. Graham, Nate, Jamie Dorner, and José Daniel Madrigal.


15. Viscidi, Lisa, and MK Vereen, 12.


18. Ibid.


26. Ernst, Jeff, Kelly Josh, Eric Olson, Kristen Sample, and Ricardo Zúñiga, 63.
28. Ernst, Jeff, Kelly Josh, Eric Olson, Kristen Sample, and Ricardo Zúñiga.
44. Virtual meeting of Inter-American Dialogue Task Force on Climate Change in the Northern Triangle, 2 February 2022.

47. Ibid, 22.

48. Ibid.

49. Ibid, 23.


56. Ibid, 27.

57. Handal de Castillo, Juliette (Dialogue task force member), personal communication with authors, 27 April 2022.


59. Ibid, 33.

60. Ibid, 29.


67. Cartagena, Rafael, Nelson Cuéllar, and Susan Kandel, 20


74. Ernst, Jeff, Kelly Josh, Eric Olson, Kristen Sample, and Ricardo Zúñiga, 170.


78. Ernst, Jeff, Kelly Josh, Eric Olson, Kristen Sample, and Ricardo Zúñiga, 170.


86. CATIE. “Nuestra esencia.” https://www.catie.ac.cr/nuestra-esencia/


90. SICA. “Centro Clima,” n.d. https://www.sica.int/iniciativas/centroclima


99. Madrigal, José Daniel (Dialogue task force member), personal communication with authors, 27 April 2022.


108. Ibid.


111. Madrigal, José Daniel (Dialogue task force member), personal communication with authors, 27 April 2022.

112. Ibid.

113. Ibid.

114. Orantes Thomas, Ana Patricia (Dialogue task force member), personal communication with authors, 27 April 2022.


117. Reyes, Magdalena.

118. USAID. “USAID’s work in El Salvador, Guatemala, and Honduras,” March 2022.


120. Cartagena, Rafael, Nelson Cuéllar, and Susan Kandel, 36.


122. Handal de Castillo, Juliette (Dialogue task force member), personal communication with authors, 27 April 2022.


