# **ALBANIA**

**Ecosystem-based Adaptation** 2016-2020

Supported by the **Special Climate Change Fund** 



SUSTAINABLE **DEVELOPMENT GOALS** 



14 LIFE BELOW WATER

15 LIFE ON LAND

Providing training for at least 30 government staff and 250 community members on implementing EbA and financing adaptation actions; developing technical guidelines for EbA in Albania; and building a website to raise awareness of EbA measures.

**Constructing a tidal inlet** channel to improve the movement of water between the lagoon and the sea, which strengthens the health of local fisheries by reducing salinity and increasing water oxygenation.

**Reforesting 7ha of degraded** forest with indigenous, climate-resilient tree species, and rehabilitating 2,000m of coastal dunes, which provide flood protection, nutrient regulation, and fish production.

**PROJECT TITLE:** 

BUILDING THE RESILIENCE OF KUNE-VAIN LAGOON THROUGH ECOSYSTEM-**BASED ADAPTATION (EBA)** 

## **EXECUTING ENTITY:**



Ministry of Environment, Government of Albania

## **KEY TARGETS:**

## 2,000

Metres of degraded coastal dunes reforested within the Kune-Vain protected area

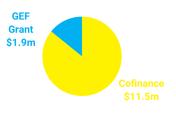
## 7

Hectares of riparian forests reforested around Ceka lagoon

## 65,000

Seedlings planted by the project to reduce the negative impacts of climate change on people

## **FUNDING:**



## **PROJECT WEBSITE:**

http://kunevain.com/





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### **INTRODUCTION**

- Albania is situated in southeastern Europe with a population of 2.85 million. The country has one of the largest and richest wetland systems – mainly in the form of coastal lagoons – in the Mediterranean region.
- This project is helping climate-vulnerable coastal communities by using ecosystembased adaptation (EbA) – the use of nature and ecosystem services to reduce the impacts of climate change on people.
- The project is located in three sites at the Kune-Vain Lagoon system in the Lezha region of Albania, which hosts stunning biodiversity.
- The main approaches include: opening a tidal channel to allow the free circulation of sea water, which regulates the salinity of the lagoon and reduces flooding; and dune rehabilitation to mitigate coastal erosion and reduce habitat loss. As a result, fish stocks and bird species will recover, leading to positive economic benefits for fisheries and ecotourism businesses.

#### **TECHNOLOGIES & METHODS**

- The project is rehabilitating 2,000m of coastal dunes within the Kune-Vain Protected Area by planting indigenous climate-resilient plant species, including more than 65,000 seedlings.
- The sand dunes are separating the lagoon from the sea. Once the sand dune erodes, the lagoon will turn to sea and disappear. The planting activities strengthen the sand dunes against erosion by holding the soil in place, helping to preserve the Kune-Vain Lagoon ecosystem.
- **7 hectares of riparian forests** are also being reforested with over 14,500 seedlings.
- A **new tidal inlet channel** between the Ceka Lagoon and the Adriatic Sea is being constructed and maintained. The channel allows the **exchange of water between the lagoon and the sea**, which significantly improves the water quality of the lagoon.

#### **CLIMATE IMPACTS**

- Albania is faced with increasing temperatures, decreasing precipitation and sea-level rise induced by climate change.
- The Kune-Vain Lagoon system (KVLS) is vulnerable to current and expected climate change impacts, which threaten the ecosystem services that communities rely on, including mitigating floods and providing food and freshwater to the local communities.
- Sea-level rise is leading to increased erosion and saltwater intrusion on people's farms and aquifers neighbouring the Kune-Vain Lagoon, where the population is mostly economically dependent on agriculture and fishing.

The degradation of lagoon ecosystems is further compounded by a rapidly growing population, with the associated expansion of agricultural land into the Kune-Vain Lagoon, which reduces its capacity to provide valuable goods and services to the local communities.

- The embankment at Shëngjin Island is being **raised and maintained** to protect adjacent agricultural land and population areas from flooding and storm surges.
- The project is also increasing the capacity of Albania to carry out EbA measures in the future by **training at least 30 government staff and 250 local community members** on how to implement, monitor, and evaluate EbA strategies.
- A maintenance strategy and an **upscaling strategy** are being developed to sustain the impacts of the project's EbA interventions.

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**Technical guidelines and protocols** are being produced on the implementation of EbA, and at least 40 national and local staff are being trained on the application of these guidelines. An **awareness-raising campaign** is being carried out on the advantages of EbA to increase resilience to climate change, including 2 experience-sharing days on EbA.

"If the lagoon disapears, the sea

will attack the city. That's exactly

what will happen."

- Albert Pati, owner of a tourist

restaurant near Kune-Vain Lagoon

"Four years ago you could not eat

the eel or the fish here. It smelled

of mud. Now it is better for the

lagoon and for us - a lot better."

- Gjon Loshi, local fishermen, explaining

the impacts of the tidal inlet channel

built by the project.

- A **web-based platform** was also developed to share information on the project and EbA: http://kunevain.com/
- At least 6 MSc and PhD students have started **research projects** on various aspects of the project.

#### **PROJECT LOCATION**



#### **CONTACTS**

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### **VIDEOS & STORIES**

Video:

https://www.youtube.com/ watch?v=ateupQpGGgE&feature=emb\_logo

#### Human impact story:

https://www.unenvironment.org/news-andstories/story/albania-how-lagoon-becamefrontline-defence-against-climate-change





