

El Salvador

Restoration Opportunities Assessment Methodology

ROAM COUNTRY BRIEF

In response to extreme weather events and climatic variability, a national ROAM process was undertaken, which included the development of technical guidelines for forest landscape restoration (FLR) for each land-use type.

Why FLR?

El Salvador is located on the Pacific coast of Central America. It has an area of 21,401 km² and one of the highest population densities in the region (292 inhabitants per km²). More than 70% of its land area is occupied with diverse productive systems, mainly corn and beans, coffee, sugarcane, and livestock.

In 2012, El Salvador formulated the National Environmental Policy (NEP), with key components including restoration and conservation of ecosystems to reduce risks, sustaining productive activities, and ensuring the well-being of the population. A National Program for Restoration of Ecosystems and Landscapes (PREP) was developed to compliment other strategies of the NEP, such as Biodiversity, Environmental Sanitation and Water Resources, and the National Plan for Climate Change. In the same year, El Salvador committed to restore one million ha under the Bonn Challenge, aiming specifically to enable the people to adapt to the adverse effects of climate change and mitigate impacts such as rising sea levels, floods, hurricanes and the modification of water cycles.

In this context, El Salvador's Ministry of Environment and Natural Resources (MARN) and IUCN jointly designed and implemented tools and instruments to strengthen and prioritise PREP actions and increase vegetation coverage.

As such, the Restoration Opportunity Assessment Methodology (ROAM) was applied to assess restoration options based on biophysical, social and economic criteria at a national scale. The partnership received support from the Regional Climate Change Program, funded by the US Agency for International Development; the KNOWFOR program funded by UK aid from the UK Government; and German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

Restoration interventions

Based on current land uses, restoration activities were prioritised to improve and recover the identified relevant ecosystem goods and services. Seven current land uses and nine transitions to more sustainable land uses were prioritised, covering an area of almost one million ha and almost reaching El Salvador's restoration commitment.

The following technical guidelines on restoration were published for mangroves, cacao agroforestry, grain agroforestry, silvopastoral and agro-silvopastoral systems, and sugarcane best management practices:

- [Guía técnica para la restauración en El Salvador Restauración de manglar y bosque de galería](#)
- [Guía técnica para la restauración en El Salvador – sistemas agroforestales en granos básicos](#)

- [Guía técnica para la restauración en El Salvador: Zafra verde en caña de azúcar](#)
- [Guía técnica para la restauración en El Salvador Renovación de cafetales](#)
- [Guía técnica para la restauración en El Salvador Sistemas silvopastoril y agrosilvopastoril](#)
- [Guía técnica para la restauración en El Salvador Sistemas agroforestales de cacao](#)

Cost-benefit analysis

From the financial analysis, the following results stand out:

- Considering productive activities in the current land use scenario, dual-purpose livestock on natural pasture is the most profitable; the least profitable is the production of lowland coffee (coffee plantations lower than 800 m above sea level);
- Of the transition scenarios, the most profitable is silvopastoral systems on natural pasture. The least profitable is the restoration of riparian forest because it is not associated with productive systems but rather focused on ecosystem conservation.
- The transition activities with the greatest incremental monetary benefit are cacao agroforestry systems. Riparian forest restoration is the only activity that has a negative marginal net present value.

For further information, please see [Economic analysis of restoration in productive landscapes in El Salvador](#)

Financial mechanisms

For each of the identified land use transitions, existing and potential instruments were analysed, and a proposed financial mechanism was designed with specific types of investments/investors. To identify and analyse the financing instruments,

the following were taken into account: existing institutions; level and current operations of these instruments; and degree of adaptation required for the successful implementation of transitions. Funding instruments included bonds, investment capital, credit, donations, subsidies, payment for ecosystem services, and buy back agreements and guarantees.

FLR implementation is already taking place, guided by a multi-criteria spatial analysis as well as the financial, social and environmental benefits resulting from the economic analysis.

Strengthening the National Restoration Strategy

The inputs generated from ROAM will enable PREP to [strengthen its National Restoration Strategy](#), ongoing efforts, initiatives and investments. It will help to pool ongoing efforts, initiatives and investments in different regions, with a view to contributing to climate change adaptation. It also aims to support the incorporation of FLR into national planning, helping El Salvador achieve its national and international commitments, such as the Aichi target 15 of the Convention on Biological Diversity or the UN Framework Convention on Climate Change REDD+ goal, among others.

For further information:

[National Forest Landscape Restoration Action Plan](#)

Resources:

InfoFLR.org
iucn.org/forests

