
Zambia: Causes of deforestation linked to government policies

Deforestation is considered one of the priority environmental problems in Zambia and woodland conversion to agriculture and wood harvesting for charcoal production seem to be the main causes of forest loss. The simplistic conclusion is therefore that "poverty" or "the poor" are to be blamed for deforestation.

However, there are a number of underlying causes related to the government's economic liberalization policies that have not been adequately investigated, forces that influence forest conversion to agriculture and clearance for charcoal production. Additionally, some studies have linked the increase in deforestation to economic policies, such as currency devaluation and removal of agricultural subsidies, that increased the area requirements for crops grown on newly cleared land, predicting more deforestation due to removal of fertiliser subsidies and a switch back to shifting cultivation.

It is important to underscore that during the first half of the 20th century, traditional crop production in Zambia was dominated by shifting cultivation --the "citemene" system-- which symbolized the effective use of tropical soil by the African indigenous peoples. For many years, the farmers of Zambia logged trees, burned the branches, and used ash as a fertilizer for the soil. Due to the nature of the soil, this method worked well and land could be used for 5 years before being left to rest. However, this system was dismissed by colonial interests --without finding out why the farmers used it-- as backwards and destructive, pushing farmers into settled agriculture.

With the "green revolution" and the increasing European and urban influence, cultivation became more permanent. Chemical fertilizers were promoted and hybrid maize was introduced in the 1970s, making farmers dependent on subsidised fertilizers. The overuse of fertilizers raised the carrying capacity of the land but resulted in soil erosion, acidification and loss of fertility. The removal of agricultural subsidies in the 1990s had consequences for rural livelihoods and people had to look for new sources of income to pay for the now more expensive agricultural inputs.

The privatization of electricity generation --imposed on many countries by the IMF and the World Bank- increased electricity prices and affected the electrification policy, pushing local people to the use of charcoal as energy. The introduction of charcoal as an urban cooking energy source in Lusaka city created a new incentive among rural communities in central Zambia to clear woodlands to supply charcoal to the urban market. Incomes from charcoal production were used to buy household requirements and in some cases these were invested in agricultural production after the removal of subsidies: a forest product had become a source of subsidy for agricultural production. Under traditional agricultural system trees were cut and burnt but with the commodification of charcoal, cut trees were converted to charcoal for sale and the land cultivated to produce both food and cash crops.

Finally, it is not only agriculture and charcoal production which are destroying the forest: uncontrolled or poorly controlled commercial exploitation of timber is a major cause of deforestation in Zambia's Western, Eastern and Southern provinces. Few of the profits reaped from this activity --supported by

the government-- benefit the local communities, given that there are no timber industries worth talking about in those areas. All the money realised from timber sales goes abroad or ends in Lusaka.

In sum, government policies --and not "the poor"-- are at the root of deforestation in Zambia. It was government policies that made people switch from sustainable shifting cultivation to unsustainable "green revolution" crop production. High electricity tariffs have pushed people to use charcoal instead of electricity. Government promotion of certain cash crops --such as sunflower, soybeans and cotton-- have incentivated further forest destruction. The government thus needs to be made responsible, not only for the past and current destructive process but, more importantly, for taking the necessary steps to address the problem.