

## Institutionality and Governance in the Central American Dry Corridor

### INTRODUCTION

**ISSUE** Climate change posits a new series of enormous challenges for development in Central America. The many threats and impacts that it now faces include temperature changes and new temporal and spatial patterns of precipitation, as well as extreme events and droughts. These many threats and impacts from climate change converge in a particularly dramatic way in the Central American Dry Corridor (CADC), a region that includes approximately 30% of the territory of Central America (ACH and FAO, 2012) and is home to the greatest density of population and important economic activities in the region.

Climate change magnifies the existing situation of environmental degradation in the CADC and amplifies the vulnerability of the area. This affects agricultural production and threatens food security. Accordingly, it represents a threat to the region's governance and development opportunities.

### TERRITORIES, ACTORS AND STRATEGIES

The CADC is a space with common characteristics but also with unique aspects that stem from the diverse territories that comprise it, including such subnational territories as the dry east (Oriente Seco) of Guatemala and such trinational territories as the Gulf of Fonseca, each emblematic in the way that they allow us to understand the diversity of existing initiatives, actors, and challenges for governance. National and local governments, rural worker and farmer organizations, private companies, and the Central American Integration System (SICA) have diverse interests and develop initiatives that often contradict or complement other initiatives, giving rise to a complex agenda where the impacts of climate change in food security and environmental degradation are combined with the development of large-scale economic proposals that seek to take advantage of natural resources or the advantages of connectivity, which are also leading to disputes and conflicts in the territories.

### IMPLICATIONS: INSTITUTIONALITY AND GOVERNANCE

Given the social and economic importance of the CADC, in the context of climate change, it has become necessary to define a framework of integrated policies that take into account the critical dimensions of the zone and defines strategies of action articulated among the local, territorial, national, and regional levels. Demanding a new generation of sector policies and planning strategies that incorporate resilience to climate change as part of the development of territories. This implies a greater articulation and coherence among sector policies (employment, investment) and the policies of mitigation of and adaptation to climate change, risk management, food security, and economic and territorial development, as well as strategies for the effective participation of and coordination between various actors. The advantage is that there exists considerable potential to draw on the experience of municipalities and localities in local and territorial management; in addition, there are regional policy frameworks that promote a greater coordination of long-term action for territories shared among countries of the region or for the addressing of common problems.

## CONTEXT

The Central American Dry Corridor has become a common topic in the regional discussions on climate change. Although there are different criteria for its borders, it is defined by bioclimatic characteristics that correspond to the living areas of wet and dry sub-tropical forests in Central America; its importance stems from the concentration of the majority of productive life in the region within its confines and the vast majority of the region's population inhabiting the area (90%), including the metropolitan centers and rural areas predominated by family agriculture, the production of basic grains, and large units of agroindustrial production under monoculture primarily bound for export.

Seen in its entirety, the current situation in the CADC is the product of natural conditions as well as the footprints of human intervention throughout its history, making it a social construct that evolves with a combination of many variables. In the past few years, we can speak of three interrelated situations: a first critical theme are the extreme climatic events, such as prolonged droughts, hurricanes, and tropical storms, that reveal the extensive social, economic, environmental, and political vulnerability of the area, which has translated into a considerable loss of life, deterioration of ways of life, and numerous losses and damages for the national economies. Another important theme in the CADC is the social backwardness, poverty, and exclusion that affects the majority of the population as a historical product of the productive processes developed in this area, characterized by a structure of inequality of land ownership and dominance of practices that degrade natural resources and intensify malnutrition and food insecurity. On the other hand, in CADC there are growing pressures from diverse public and private investments



Source: Elaboración propia con base en ACH, FAO, ECADERT y OXFAM.

in such sectors as mining, road infrastructure, energy, tourism, and agroindustry, that threaten to drastically increase the vulnerability of the region and result in the rise of territorial conflicts and disputes (Davis and Díaz, 2014).

In the CADC there are emblematic cases that reflect the complexity of territorial management due to the challenges that confront local, national, and regional decision-making actors and agencies in the context of changes that increase the challenges of development. In these territories, investment opportunities and development programs at both the national and territorial level confront a growing vulnerability due to climate change, which may worsen the conditions of exclusion, poverty, and degradation. In addition, if large-scale economic contributions do not have implementation frameworks adapted to this complex situation, they run the risk of worsening disputes over resources and increasing the degradation of the same.

#### Gulf of Fonseca

The Gulf of Fonseca is an ecosystem shared among El Salvador, Honduras, and Nicaragua, and it is also an area of cultural confluence and geopolitical and economic interest for its strategic position, both as a natural port and for the investment potential of its biological and water resources. It illustrates the challenge of creating regional accords for managing shared ecosystems that are strategic for driving development in the region of Central America, but which are simultaneously highly vulnerable due to conditions of poverty and resource degradation. Likewise, it requires the implementation of intense agenda for negotiating border disputes,<sup>1</sup> above all those related to areas of navigation, which constitute the principal impediment to a joint strategy for developing the area.

Presently, each country is separately designing its respective programs and projects. In Honduras in 2012, the government defined the Sub-Region of the Gulf of Fonseca as a “Model Region” of the Nation Plan, even though it is the most vulnerable region in the country in the face of climate change (Secretaría de Recursos Naturales y Ambiente, 2000). It is an area with a strong presence of localities with the capacity to manage and administer initiatives. Private companies are also key actors due to the thriving commercial shrimping industry, which provides 10% of national foreign exchange, even though the loss of 50% of the mangrove ecosystems is attributed to the industry.<sup>2</sup> In Nicaragua, agriculture, livestock, and shrimping threaten the biological richness of the Estero Real Natural Reserve, where in 2000, it was calculated that approximately 385 hectares of mangrove were being deforested annually. The civil society organizations of Estero Real are principally concerned with shrimping. While this activity generates around 24,000 jobs annually and supports 4% of the country’s total exports, the principal socioeconomic problem in Estero Real is the poverty of more than 60% of the population. In the case of the Strategy for the Development of the Marine – Coastal Strip in El Salvador, the proposals of the central government have predominated, including the concession of the International Port of Cutuco, taking advantage of its geographic location; however, the port faces serious problems with the siltation of its access canals due to erosion produced by unsustainable agricultural practices.<sup>3</sup> The government estimates that 30 million USD would be necessary to remove the sediment every three years, and in the face of this situation, the recommendations of MARN to facilitate decisions on investments to counter climatic and natural phenomena, guaranteeing their sustainability over time, have gained importance (Government of El Salvador, 2012). MARN proposes massive restoration of landscapes and ecosystems, as an alternative to undertaking expensive engineering projects (MARN, 2012). The complexity of the territorial dynamics in the Gulf increase in the context of climate change,

<sup>1</sup> In 1992, the International Court of Justice of the Hague determined that these three countries would share the Gulf of Fonseca and distributed the rights over the islands and islets (International Court of Justice of the Hague, 1992).

<sup>2</sup> [http://redmanglar.org/sitio/index.php?option=com\\_content&view=category&layout=blog&id=37&Itemid=104](http://redmanglar.org/sitio/index.php?option=com_content&view=category&layout=blog&id=37&Itemid=104).

<sup>3</sup> The annual rate of erosion is estimate at 52 tons per hectare per year (MARN, 2012).

marking the urgency of constructing new frameworks of national regional policy for an integrated strategy for the whole area.

### Trinational Upper Basin of the Lempa

This basin covers 18,240 km<sup>2</sup> (7,042.5 mi<sup>2</sup>) of area shared among Guatemala, Honduras, and El Salvador (the last with 56% of the territory). In the upper part of the basin of the River Lempa is the Montecristo Massif, an ecological area of recognized value for its species of flora and fauna where the borders of the three countries converge and the river begins, but the area is, for the most part, semi-arid with rugged terrain. The Trifinio Region, in the upper basin, illustrates the necessity of advancing toward adequate mechanisms for managing shared basins, given that climatic variability and the pressures of investment, specifically in mining, can result in considerable retrogression for territorial efforts and regional character, in the extent to which they put in danger the sustainability of ecosystems in an area of high importance for the adaptation and mitigation efforts against climate change. Any climatic impact on this basin (floods, landslides, intense rains, or prolonged droughts) constitutes a grave threat to adaptation in the territories of the CADC.

In this area, there exist efforts toward concerted action for a trans-border development that builds on the conservation of natural resources, agricultural development, and local economic development that can be important for the management of the high basin within the framework of territorial dynamics and the challenges of climate change. The oldest is the Trinational Commission of the Trifinio Plan (Comisión Trinacional del Plan Trifinio), established in 1988 (Plan Trifinio, 1988), formed by 45 border municipalities located around the Montecristo massif with the objective of driving Central American integration. The Trinational Trans-border Association of the Lempa River (Mancomunidad Trinacional Fronteriza Rio Lempa) brings together 21 municipalities that are home to around 200,000 inhabitants primarily dedicated to small-scale economic activities. The Territorial Strategic Plan of the Association has as objectives promoting territorial interconnectivity to facilitate socioeconomic development, generating clean and sustainable energy, and developing tourism and artisanal production, as well as agricultural and business development. While there have not yet been great investments, the possible operation of the Cerro Blanco Mine (), which recently stopped its operations, has been a point of conflict and worry for the population of the Trifinio and for the government authorities in El Salvador for the impacts that this type of activity would have in degraded and vulnerable territories, with scarce water resources and whose hillsides and slopes discharge into the territories and populations of the lower basin, in this case including important cities such as San Salvador, the capital of El Salvador.

### Nicaraguan Pacific

The entire region runs parallel to the coast of the Pacific Ocean, in the Nicaraguan trough, covering 18,555 km<sup>2</sup> (7,164 mi<sup>2</sup>), with the majority of the population (60%) and important cities such as Managua, Chinandega, León, Granada, Rivas, and Masaya. It is an emblematic territory that illustrates the weight of the economic activities developed in the CADC and how its vulnerability to climate change endangers important productive activities and the ways of life of several sectors of the population.

In the region of the Nicaraguan Pacific are the principal areas of annual cultivated production, including sugar, cotton, livestock, corn, rice, and beans. Concentrated in this area are also the most important activities of commerce, industry, tourism, education, general services, and infrastructure, generated 70% of the national GDP. Historically, it has had the privilege of the intensive agricultural use of the earth, taking advantage of its great natural fertility and the availability of underground water reserves for irrigation. In fact, it has been the most productive agricultural region in the country and has benefitted from the largest actions by the State to increase its productivity. The weight of these productive economic activities of different scale demonstrates the importance of the producers and their forms of organization, but also of local development actors, the central government, and private investors. For its economic and social importance it is worrying that this region of the country is the most exposed to the impacts of

climate change in terms of rising temperatures, prolonged droughts, and erratic rainfall patterns. In fact, in 2013, out-of-season rainfall and wind temperature reached historic highs for the Pacific Region. These trends illustrate the vulnerability of the area, demanding responses that transcend individual parcels and propose much broader measures that are able to address the key relationships for adaptation at different scales, from family units to landscapes and territories.

### Guatemala's Dry East (Oriente Seco)

It is a neuralgic area of the dry corridor of Guatemala that is located in the eastern part of the country, in what is known as the Ecoregion of Mount Espinoso in municipalities of the provinces of Chiquimula, Zacapa, and El Progreso, that extends to Jutiapa, Jalap, and Baja Verapaz. It is emblematic in that it allows us to understand the most critical situation of food insecurity that affects the most socially vulnerable sectors of the population, such as indigenous peoples. Several studies have highlighted that the development of indigenous peoples in every country of Central America greatly lags behind the national average, a product of structural discrimination, social exclusion, the negation of their rights, and the continued dispossession of their territories. The poverty, malnutrition, illiteracy, and scant access to health affect indigenous peoples unequally,<sup>4</sup> a situation which is aggravated when they are located in areas exposed to climatic variability; for example, they have been the most impacted by climatic disasters, such as Hurricane Mitch in 1998. In addition, in Central America, these peoples face a grave situation due to the proliferation of megaprojects in mining, hydroelectricity, and tourism, as well as large-scale cultivation of melon, sugarcane, tobacco, and shrimp.

According to information from the sociolinguistic atlas of indigenous peoples in Latin America (FunPROEIB – Andes, 2009), approximately 3.5 million indigenous individuals inhabit the CADC, distributed among 20 indigenous peoples, some of which are the Ch'orti, Lenca, and Cacaopera, with a presence in two countries. Guatemala has the largest indigenous population within the CADC. In the nucleus of Guatemala's dry corridor, the situation of indigenous peoples is extremely precarious. The Ch'orti of Chiquimula, the Poqomam of Jalapa, and the Achi of Baja Verapaz are among the most vulnerable to changes in the climate, as their populations have difficulties satisfying their dietary needs and have suffered the most from the impacts of disasters caused by hurricanes and tropical storms. The incorporation of indigenous peoples and their forms of organization in the definition of national and regional programs for the CADC is of paramount importance for them to better adapt to climate change in accordance with their priorities.

### REGIONAL STRATEGIES FOR THE DRY CORRIDOR

Within the structure of SICA, regional political strategies have been produced with frameworks that capture the complexity of the economic and environmental changes of the last decades, among them the Central American Strategy for Territorial Rural Development (ECA-DERT), which highlights the importance of a territorial approach to rural development, in a way that such themes as food security and adaptation to climate change are key transversal themes for rural territorial governance.

Climate change and risk management policies are playing a relevant role for addressing the effects of climatic variability. Countries have had to strengthen their actions to guarantee food security beyond moments of emergency. In this vein, the CADC has already been the object of an intervention under the Regional Strategic Framework for Climate Risk Management in the Agricultural Sector of the Dry Corridor (MERGERCA), oriented toward resolving agricultural and natural resource management problems, focused on small producers exposed to drought; its implementation is linked to the Central American Agricultural Council (CAC). On the other hand, within ECADERT there are opportunities for driving rural development processes with a territorial approach that incorporates concerted action for responding to the recent climate

<sup>4</sup> UN OHCHR, 2011. Diagnóstico sobre la situación de los derechos humanos de los pueblos indígenas de América Central. Tomo I. Managua, Nicaragua.

variability and vulnerability of the area, starting with specific territories prioritized by each country (SICA-ECADERT-PRAT-IICA, 2014). However, there is still a lack of efforts that transcend sector policies toward more concerted efforts in the CADC that incorporate new dimensions of vulnerability created by climate change and the different territorial relationships that underlay them. For that reason, there is a need for greater inter-institutional articulation that supports and links territorial actions with local, national, and regional policies, which is to say a “nested” institutionality that demonstrates long-term commitments to the construction territories resilient to climate change in concordance with the development of the territories.

## TOWARDS AN INSTITUTIONALITY AND GOVERNANCE OF THE DRY CORRIDOR

As a territory that includes a great portion of the area of Central America, the CADC requires government efforts with actions at a variety of levels, from communities to territories to the regional level of Central America, involving a variety of actors that influence the conditions of vulnerability and that are, at the same time, key for achieving resilience: community and rural producer organizations, the indigenous population, private companies of diverse scale, municipalities, and communities, as well as the political frameworks and resources provided by States, SICA, and international cooperation. In this sense, this presents a set of challenges such as the following.

### Articulation of policies

The regional preoccupation regarding the vulnerability of the CADC in the face of climatic phenomena has led to diverse political initiatives and actions that span from the territories to the region as a whole, with which it is necessary to open a process of articulation of policies for addressing the challenges of food insecurity, poverty, degradation, and climate change. At the same time, it has become essential to incorporate in this articulation the policies of economic development and territorial development, in a way that these include effective instruments for planning and regulating large-scale projects. The articulation of policies also permits a more effective use of domestic financial resources and those stemming from international cooperation.

### Nested institutional framework

The institutionalization of CADC is necessary process for the different actors to be able to jointly connect to, own, and benefit from actions in this territory. It is possible to advance in the construction of nested institutions that, from the local levels, establish concordance in objectives, strategies of action, and support with the national and regional levels. ECADERT and similar strategies have the potential to be a good framework for this nested action if they have the political backing of local and national actors. In this vein, there is a growing relevance for the creation of space for convergence and dialogue, such as territorial roundtables, as well as strengthening the management of intermediate territories, such as municipal communities, which are necessary for a transparent management that is simultaneously capable of negotiating with divergent interests.

### Inclusion of vulnerable sectors

The inclusion of the most vulnerable sectors of the population in the management of CADC in the face of climate change becomes relevant, above all those whose ways of life depend the most directly on the flow of ecosystem services for self-sufficiency. For that purpose, it is essential to have the active incorporation of indigenous peoples and rural communities that face the threat of food insecurity and the advance of megaprojects. The strengthening of their forms of organization and the establishment of negotiating platforms is key for securing effective participation that guarantees the incorporation of their priorities in the face of actors with more political-economic power, such as large investors.

The region is living in an apt moment for taking action that marks the path forward for achieving institutional change in public policies and in regulation, constructing alliances necessary for reducing vulnerability, improving the conditions of poverty and malnutrition, arranging investments, and orienting civil service toward integrated management in the territories of the CADC. It is possible to consider a Roadmap as a process of consultation, inclusion, and participation for promoting institutional and public policy reforms, as well as for developing the capacities and potential of actors for the integrated management of the CADC. For this purpose the following is proposed:

- Establish effective coordination among different actors (civil society, State, private sector, and cooperation), taking advantage of existing initiatives within ECADERT for establishing the CADC as an affiliated territory, from which to seek a strengthening of territorial development in priority areas and define the rules of the game for the start and functioning of the process.
- Collectively define priorities. The management of CADC should be a proposal of articulation among actors, through the formation of solid alliances for jointly responding to common interests and creating mechanisms to resolve differences. The priorities should be the result of a serious process of dialogue and negotiation among actors that transcends sectorial visions to effectively transform the vulnerability, social disparities, and sustainable development of the countries.
- Design an institutional framework that allows for the articulation, representation and legitimation of social actors. The CADC should not be posited as an additional project but rather as a process truly owned and conducted by involved actors of society, in their different sectorial and territorial scales. To this end there is a need for a reformed institutional framework (norms, regulations, control systems, social audit, sanctions) and a framework of public policies that go beyond traditional sector approaches.
- Generate knowledge and capacities around the territorial specificities of climate change. The territories that comprise the CADC have particular characteristics that should be considered when defining the actions to be taken to manage the region in the face of climate change. Civil society actors and specifically the universities and academic centers should involve themselves in the construction of a research and capacity development agenda that provides actors, above all those in the territories, the knowledge, abilities, and skills for confronting the challenges of climate change from their own spaces and in their own activities.
- Achieve the commitment of national governments and regional and international organizations for the implementation of priority actions in the CADC, which implies that the territories' priorities form part of the municipal, national, and regional plans, expressing the commitment of the governments. National governments and SICA should institutionalize their support for CADC actions, provide it with the necessary framework, readjust their public policies, assign resources within their budgets, and manage technical and financial backing for its implementation.
- Create favorable conditions for the territorial coherence of interventions by different actors in the CADC, which up to now have led to contradictions and disputes over control of the resources and taking advantage of their potential. The intent of CADC is precisely to order, through consensus and articulation, the interests of the involved actors, with a view towards a future of common interest. For this it is key to establish tables of dialogue and consultation for defining plans for the development and integrated management of the territory that respond to the needs of the different actors and seeks coherence, cooperation, and solidarity, taking into account the implications that the actors, above all, have in climate change.

- Facilitate processes of communication, consultation, and inclusion of the most disadvantaged sectors in the definition of priorities according to their aspirations. One of the principal problems of the CADC is the large gap between the actors of the rural, indigenous, and marginal urban sectors (especially youth, women, and seniors) and the rest of the population. The establishment of processes of social communication and prior consultation with actors from the rural, indigenous, and marginal urban sectors can facilitate their inclusion in the planning and implementation of actions in the CADC such that they may better adapt to climate change.

## REFERENCES

- ACH and FAO. (2012). *Estudio de la caracterización del Corredor Seco Centroamericano (CA-4)*. Rome: United Nations Food and Agriculture Organization (FAO).
- Bruns, B., & Chalad Bruns, P. (2004). *Como fortalecer la acción colectiva desde los actores que intervienen en el desarrollo de los territorios*.
- Davis, A., & Díaz, O. (2014). *Adaptación y acumulación: Desafíos, contradicciones e implicaciones para la gobernanza territorial en el Corredor Seco Centroamericano*. San Salvador: Fundación PRISMA.
- Elias, Silvel (para publicar) *Institucionalidad y Gobernanza en el Corredor Seco Centroamericano*. San Salvador: Fundación PRISMA
- Fernández, L., & Navarro, E. (2005). *El Sistema Agroforestal Quesungual. Una opción para el manejo de suelos en zonas secas de ladera*. Tegucigalpa: FAO.
- FunPROEIB – Andes (2009). *Atlas sociolingüístico de pueblos indígenas en América Latina*. Cochabamba, Bolivia: FunPROEIB - Andes.
- Government of El Salvador. (2012). *Franja Costero Marina un Territorio de Oportunidades*. San Salvador: Publication produced by the Secretaría Técnica de la Presidencia, Ministerio de Economía y Ministerio de Medio Ambiente y Recursos Naturales.
- Hasemann, G. y Lara, G. 1993. *La Zona Central: regionalismo e interacción*. In Historia General de Centroamérica. FLACSO, Cap. 3 Tomo I. Madrid.
- International Court of Justice of the Hague. (1992). *Land, Island, and Maritime Border Dispute*. The Hague: International Court of Justice of the Hague.
- MARN (2012). *FOMILENIO II, Evaluación Ambiental Estratégica*. Informe No. 2. Exploración de Alternativas: pesca, agroforestería y turismo. San Salvador: Ministerio de Medio Ambiente y Recursos Naturales.
- MARN (2012). *Programa Nacional de Restauración de Ecosistemas y Paisajes (PREP)*. Esfuerzo principal de adaptación al cambio climático en El Salvador. San Salvador: Ministerio de Medio Ambiente y Recursos Naturales, PNUD.
- MARN (21 de Febrero de 2013a). *El PREP y la importancia de la Escala de Paisaje*. Recuperado el 11 de Marzo de 2013, de Fundación Prisma: [http://www.prisma.org.sv/index.php?id=26&tx\\_ttnews\[tt\\_news\]=472&cHash=c5d1d8b3322cedeed02385d0dc8da7fc](http://www.prisma.org.sv/index.php?id=26&tx_ttnews[tt_news]=472&cHash=c5d1d8b3322cedeed02385d0dc8da7fc)
- Plan Trifinio (1988). *Plan de Desarrollo Regional Fronterizo Trinacional Trifinio*. Plan Trifinio. Convention Guatemala-El Salvador-Honduras, OAS-IICA.
- Secretaría de Recursos Naturales y Ambiente (2000). *Primera Comunicación de Honduras a la Convención Marco de Las Naciones Unidas sobre Cambio Climático*. Tegucigalpa: Government of Honduras-UNDP.
- SICA-ECADERT-PRAT-IICA (2014). *Desafíos y oportunidades para invertir en restauración de paisajes en Centroamérica*. San Salvador 17 de febrero.: Presentación realizada en el Foro Internacional Restauración de Paisajes, Gobernanza y Cambio Climático.
- UNESCO (2010). *“Atlas de Zonas Áridas de América Latina y el Caribe”*. Dentro del marco del proyecto “Elaboración del Mapa de Zonas Áridas, Semiáridas y Subhúmedas de América Latina y el Caribe”. CAZALAC. Documentos Técnicos del PHI-LAC, N°25 [http://www.centralamericadata.com/es/article/home/La\\_industria\\_camaronera\\_de\\_Honduras](http://www.centralamericadata.com/es/article/home/La_industria_camaronera_de_Honduras)