

# Ecosystem-based adaptation measures protect coastal and marine areas in Peru

## Context

The coastal region accounts for more than 70 per cent of Peru's economic output. In addition to fishing as the main source of income, tourism is increasingly positioning itself and putting increasing pressure on the use of coastal ecosystems. Both areas depend on a large number of ecosystem services. For the tourism industry, cultural services such as attractive landscapes, use for sport, leisure and education, and Peru's cultural heritage are particularly important. For fishing, the most important services are the habitats for plants and animals, photosynthesis, nutrient cycles and provisioning services – fish, seafood and algae to ensure food security.

Both areas make a key contribution to economic development and employment generation. At the same time, however, they are weakening the ecosystems and ecosystem services on which they depend. This is caused by inadequate management of marine and coastal zones, leading to overexploitation of natural resources due to lack of control and surveillance. This leads to:

1. Uncontrolled fishing (overfishing),
2. Increased pollution of coastal waters through waste and untreated wastewater,
3. Deterioration of ecologically sensitive areas caused by unsustainable infrastructure and tourism activities.

The central problem is that ecosystem approaches and climate change aspects have not yet been sufficiently included in strategic planning and investment processes.

Ecosystem-based adaptation to climate change (EbA) comprises measures to protect ecosystems and use them sustainably. The aim here is to increase the resilience of people and nature and stem the consequences of climate change.

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<b>Country</b>	Peru
<b>Lead executing agency</b>	Ministry of the Environment (MINAM)
<b>Overall term</b>	2019 to 2024

## Objective

EbA measures are integrated into the strategic planning processes for coastal and marine zones at national, regional and local level and are being implemented in the regions of Piura, Lima and Ica.

## Approach

Peruvian scientific research institutions provide environmental, socio-economic and climate change-relevant information. The project processes this information in cooperation with the Leibniz Centre for Tropical Marine Research (ZMT) in Bremen. On this basis, effective EbA measures are developed and integrated into the management of coastal marine areas.

The project is strengthening the political/legal framework for integrated coastal and marine zone management. It is also strengthening stakeholders' management skills and the coordination mechanisms between the institutions for planning and implementing the EbA approach.

In line with the regional challenges, the EbA approach is being implemented in Piura, Lima and Ica in three different ecosystems: wetlands, beaches and islands. The Peruvian Ministry of the Environment (MINAM), the regional governments of Piura, Lima and Ica, the private sector and civil society are involved in the implementation. For this purpose, the project intends to integrate the EbA approach into governmental and private investment projects in the tourism and fishing industries, and to establish skills for implementing the investment projects. The aim of this is to increase private and public investments promoting ecosystem-based adaptation in Peru's coastal and marine zone management.

The project collects and shares lessons learned and the most successful measures of the EbA approach in Peruvian coastal and marine zones through national and international exchange forums.

## Results

- The beach law approved in September 2021, which was developed with technical support from the project since 2020, promotes the conservation and sustainable use of more than 250 beaches along the Peruvian coastline.
- In December 2021, MINAM approved the „Environmental Distinction for Beaches“, which includes the ecosystem-based approach. This award recognises good environmental management by municipal governments in the management of their beaches and is given for meeting sanitary and environmental quality criteria. The project provides technical support to MINAM and the selected municipalities (Talara in Piura and Vegueta in Lima) to achieve this recognition.
- More than 50 trainers from the National Fund for Fisheries Development (FONDEPES) and the Regional Directorates of Production (DIREPRO) have been trained at the national level, they now have the competencies to train 8500 artisanal fishers in ecosystem-based adaptation and fisheries sustainability, using effective digital communication techniques.
- The municipality of Talara (Piura) approved the creation of the Balcones Environmental Conservation Area, with the aim of conserving and sustainably using more than 900 hectares of dry forests, beaches, wetlands and salt marshes. The project contributed to the identification and establishment of the protected area.
- Since the beginning of the project and within the framework of the municipal programme EDUCCA, more than 1200 citizens of Piura and Huacho have been sensitised through environmental education and cultural activities. Thus, for example, an educational campaign for the conservation of the sea has been carried out, which included talks, a painting competition, the collection of more than nine tons of marine and underwater rubbish and the painting of community murals.



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Pasaje Av. Antonio Miroquesada  
(ex Juan de Aliaga) 425, Piso 16, Oficina 1611  
Magdalena del Mar, Lima 15086 - Perú  
T +51 (1) 441 2500 / 441 1454  
giz-peru@giz.de  
[www.giz.de/peru](http://www.giz.de/peru)

Author: Philine Oft

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