

INSTITUTE OF CURRENT WORLD AFFAIRS

GSH-1
El Salvador: An Ecological Disaster

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Dear Peter:

I wrote this newsletter over six weeks ago, but obtained a typewriter only today. You can be assured that future newsletters and reports will not encounter such a delay.

In a 1976 cover story article on the growing specter of famine in the world, Time Magazine included El Salvador in a map of countries facing potential famine. El Salvador and Haiti were the only western hemisphere countries so designated by Time. My previous acquaintance with El Salvador has been restricted to driving the coastal highway, "EL Litoral," on lengthy trips between the U.S. and Costa Rica. To get a better view of a country threatened by famine, I decided to accompany Joe Tosi on his brief trip to El Salvador.

From April 20 to 28 I was able to go on several day field trips to diverse sections of the country. El Salvador is only 20,975 km² with a good road system, especially those leading to the Honduran border. I was able to get into the high pine areas (generally above 1,000 m) in the northern part of the country, as well as the hot, dry lowlands of the central and eastern regions. (April is usually the last month of the 5-7 month dry season.) Even though the country is now very dry, the subtropical moist regions which predominate in the lowlands receive 1-2 m of rain during the May-October rainy season. The major agricultural crops in this monsoonal climate are annuals such as cotton and corn or drought tolerant perennials like pasture, sugar cane and coffee. Cotton, coffee and sugar are the main agricultural export commodities.

I must admit to some skepticism about Time Magazine's inclusion of El Salvador as a potential famine country, mostly because of the large areas of fertile agricultural soils that I had seen in the southern lowlands. Hence I traveled to El Salvador with an open mind. Surely, I didn't expect to see large expanses of forest, but I also did not expect to see denuded, parched earth like in the African Sahel.

During my short stay in El Salvador I traveled about 2,000 km getting a first-hand view of much of the countryside, its ecological conditions and land use activities and trends. As expected, I did not see much forest in my travels. Some pine forests occur in the rugged highlands along the Honduran border, but they are being exploited voraciously. Logging activity is usually followed by putting cattle in the more open woods to browse or graze the grass and woody regrowth. Overgrazing inhibits tree regeneration and leads directly to soil degradation through compaction and surface erosion. Fire is not an important ecological factor in the wet highlands.

The subdirector of the Salvadorean Forest Service told me that 45,000 hectares (1 ha = 2.5 acres; 100 ha = 1 km²) of pine forests, 38,000 ha of mangrove forests and 60,000 ha of broad-leaved forests are believed to remain. That's about 7% of the country. However, from my observations I believe the estimates of remaining pine forests to be low and of broad-leaved forests to be highly inflated. Only the mangrove forests are government owned. The subdirector who provided the above information insisted that not a single tree, whether on private or public land, is cut down without government permission. After persistent, skeptical questioning he finally allowed that the Forest Service is having "some difficulty" in enforcing the law requiring permission to cut a tree.

I was struck by the huge volume of firewood stacked along any and every backroad waiting for transport to San Salvador, the capital city. The stacks consisted of some logs but mostly branches to a minimum diameter of about 2 cm, all cut (by axe) to a length of about 100 cm. Much of the firewood comes from hillsides cleared for planting corn. When I asked the subdirector if all that firewood was cut by permission, he stated that the bulk of the firewood comes from pruning the shade trees over coffee bushes. I am cognizant that prunings from coffee shade can supply a considerable quantity of low grade firewood, but all the firewood I saw stacked along the backroads was not from coffee plantations.

Does it really matter that El Salvador will destroy its few remaining firm-ground (i.e. non-mangrove) forests within five years? Could not massive reforestation with fast-growing exotic trees alleviate the impending firewood crisis? In such a small country the cold answer to the first question is no. El Salvador can and will continue to import Honduran timber "laundered" through Guatemala. The second question can simplistically be answered yes, but herein lies El Salvador's real problem--too many people! El Salvador has almost 5 million people, increasing at an annual rate of 3.2%. The demand for land for planting corn is so great, no small farmer can afford to think of setting aside land from corn for planting trees.

Even though El Salvador has virtually no forests left and is rapidly approaching a firewood crisis, these are not forest resource problems, but human ecologic problems caused by overpopulation. It seems as if there are more kids than trees in El Salvador! This ecological disaster is amply evident from the eye-stinging air pollution around San Salvador (industries feed on cheap labor), the stench from rivers that are open sewers, the heavy siltation that robbed the "5 de noviembre" dam of its hydroelectric capacity in only 30 years, virtually unlimited spraying of DDT and related pesticides on cotton fields, etc. El Salvador is a very real example of Ehrlich's population bomb ticking away.

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Only now is El Salvador beginning to accept reality and admitting it has a population problem. President Romero recently gave top priority to a national birth control program. Yet it is being vigorously opposed by the Catholic Church. Infant mortality remains high in the country, so parents are reticent to artificially limit family size. Massive emigration of agriculturists to Bolivia has even been proposed. Yet these are palliatives and it is not at all clear if El Salvador can effectively grasp its population problem before it is too late.

It will be most interesting to visit El Salvador again in two years to see the changes in the country and whether or not the government attains a grasp on its overpopulation problem.

Sincerely,



Gary S. Hartshorn
Forest & Man Fellow

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