

THE SOCIO-ECONOMIC BENEFITS OF NATURE RESTORATION IN GREECE



Showcasing the potential benefits of upscaling nature restoration in Greece to meet the targets of the proposed EU Nature Restoration Law

Aubert, Gabrielle (IEEP) & Christopoulou, Ioli (The Green Tank) – 22 June 2022

BACKGROUND

- On 22 June 2022, the European Commission unveiled the proposal for an EU Nature Restoration Law which includes legally binding EU nature restoration targets. Under the proposed law, Member States will be required to adopt National Restoration Plans, in which they will set out specific restoration priorities and measures.
- Greece is particularly vulnerable to the negative impacts of climate change. Nature restoration can contribute to climate mitigation and adaptation, as well as additional social and economic benefits.

Climate mitigation and adaptation benefits



Climate change mitigation

Ecosystem restoration can make a key contribution by avoiding current emissions associated with key degraded habitats, compensating for unavoidable GHG emissions from other sectors by increasing natural carbon sinks and preventing future emissions by increasing ecosystem resilience



Forest fire risk reduction

Restoration of burnt areas can contribute to mitigating the impacts of forest fires and to reducing the risk of future fires. Fire-smart management plans, policies and practices aim to minimise socio-economic impacts and maximise ecological benefits which contribute to re-establish forest diversity and their resilience to fires.

LIFE-TRANSFER: Restoring Seagrass Meadows

Seagrass meadows deliver important ecosystem services, such as carbon sequestration services. Healthy ecosystems can store carbon at a rate 30 times faster than forests. The Hellenic Centre of Marine Research has started a program to restore seagrass meadows in the Amvrakikos Gulf.

Forest restoration in Greece's National Recovery and Resilience Plan

Greece's National Reforestation Plan aims to restore forests to halt biodiversity loss and protect infrastructures from natural disasters. Measures such as the restoration of 16,500 hectares of degraded forest ecosystems and of Mount Parnitha will be funded by the country's National Recovery and Resilience Plan.



City resilience to climate change

Nature restoration in urban areas can play a key role in making cities more liveable and resilient to key urban challenges, many of which are expected to be aggravated by climate change. For example, urban green space and vegetation can help reduce the urban heat island effect as an increase in tree canopy cover can help decrease temperatures.



Flood risk reduction

River and wetland restoration can enhance the ecosystems' natural flood protection capacity by to absorb and retain water in its vegetation and soil, which also reduces the risk of other hazards such as landslides.

Nature-based solutions can be used to replace grey infrastructure which has been the tradition response to river floods but which can be damaging for the natural environment.



Coastal erosion risk reduction

Nature-based solutions and restoration measures can replace harmful hard engineering infrastructures which have been the main response to coastal erosion. Nature-friendly alternatives such as planting and/or stabilising dunes with native vegetation and beach nourishment enhance their resistance to erosion. Restoring coral reefs and coastal wetlands enable them to act as a natural defence against coastal erosion by absorbing wave energy and stabilising sediments.

Athens – restoring nature to enhance city resilience to extreme heat and other urban challenges

The city's Climate Action Plan and Resilience Strategy aims to restore nature in the city to increase its ability to withstand climate change and to reduce the urban island heat effect. Other co-benefits include enhanced biodiversity, reduced pollution and lower flood risk.

Riparian Forest Restoration and Riverbank Protection, Evrotas River

The LIFE-EnviFriendly Project demonstrated how low-cost nature-based solutions used by farmers within a watershed can improve riparian resilience to floods, enhanced biodiversity, groundwater quality improvement and adaptation to climate change impacts.

HERMES – Interreg Balkan-Mediterranean

The project HERMES aims to develop a harmonised and unified approach to mitigate the effects of coastal erosion and promote beach restoration in the four countries. It will promote environmental-friendly techniques for coastal restoration works, such as beach and dune stabilisation and beach nourishment.



Safe and reliable water supply

Restoring water ecosystems will enhance their storing capacity in periods of heavy rainfall, therefore avoiding flooding and delivering fresh water in periods of droughts. Restoring wetlands increases their natural capacity to retain nutrients and filter excess nitrogen runoff from agricultural activities, which increases water quality. Moreover, these improvements lead to a reduction in water treatment costs and in water damage repairs after a flood.

Wetland adaptation in Attica Region, Greece – OrientGate

The planned measures in the Strategy and Action Plan for wetlands in the Attica Region are expected to mitigate the impacts of climate change on the wetlands and to improve their ecosystem functions, such as water quality improvement by trapping sediments and toxic substances and reduced risks of damages by droughts.



Sustainable and resilient food systems

Climate change is already impacting agricultural production in the EU. Restoring agricultural land through improved practices such as agroforestry and conservation agriculture can help enhance land productivity by enhancing ecosystem processes and services which the lands depend on. Restoration also contributes to food security and resilience by enhancing pollination services, which are essential to agricultural crop production.

In the marine area, the protection and restoration of Marine Protected Areas can increase the sustainability of fisheries and reduce the risk of fish stock collapse, as well as reduce the rate of overexploitation of fish stocks.



Economic opportunities

Sustainable jobs and tourism

The economic well-being of tourism-dependent communities depends to a large extent on the conservation and sustainable management of particular habitat elements, such as coastal areas which attract tourists.

Restoring these habitats is therefore essential to guarantee their economic growth. Restoration can also help sustain jobs for people in local communities who depend on coastal and marine resources such as fisheries, aquaculture and tourism.

Restoration, management and valorisation of Priority habitats of Mediterranean coastal areas – LIFE PRIMED

The project aims to restore temporary ponds and alluvial forests in the Nestos Delta in Greece and reverse the forest decline in specific areas.

It integrates socio-economic considerations in the achievement of its objectives, which are to promote nature-based tourism through awareness raising of the biodiversity present in the area.



New entrepreneurial opportunities

Nature restoration can help attract new investment and economic ventures to an area by creating incentives for biodiversity-positive business models. They will create long-term economic opportunities for local communities and attract additional financing.

Public health and social benefits



Improved physical and mental health

Restoring natural habitats enables citizens to access green spaces which promote healthier lifestyles by encouraging people to be more physically active and therefore lead to a prevention in cardiovascular diseases and diabetes. They improve air quality and reduce air pollution-related diseases. They also contribute to improved mental health as they contribute to reduce anxiety, depression and loneliness and promote social interaction and relaxation in outdoor spaces. Improved mental and physical health lead to a lower annual average health care costs for people and for national health services.

Restoration can also promote community building, social cohesion, a sense of local pride, and a more equitable enjoyment of nature and its benefits. Green spaces in urban areas have been linked to an increased feeling of community cohesion and inclusion and is associated to lower crime rates in the area.

WWF Impact Ventures in Greece – New business models which support vulture habitat restoration in the region of Dadia

The project supported ventures in important biodiverse regions including the Dadia Forest, a key breeding group for European raptor birds. It provided business expertise, training, and networking with potential investors to support innovative business models. For example, the OpenFarm venture sells sustainable meat from livestock reared in the Dadia National Park which contributes to restoration through preserving open landscape which vulture's need to catch their prey.

Thessaloniki's Resilience Strategy and regenerated waterfront

The city regenerated its waterfront which includes a breakwater for people to walk, fish and socialise and a dozen of green spaces. Results show that people who have been exposed to the waterfront have improved blood pressure following an increased level of physical activity and reduced levels of stress anxiety.

The city's Resilience Strategy aims to increase green spaces and infrastructures to create space for social interaction. The municipality will create pocket community gardens and develop a 'Adopt your Green Spot' initiative to actively engage local communities in the development of urban agriculture and maintenance of the green spaces.

The **Institute for European Environmental Policy** (IEEP) is a sustainability think tank with offices in Brussels and London. As a not-for-profit research organisation with over 40-years of experience, we are committed to advancing evidence-based and impact-driven sustainability policy across the EU and the world.

