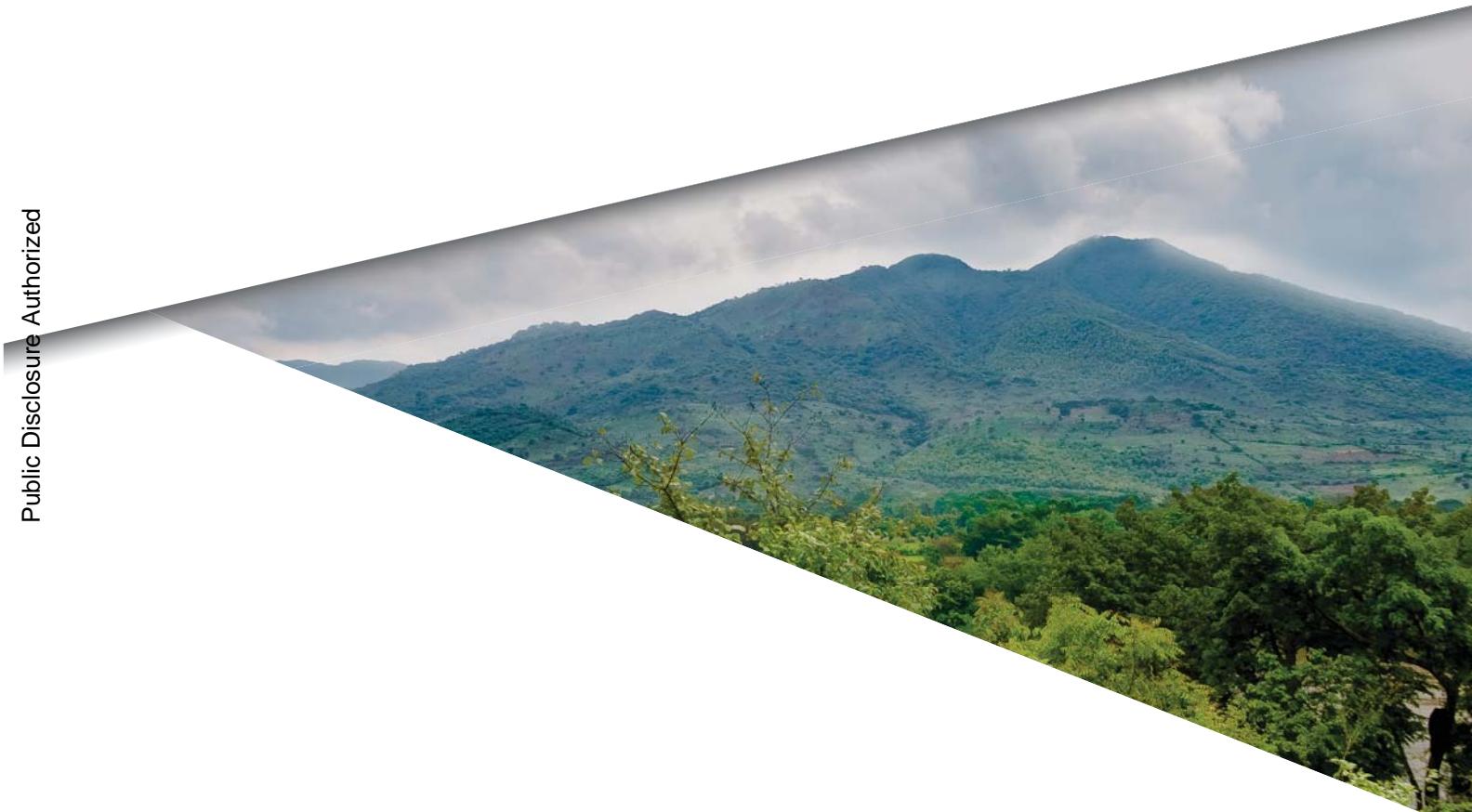


Country Forest Note

El Salvador



Summary for Policymakers

Forests are essential for the development of El Salvador, contributing directly to its economy and society's well-being. With an extent of 817,000 ha, forests cover 38% of the country's land area and are linked to most productive sectors. The forestry sector accounts for 1.5% of GDP, generates approximately 12,000 direct jobs, and supplies the population with firewood. Salvadoran forests also protect water and soil, which are in turn essential for agricultural production, nature conservation, and protection from natural disasters. They also represent an opportunity to recover the economy after the COVID-19 pandemic.

Despite their relevance, 21,700 ha (2.6%) of forests are lost every year, mainly due to the expansion of agriculture and urbanization. Other causes include firewood and charcoal production, logging for timber products, and fires associated with forest degradation. All these processes are driven by poverty, rural fragmentation, and demographic growth. Most of today's forests are young and fragmented between a mosaic of crops, and only 141,000 ha are associated with Natural Protected Areas, biosphere reserves, and Ramsar sites.

Rapid deforestation and forest degradation in El Salvador threaten water availability, food security, and agricultural production and increase exposure to natural disasters. Over 25% of the national territory suffers from soil erosion due to the loss of forests. This includes lands that are prone to landslides but were previously productive. In addition, large areas of the country that are important for freshwater recharge and the banks of major rivers lack forest cover.

The country's growing climate vulnerability is accentuated by forest loss. The loss of infrastructure associated with climate change reaches US \$215 Million annually. According to the Ministry of Environment and Natural Resources (MARN, in Spanish), these numbers could be aggravated since about 10% of the country is susceptible to flooding, 20% to landslides, and 50% to droughts. Also, the country has the lowest freshwater availability per capita in Central America. These risks are projected to increase with forest loss but could be minimized if forests are recovered and better managed.

The country has the opportunity to impulse a transformation towards better forest management. Although most forests are young, fragmented, and exist in mosaics within agricultural farms, they continue to provide goods and income for subsistence farmers and ecosystem services for the nation. One of the main challenges to achieving sustainable forest management is the reconciliation of the opportunities for production, protection, and forest restoration with the limitations, capacities, and needs of the large number of subsistence farmers who own the forests. To achieve this, most forest-based solutions will be small-scale, but aggregated, they can have an enormous impact.



Through better management, El Salvador has the opportunity to reverse the trend of forest loss in favor of its development and resilience. It is necessary to promote climate-smart and sustainable production practices that include tree management on farms. A list of *Opportunities for El Salvador associated with forests* identified in the Country Forest Note is presented below. To achieve large-scale and successful adoption of these systems, behavioral changes at the farm level are needed. These changes can be induced by incentives or subsidies, greater access to technical assistance and credit, as well as building awareness through educational campaigns. The proposed forest management interventions could be combined with traditional crops and other high-value investments (livestock, vegetables) to ensure cash flow, food security, and increased farmers' incomes.

The path to sustainable forest management for El Salvador requires public and private actors and the civil society. In order to implement these alternatives, the country needs to integrate forest, water, environmental and agricultural policies, for example, by reconciling forest and water legal frameworks that limit timber use and discourage tree planting. This includes changing current agrarian policies, incentives, and extension programs for basic grains and livestock; making the delivery of current subsidies conditional on the use of sustainable techniques; and incorporating forest technical assistance into existing programs. Their implementation requires close cooperation and coordination between the MARN, the MAG, the DGFCR, other ministries, and municipalities. Public platforms and structures should be complemented with the participation of private sector and civil society actors, alone or in public-private partnerships, helping to reduce reliance on public investment. Finally, forest interventions should be accompanied by better planning and control of peri-urban land use and greater job creation to provide subsistence farmers with alternative income sources.

Opportunities for El Salvador associated with forests

- ***Conservation or restoration of forests based on natural regeneration.*** This alternative would allow to recover the natural capacity of soils and water retention at a low cost while improving agricultural productivity. It could be encouraged through private environmental compensation, water use fees, or payments for environmental services (e.g., reducing greenhouse gas emissions). Experience exists in the country through FIAES and FONAES, focused on farmers located in marginal and rugged land on slopes (> 40%) and aquifer refill zones, where opportunity costs are low and potential benefits in environmental protection, and ecosystem services are high. Restoration opportunities have been identified in 60,000 hectares with steep slopes, and conservation opportunities in 148,000 hectares of forests, creating up to 50,000 jobs.
- ***Commercial wood from secondary forests and shaded coffee systems.*** Older forests and agroforestry systems like shaded coffee have significant quantities of high-value exportable wood (5.74 million m³) and lower quality timber (7.55 million m³). With proper management, the quantity and quality of wood can be improved, allowing entry



to attractive neighboring markets in Central America and the United States. For this, a public-private supply aggregation mechanism through a collaborative virtual platform, including technical support, could help organize industry participants, improve their operations and market access, and thus increase their profitability. This mechanism's key components would include government-formulated forest management plans, quota systems based on annual limits and fees for certified timber, virtual or real timber collection centers with public prices, and technical assistance to improve wood quality. In this way, the system would be more profitable and transparent, with high social impacts through cooperatives and positive environmental outcomes through sustainable management.

- **Considerable expanses of secondary forests with potential for producing firewood or biomass for renewable energy.** The recent expansion of secondary forests represents a potential resource to meet the demand for wood and woody biomass. Low-cost woodlots can be established on farms, improving farmers' incomes, maintaining biodiversity, and providing ecosystem services such as water or greenhouse gas capture. A management design for these systems is required, including strategies to enhance their sustainability and productivity. These systems could also generate synergies in partnership with annual crops, diversifying the sources of income of small and medium-sized farmers.
- **Shaded coffee and cocoa crops with valuable commercial wood.** Traditionally important coffee production in El Salvador has decreased in importance to growing international competition, climate change, and diseases such as rust. This crop can generate significant income for farmers and environmental benefits but requires large investments in activities and labor during the first year of implementation. Coffee could be recovered by renovating old plantations in high elevations, converting low elevation plantations into cocoa, and improving their management practices. The promotion of these systems should be aligned with the limitations, capacities, and needs of farmers through government support with incentives such as technical assistance and the supply of planting material.
- **Perennial fruit plantations.** They can be complementary to other tree plantations, generating income from early stages, and forest-like environmental benefits. Adoption of fruit plantations could be increased through incentives and support services such as technical assistance and access to credit to cover their establishment and maintenance costs.

Characteristics and strengths of the forestry sector in El Salvador

- Growing recognition of the importance of forests by political leaders.
- National public legal and policy frameworks and international commitments.
- Leadership of the country in the area of forest restoration.
- Existing institutional structures and important advances in forest restoration within the Ecosystem and Landscape Restoration Program (PREP in Spanish), a collaboration between the Ministry of Agriculture and MARN; that can provide a basis for new activities related to forest production, management, conservation, and restoration.
- Non-governmental and civil society organizations with experience and interest in promoting and participating in improving Salvadoran forests' management.

Pilot experiences to finance improved forest practices through user rates or environmental compensations and platforms that could be adapted to mobilize payments for forest conservation or restoration, providing technical assistance.