Tonga: The underlying causes of forest loss

The Kingdom of Tonga is located in the central south-west portion of the Pacific Ocean. Its territory comprises more than 175 islands, with a total of about 750 square kilometres of land, inhabited nowadays by about 100,000 people residing in 166 villages on 43 islands. The climate of Tonga is sub-tropical. It has an annual temperature range of 17 – 30°C, with annual rainfall of approximately 2,700mm.

It can be reasonably assumed that Tonga was at some past time completely covered by forests, which according to studies performed in today's remnant forest areas, were very diverse in species. Remaining natural forests are confined to small areas, typically on land with physical constraints that preclude human use. The largest portion of natural forest is found on the steep east coast of 'Eua. Other remnants are scattered throughout the country, on several relatively remote islands of difficult access --like Kao, Tofua and Late-- in mangrove swamps, and a few small remaining segments elsewhere in Vava'u and Tongatapu.

A study carried out in the country identified two primary and interconnected causes for the serious deforestation and forest degradation process: population growth and monetarisation of the economy. Ecological and spatial restrictions would be the reason for the effect of population growth (from about 20,000 inhabitants in 1891 to 100,000 in 1996) on the forests. Nonetheless, the effects of population pressure have been accelerated and further exacerbated by economic change, and its impact on patterns of land-use. The most important overall economic change has been the transition of Tonga from a non-monetary economy --based primarily on subsistence agriculture-- to a monetary economy, with a wider and more commercial economic base. The entrance of Tonga into the globalized economy started about fifty years ago, and nowadays, with the registered demand for cash, the economic transition can be considered complete.

As the interaction between Tonga --which had been a rather isolated country-- and the outside world increased, so did the risks of the intensification of pressure on natural resources, forests included. In fact, from 1980 to 1992 the level of exports tripled. Since agriculture based on monocrops --especially aimed at the Japanese market-- accounts for 75% or more of export earnings it is not surprising that the advance in the agricultural frontier has provoked the loss of forest lands.

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