



IKI Alliance Mexico Newsletter



News from IKI projects in Mexico

A service provided by the "Mexican–German Climate Change Alliance"

Dear reader,

During this challenging time as the COVID-19 virus spreads across the world, we hope that you and your family are well and healthy. In recent weeks, you have undoubtedly been forced to adapt your personal and work habits and customs to the new situation. In line with this theme, in this newsletter, we will discuss climate change adaptation actions that are more relevant than ever.

In this spirit, for the first time we carried out the **fourth exchange workshop of the International Climate Initiative (IKI)** in Mexico virtually. More than 110 participants joined from different parts of the country and the world to exchange knowledge and find agreements that will allow them to advance in their daily work. We want to give special thanks to IKI project members, counterparts of the Mexican Government, and officials from Germany's Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) for their participation.

Our quarterly newsletter "**IKI Alliance Mexico**" highlights the activities and impacts of IKI projects in Mexico and aims to promote exchanges and create synergies. We invite you to share it with your colleagues and counterparts, as well as to visit our **IKI Alliance Mexico** blog for more news.

Do you have any comments? We would like to hear from you! Write us at our email iki.alliance.mexico@giz.de or on [Twitter](#).

We hope you enjoy reading!

Jasmin Fraatz, Claudia Kirschning, and Mona vom Endt from the IKI interface team in Mexico

What does adaptation to climate change mean?



As human beings, we find ourselves in a constant process of adaptation to our environment. We do so continuously and, many times, even unconsciously. But, **what does adaptation to climate change mean?** It involves adjusting to ecological, social, and economic systems in response to current or expected climate change impacts (OECD, 2006). In other words, it means changing processes, practices, and structures to moderate the potential damage associated with climate change, both in human and natural systems. Thus, actions such as afforestation, land use change and preservation of open-air spaces are examples of adaptation to climate change (Regional

The [Paris Agreement](#) emphasizes the importance of adaptation on the international agenda, especially in those countries susceptible to the destructive impacts of climate change. Mexico is no exception to this trend since its geography, topography, and hydrological network make it a highly vulnerable country to the effects of climate change (INCyTU, 2018). In the last 50 years, average temperature and rainfall have increased significantly, as have the number of hydrometeorological phenomena (hurricanes, floods, and droughts). Likewise, it is estimated that 60% of the Mexican population lives in conditions of poverty or extreme poverty, which causes these groups to be more vulnerable to natural disasters for living in precarious areas with more risk of suffering climate change consequences (e.g. mountainsides, gullies or flood-prone areas) (Government of Mexico, 2015a).

The negative effects of climate change on economic activities, ecosystems, and social conditions are not uniform or linear. On the contrary, they are progressive and have a high degree of uncertainty. Therefore, the actions undertaken to counteract them must be interdisciplinary, multidimensional, and transversal (INECC, 2018).

Accordingly, Mexico established three ambitious unconditional goals for the period 2020-2030 in its Nationally Determined Contribution (NDC) regarding adaptation (Government of Mexico, 2015b):

- Increase the adaptive capacity of the population in the face of climate change and decrease high vulnerability in 160 municipalities
- Strengthen actions to protect and restore ecosystems and achieve a rate of zero deforestation
- Create prevention and early warning systems throughout the country for extreme hydrometeorological events

Conditional goals include the following:

- Development of capacities
- Technology transfer
- Financing for adaptation

The Mexican Ministry of Environment and Natural Resources ([SEMARNAT](#)) is currently in the process of updating the NDC in collaboration with relevant government and civil society stakeholders.

To achieve the NDC goals, IKI projects assist and work together hand in hand with multiple government sectors to adapt the country to the consequences of climate change. In this newsletter, we want to present to you those projects that, in their bilateral, regional, and global modalities, are working on adaptation actions in Mexico.

Finally, we want to invite you to share successful adaptation actions. Tell us by using the hashtag **#IKIAdaptation** on [Twitter](#) and let's start a community conversation.

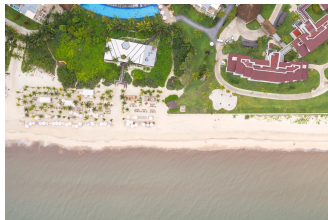


Adaptation projects

Ecosystem-based adaptation to climate change with the

tourism sector – ADAPTUR

Bilateral project | 09/2017 – 08/2021



Private Sector Mobilizes Adaptation Resources

The project [ADAPTUR](#) is implemented by [Deutsche Gesellschaft für Internationale Zusammenarbeit \(GIZ\) GmbH](#) and aims for the private tourism sector to adopt Ecosystem-based adaptation (EbA) solutions to reduce the risks of climate change to their businesses.

Recently, through a concurrent fund in the Payments for Environmental Services scheme, a public-private alliance was established that commits to the investment of 12 million pesos (around 450,000 Euros) for implementing adaptation solutions in tourist destinations. Along the Nayarit-Jalisco Riviera, restoration actions are planned to take place in 2,500 hectares of tropical forests to help reduce flooding and hurricane risks for the general population and businesses, as well as to guarantee their ecosystem services. In San Miguel de Allende, 1,000 hectares of semi-desert scrubland are planned to be restored to improve water-capturing systems in the aquifers and ensure the existence of water going forward. Meanwhile, in the Mayan Riviera, a company from the hotel sector will finance a pilot restoration project of marine grasslands aimed at maintaining the service of coastal protection it provides to Puerto Morelos.

What's more, the political sector has managed to incorporate the focus of climate change and adaptation into the tourism sector's instruments for national planning, such as the [Sectoral Program](#) and the [Integration Mainstreaming Strategy for Welfare](#), as well as other instruments of municipal planning such as the [San Miguel de Allende Municipal Program for Urban Development and Ecological Territorial Regulation](#), the [Tulum Regulation of Ecology, Mitigation and Climate Change Adaptation](#), and the [Puerto Vallarta Municipal Climate Change Program](#).

For more information, please visit the [ADAPTUR website](#).

■ First National ADAPTUR Forum

Smart Coasts – Climate-smarting marine protected areas and coastal management in the Mesoamerican reef region

Regional project | 09/2018 – 11/2022

The project [Smart Coasts](#) is implemented by the Worldwide Wildlife Fund ([WWF](#)) and aims to strengthen the capacity of coastal communities in the Yucatan Peninsula to adapt to climate change.



WWF works with several partners to generate information from climate change projections (atmosphere temperature, change in precipitation and water temperature, and rising sea levels), from which a portfolio will be designed with options for climate change adaptation.

The project is prioritizing measures based on ecosystems and is currently developing models through which scenarios for managing the territory will be identified. Through these mechanisms, the ecosystems with more potential to provide services to local communities will be recognized, for example, by protecting communities and their infrastructure from coastal threats such as erosion and flooding from tropical storms and rising sea levels.

Morgenstadt global smart cities initiative: global approach - local solutions

Global project | 12/2018 – 11/2021



City Lab Saltillo analyzes local water sector for climate change adaptation and mitigation

The [project](#) is implemented by the [University of Stuttgart](#) and [Fraunhofer-Gesellschaft](#).

As part of the Global Smart City Initiative, the Municipal Planning Institute of Saltillo and a team of German researchers work together to develop sustainable solutions for Saltillo's water sector in preparation for and adaptation to climate change impacts.

The City Lab Saltillo combines the sectoral analyses of the energy, mobility, and water sectors to create a city profile that serves as the basis for developing sustainable and climate-sensitive measures in urban planning. The City Lab team is currently evaluating data on 25 indicators that assess, amongst others, aspects of Saltillo's water availability and quality, wastewater treatment and reuse, and water resource potential, involving Fraunhofer IGB, IMPLAN, and other key stakeholders in the city. The data provide the basis for the on-site assessment scheduled for 2020, during which key actors from the municipal government, private sector, and civil society will enter into dialogue to develop measures that promote a more resilient and climate-smart water management in Saltillo.

The Morgenstadt City Lab Methodology is a scientific approach to develop and promote innovation at the city level. The City Lab in Saltillo forms part of the Morgenstadt Global Smart City Initiative.

ICT-based adaptation to climate change in cities

Global project | 03/2017 – 04/2020

The global project [ICT-based adaptation to climate change in cities](#) is implemented by GIZ and aims to conceptualize, develop, and test digital solutions in Mexico, Peru, and India that help cities to adapt to the impacts of climate change.



To achieve international goals in the area of sustainability, it is crucial for cities to adapt to the impacts of climate change caused by extreme weather events, such as deterioration of infrastructure or loss of biodiversity. Due to increasing urbanization, the urban population is particularly at risk.

These events bring new challenges for urban planners and regional decision-makers because they lack the necessary databases to apply local adaptation measures. Participatory data collection on local climate data, together with new information and communication technology (ICT) approaches (e.g. CrowdMapping), could fill this gap and therefore contribute to the planning of measures and increase the resilience of infrastructure and supply services. The project is inspired by ICT and web-based methods and strengthens the resilience of the city (and the surrounding region) by integrating them into urban management (especially urban planning).

In Guadalajara, the mobile application [Árbol IoT](#) was developed, which is an open government digital platform that aims to collect information about urban trees. Specifically, it helps the municipality to systematize necessary information based on contributions from citizens.

For more information:

- [Website](#)
- [Facebook](#)

Other IKI projects with adaptation components

Mexican-German Climate Change Alliance

Bilateral project | 02/2019 – 01/2023



The [Mexican-German Climate Change Alliance](#) is implemented by GIZ and aims to assist the Mexican government in the implementation of concrete measures to achieve the goals of the NDC. In addition, on specific adaptation issues, the project provides technical assistance to strengthen institutional capacities to reduce vulnerability and increase the resilience of exposed systems. The project works through a close Mexican-German climate alliance.

The list below is providing an overview of processes in the area of adaptation driven by SEMARNAT and subnational governments and supported by GIZ:

National level

- Process of updating and increasing the ambition of the Mexican NDC in the adaptation component (due to be published)
- [Methodology for prioritizing adaptation measures](#) [In Spanish]
- [Characterization process of two actions for the NDC water sector](#) [In Spanish]
- [Characterization and monitoring of Mexico's NDC with regards to climate change adaptation](#) [In Spanish]

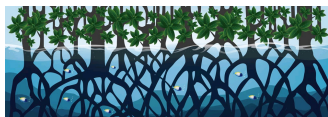
- Construction of a digital tool hosted on the agro-food and fisheries information service (SIAP) geospatial platform [In Spanish]
- Design and definition of climate change adaptation indicators within the framework of the National Adaptation Policy (NAP) [In Spanish]
- Design of a roadmap for planning Mexico's NAP [In Spanish]

Subnational level

- Diagnosis of present and future vulnerability to the impacts of climate change of three subsectors of agro-food production [In Spanish]
- Selection of generic measures with an impact on mitigation and adaptation to climate change at the subnational level [In Spanish]
- Incorporation of the gender perspective to the lines of action and indicators of the Mexico City Climate Action Program 2014-2020
 - Products, results, lessons learned, and recommendations [In Spanish]
 - Indicators with a gender perspective [In Spanish]
- Capacity building for NDC subnational governments (with global project "Vertically integrated climate protection (VICLIM), ended in 09/2019)
 - Subnational contributions toolbox for the NDC [In Spanish]
- Veracruz state
 - Updating of the Monitoring, Reporting, and Verification (MRV) and Monitoring and Evaluation (M&E) systems [In Spanish]
 - Development of an index to measure adaptation to climate change [In Spanish]
- Jalisco state
 - Development of an MRV and M&E system [In Spanish]
 - State plan for adaptation [In Spanish]

Restoration of mangrove forest landscape: an opportunity for social development in the RAMSAR site “Alvarado lagoon system” in Veracruz

Bilateral project | 01/2017 – 03/2020



The project is implemented by [Pronatura Veracruz](#). The initiative aims to increase the capacities of the ecosystem and the local communities for climate change adaptation.

It involves a variety of actions that have impacts on several ecological aspects: for example, damaged mangroves are being restored by adapting the ancestral technique used for chinampas (raised, floating farming beds); obstructed canals are being rehabilitated; 2,753 hectares of mangroves are being protected, and biological monitoring is being implemented. In social terms, legal, sustainable, and community harnessing of the mangrove forests has boosted economic development. Thus, with a focus on value chains, capacities are strengthened, and the initiative *Mundo Manglar* is developed to raise awareness in the market. In this way, the consumption of products such as wood, carbon, and honey can contribute to the conservation of biodiversity and the economic development of communities.

Mobilizing capital for EbA – the value of resilient forests for water management in the tropics

Regional project | 01/2018 – 12/2022

The project is implemented by the [OroVerde - The Tropical Forest Foundation](#) and [Pronatura México](#). This initiative supports the elaboration of standardized methodologies that include a focus on EbA at the community level, by rescuing traditional knowledge as a structural axis and starting point for participative territorial planning.



In the project, EbA plans are created at community level, thus generating, strengthening, and diversifying chains of production and agricultural, forestry, and aquaculture value in the Valle de México Basin. In addition, the project is involved in land and water conservation works for over 60 hectares, encouraging the natural regeneration of at least 100 hectares and strengthening the capacity of growers.

The objective of this project is to help decrease the climate vulnerability of the local population and to encourage resilience of ecosystems and provision of their services. Every one of the seven plans with EbA measures is expected to have a significant impact on the communities of the Valle de

México Basin and society itself, as they prioritize the importance of climate change adaptation and the virtues of the EbA focus.

Other news

- **Mexican-German Climate Change Alliance**
 - Sustainable consumption and recycling of electronic waste in Mexico and Germany: challenges and opportunities
- **Biodiversity and sustainable agrosilvopastoralist livestock landscapes (BioPaSOS)**
 - Mexican farming families adapt to climate change and conserve biodiversity
- **Climate protection in the Mexican urban policy: cities and climate change (CiClim)**
 - Caffenio's National Green Infrastructure Awards
- **Enhancing the coherence of climate and energy policies in Mexico (CONECC)**
 - Co-benefits: contribution to energy transition for sustainable development in México
- **Mainstreaming biodiversity into the Mexican agricultural sector (IKI IBA)**
 - Xook K'iin: ancestral Mayan knowledge about factors affecting agricultural cycles
 - Global biodiversity aims post-2020: identifying challenges and opportunities
 - In Mexico efforts are being made to achieve a sustainable production of palm oil
 - Economic assessment of land degradation provides essential supplies for productive sectors
- **Nitric acid climate action group (NACAG)**
 - Mexico commits to a climate friendly nitric acid production
- **Programme for energy efficiency in buildings (PEEB)**
 - Smart and efficient. Digital solutions to save energy in buildings
- **Programme for energy efficiency in buildings (PEEB) and Financing energy for low-carbon investment – cities advisory (FELICITY)**
 - How to finance energy efficiency in buildings?
- **Sustainable and climate-friendly phase-out of ozone-depleting substances (SPODS)**
(project by BMZ)
 - Are refrigeration and air-conditioning systems increasing the planet's temperature?
- **Preparation of an Emissions Trading System (ETS) in Mexico**
 - University students participate in a tournament about the Emissions Trading System in Mexico
 - Exchanging experiences: training course for verifiers in the framework of the emissions trading system

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Bibliografía

OECD (2006). Adaptation to Climate Change: key terms. Retrieved March 18, 2020, from this source
Regional Climate Change Program & USAID ProParque (2015). Fortaleciendo procesos para la adaptación y mitigación del cambio climático con familias productoras de café en Honduras. Retrieved March 18, 2020, from this source
INCyTU (2018). Cambio climático y el Acuerdo de París. Boletín de la Oficina de Información científica y tecnológica para el Congreso de la Unión, Número 009. Retrieved March 18, 2020, from this source
INECC (2018, May 18). Adaptación al cambio climático. Retrieved March 18, 2020, from this source
Government of Mexico (2015a). Contribución prevista y determinada a nivel nacional de México. Retrieved March 18, 2020, from this source
Government of Mexico (2015b). Compromisos de mitigación y adaptación ante el cambio climático para el periodo 2020-2030. Retrieved March 18, 2020, from this source

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