

# Protecting Mexican coastal regions and their marine ecosystems by reducing plastic waste (PROCEP)

## Context

The leakage of plastic waste into rivers and the ocean off Mexico's coasts is an increasingly critical problem. Mexico is the leading consumer of bottled water containers and the second largest consumer of PET soft drink containers in the world, whose waste is generally inadequately managed.

According to the 2023 National Inventory of Plastic Pollution Sources, the per capita consumption of plastics in Mexico is estimated at 66 kg/year, and 59 kg/year of plastic waste is produced per inhabitant. This means that 89% of plastic becomes waste. The proportion of improperly managed waste, i.e., not collected or sent for disposal at sites with a low level of control in their operations, reaches up to 58 percent, and the leakage of plastic waste into the environment is estimated at up to 15 percent.

The coasts of Oaxaca are of special interest, because according to the National Institute of Statistics and Geography (INEGI), Oaxaca is one of the states with the highest number of official disposal sites in Mexico. However, the state does not have an industry capable of processing, transforming and recycling what is recovered in this region. In addition, there are important protected natural areas in this region.

According to diagnostic studies conducted by the project in 2022, approximately 2 tons of plastic waste reach the sea every day in Oaxaca alone. Nationally, 20 percent of the waste generated is plastic, but on the coast of Oaxaca this number rises to 27.3 percent, possibly due to tourism activity, among other factors.

On the other hand, macroplastics in the sea cause damage or death to fauna by entanglement, ingestion or transmission of pathogens (bacteria and viruses). Plastic waste accumulates in the environment due to its almost null degradability. This affects marine life, but also the fishing activity that depends on it.



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Picture: ©GIZ Mexico

## The Project in a Nutshell

<b>Name</b>	Protecting Mexican coastal regions and their marine ecosystems by reducing plastic waste (PROCEP)
<b>Duration</b>	November 2021 – October 2024
<b>Volume</b>	€ 4 millions
<b>Commissioned by</b>	Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV)
<b>Executing Agency</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
<b>Counterparts</b>	Ministry of Environment and Natural Resources (SEMARNAT), Secretariat of Environment, Biodiversity, Energy and Sustainability of Oaxaca and municipal governments of the coast of Oaxaca
<b>Project regions</b>	Coast of Oaxaca

## Contribution to the 2030 Agenda



Meteorological and geographical conditions, such as storms, heavy rainfall and natural river flows are the main mechanisms for waste entering the sea.

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Offering water or other beverages to refill containers is one of the most cost-effective voluntary measures to avoid the consumption of single-use plastics. By avoiding the generation of waste, local governments and society generate significant savings and protect marine ecosystems.

## Objective

The goal of the project is to reduce the amount of plastic waste entering Mexican marine ecosystems off Mexico's Pacific coast.

## Approach

PROCEP develops and implements solutions at national and subnational levels around four expected results:

### Improve waste management in Oaxaca

From a practical approach, PROCEP supports local governments in improving their waste management through efficient waste separation, increasing the recovery of reusable materials and increasing the coverage of urban waste collection.

It also seeks to establish a monitoring and evaluation system to estimate the amount of plastic waste entering the sea and thereby evaluate and adjust the policies implemented to reduce it.

### Reduce plastic consumption in tourism and fishing in Oaxaca

PROCEP works with the tourism and fishing sectors of the coast of Oaxaca to reduce the consumption of single-use plastics derived from these activities. To this end, the Less Plastic Guide is being implemented in both sectors, providing alternatives to single-use plastic, particularly for locally produced products, accompanied by awareness-raising campaigns for these two economic sectors. In addition, a guide for good waste management in the fishing sector is being developed in a participatory manner.

### Disseminate and replicate best practices

The actors of the Oaxaca coast exchange their experiences with other municipalities of the Pacific coast in Mexico, namely the municipalities

of La Paz, Baja California Sur and two additional municipalities to be defined, to promote their imitation and thus contribute to the reduction of plastic discharge into the sea. In addition, good practices are disseminated at national and international events and the integration of knowledge networks is promoted to encourage replicability, continuous improvement and sustainability of the interventions. This ensures the permanence of this priority in political agendas.

### Improve national policy

PROCEP, together with its counterparts, provides inputs for the construction of the National Circular Economy Strategy and to update the NMX-AA-120 focused on sustainable beach certification (including a focus on plastic waste), strengthen the focus of management plans for companies that manufacture or distribute single-use plastic materials in Oaxaca, as well as updating local regulations that impact the leakage of plastic waste into the ocean.

The principles of equity and leaving no one behind are **an integral part** of the project. For this reason, materials are provided in different languages of Oaxaca, as well as elements of change to improve equity conditions. In particular, the project seeks to promote the local production of plastic substitute products. The project also seeks to integrate informal waste collectors into improvements in solid waste management.

## Counterparts

The Ministry of Environment and Natural Resources (SEMARNAT) is the main counterpart of the project. At the state and municipal level, PROCEP works with the Ministry of Environment of the State of Oaxaca, municipal governments of the coast of Oaxaca, the private sector and civil society organizations.

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