Costa Rica's Progressive & Successful Deforestation Policies

By

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Costa Rica lost more than one-third of its rainforest during the booming 20th century to cattle ranching, agriculture, and logging. Since the 1990's, when it had one of the worst deforestation rates in the Americas, 26% of its territory has been protected, and it has increased its forest cover to over 50%.[1] By pursuing a number of bold conservation policies, by establishing and managing national parks and reserves, and by promoting ecotourism, the country has reversed this trend of deforestation. In fact, Costa Rica continues to combat encroaching forces of development successfully, now serving as a leading practitioner of afforestation, reforestation, and preservation in Central America and beyond.

Deforestation in Costa Rica has a serious impact on the environment and therefore may directly, or indirectly, contribute to flooding, desertification, sedimentation in rivers, loss of wildlife diversity, and the obvious sheer loss of timber. The deforestation of Costa Rica's tropical rain forests as in other countries is a threat to life worldwide with a profound effect on the global climate. Costa Rica alone protects 4.5% of the planet's biodiversity and its rainforests comprise 25% of the country's territory.[2]

In the first half of the 20th century over 75% of Costa Rica was covered in indigenous tropical rainforest. 80% of that had been cleared since the 1940's.[3] Unregulated logging started churning the country's largest resource into private profit. The country's population boomed in the 1950's and 1960's, and rural citizens began cutting down forests to make new pasture for cattle ranching. Producing beef for the world market raised much needed revenue. The rapid deforestation worsened during the 1960s's when the United States offered Costa Rican cattle ranchers millions of dollars in loans to produce beef. Agriculture also expanded into previously wooded land, and monocrops became the norm. When the 1980's came around, only 26% of the original forest cover was left.[3] Between 1973 and 1990, deforestation in Costa Rica was among the highest rates in the world. As the global environmental movement found widespread support, scientists began to reveal great biodiversity loss in the world's rainforests. Soil erosion had increased with deforestation as valuable topsoil washed away from the hills into the streams and out sea year after year. Countries were losing their vast resource base.

In 1969, there came a growing acknowledgment that something unique and important was vanishing, and a systematic effort began to save what was left of the wilderness. The same progressive ethics that abolished the country's military in 1948 emboldened Costa Rica's attitude toward diminishing forests, and led to strong conservation programs.[3] Citing rampant logging, the Costa Rican government created its Forestry Department, and banned the export of more than sixty tree species that were being overharvested. They also began strictly enforcing laws prohibiting the cutting of trees without proper permits.

A year later, the progressive Costa Ricans formed a national park system that won global support. New laws declared over 10% of the land was to be protected. An additional 17% was set aside as forest reserves, buffer zones, wildlife refuges, and Indian reserves. Portions of all the major habitats throughout the country were protected for future public trust. In 1995, the government introduced more protected areas, and another 13% of the country, particularly those with high biodiversity, was put under protection through privately owned preserves. Since, any poorly managed forest reserves and wildlife refuges tend to be turned into national parks, and adjacent national parks, reserves, and national forests are being integrated to create corridors in which wildlife might be able to move with greater freedom over much larger areas. Today this widespread National Parks Service manages twenty national parks and eight bioreserves. The Forestry also protects twenty-six protected zones, nine forest reserves, and seven fauna sanctuaries.[4]

The Costa Rican government has promoted reforestation as part of its approach to deforestation too. By offering tax breaks to tree farms, the country has seen an increase in the growth of nonnative species. The government has also offered legal residency status to anyone who helps with reforestation programs, requiring a minimum nontaxable investment of $50,000.[4]

The government has also started many inventive programs promoting sustainable development. FUNDECOR organized a project that works to sustainably manage more than 30,000 acres by helping landowners with forest management plans. In this way locals can be educated on that rewards of long-term planning and the negative effects of desperate short-term goals. Landowners earn more money and do less damage to the forest when removing valuable trees.[4]

In 1986, the National Bamboo Project was founded to decrease deforestation. Leaders hoped to replace timber with fast growing bamboo as a main building material. This was also aimed at providing low cost housing for Costa Rica's rural poor. By pushing the National Bamboo Project the government saw the building of thousands of homes for the poor while benefiting the environment.[2]

Due to the widespread success of program implementation, and support for the robust ecosystems of Costa Rica, foreign and private organizations are growing more and more interested in preserving the rainforest's abundance. The country has welcomed many conservation groups and their projects. Programs like private nature reserves, children's reforestation projects, forest management projects, and world-wide scientific research further enhance funding to Costa Rica's conservation efforts. Attempting to solve Cost Rica's large foreign debt concerns, some of these actors are involved in "debt-for-nature" programs. Trading debt for conserved land has raised money for conservation while keeping foreign money in the country. In doing so, the National Parks Foundation bought a share of the country's debt from a U.S. bank. Costa Rica then paid off the National Parks Foundation with bonds in local currency, with a formal promise to use that money for conservation projects.[5]

In 1979, Costa Rican initiated the system of Payments for Ecological Services (PSA), the first nation in the world to do so.[6] PSA pay owners of forests and forest plantations to conserve or sustainably manage land that could otherwise be lost to short-term needs. Services like preserving forests for reduction of greenhouse gases, care for water resources, biodiversity protection, and maintenance of

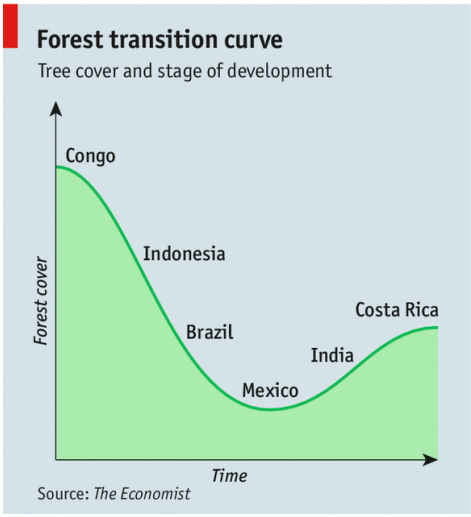
aesthetic beauty were given value, and landowners were compensated over contracted years. The Ministry of the Environment and Energy now oversees the PSA system through the National Forestry Financing Fund, working with REDD+ to broker arrangements with international organizations. These organizations can invest in environmental programs or in essence trade their surplus of pollution for services being maintained in Costa Rica. Selling allowances to emit greenhouses gases generated $20 million in 1999. Similarly, Costa Rica joined a group of tropical developing countries in a deal at the United Nations' Summit on Climate Change in 2005. The "rainforest conservation for emissions" plan, called for wealthy countries to compensate poorer countries for their potential conservation.[6]

Every year Costa Rica's population grows by 2.5%, exacerbating the land-pressure problem and forcing squatters onto virgin land where they continue to deplete the forests that once covered 80% of Costa Rica.[7] Compounding this is the fact that Costa Rica is one of the region's most centralized countries. When the federal government fails to enforce national law in its periphery, due either to corruption or lack of control over implementation, the strength of the programs is diminished. Efforts have been made to institute more effective management practices to reduce such failure. In the mid 1990's, the government grouped all the protected areas into eleven regional administrative units and labeled them conservation areas. Each area was given the authority to exercise autonomy in the design and implementation of management policies. This plan placed the livelihoods of local communities in the equation by attempting to integrate their needs into the philosophy and operation of the national park system. Locals were given a stake in the conservation of their land by showing them that they can make a living by preserving rather than destroying natural resources. This method has proven especially useful in recent years.[6]

Eco-tourism has become one of the most important sources of revenue for Costa Rica.[1] The country is an ideal introduction to the rainforests and biodiversity, and international travelers have been

coming in swarms. In some areas, tourism has proved a little too much for the environment and some parks now have restrictions on the number of visitors allowed at any given time. Costa Rican tourism is booming so quickly that some parks are beginning to show wear and tear from too much. Locals and indigenous groups have, in some cases, moved away from now bustling towns into protected areas and reserves, claiming squatters' rights. Thus, tourist management policies have been adopted to control the negative impacts in the reserves. The Ecotourism Society, an organization of travel professionals and conservationists, has begun a campaign to raise park fees so the country can afford to maintain the parks in the face of new development and encroachment. About 50% of Costa Rica's economy comes from tourism, mostly eco-tourism and adventure, so commitment to the environment has been good business.[3]

The conservation program in Costa Rica is ambitious and in being so, is one of the most developed among tropical rainforest countries. Costa Rica stands out having addressed high levels of deforestation through a robust Protected Area system,natural resource management legislation and direct financial incentives offered to private landowners. Ecotourism plays a huge part in reinforcing these conservation measures and encourages all actors and agents to have the same goals in mind. Perhaps the most significant innovation has been the establishment of PSAs, which provide direct financial incentives to landowners to conserve forests instead of converting them to agricultural land.



REDD+ and the Union of Concerned Scientists have established a Forest Transition Curve (see above) that reflects a country's forest loss or gain over time; Costa Rica is one of few countries in the upswing after averting years of loss. (ucsusa.org) According to the United Nations, all of these policies and practices have increased forest cover in Costa Rica up to over 50% of total cover, a figure not seen since 1960. These numbers have also proved stable since 2005. (un.org)

It is hard to tell if this progressive approach can be transferred to other nations. Not everyone can rely on ecotourism or do without a military. What the international community *can* learn however is that a healthy economy cannot survive for very long without a healthy environment. Costa Rica made this connection decades ago and are seeing the results of choices that will certainly reinforce the mission to conserve the rainforests. What is very clear is that the country's decisions have positively impacted both itself and the globe.(unu.edu)

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