



Central African Regional Program  
for the Environment

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Proposal Title: ***THE IMPACT OF THE  
STRUCTURAL ADJUSTMENT  
PROGRAMME ON  
DEFORESTATION IN CAMEROON.***

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**Abstract**

In the 1980's Cameroon experienced a transition from an economic boom into a deep recession. Up to 1985, the country benefited from the increase in oil prices (in 1979, oil was discovered in the western part of the country) and from the high prices in the international cash crop markets (coffee and cocoa). The year 1986 mark the onset of the recession: oil prices started to fall (at the same time, it was discovered that the oil reserves were smaller than expected) and the cash crop prices also went through a deep trough. The consequences affected the economy as a whole, leading to balance of payments and budget deficits, falling GNP, and high inflation.

This economic crisis called for similar adjustment policies as in most African countries. Of these policies, the removal of subsidies on agricultural input, increased producer prices, liberalisation of interest rates and the more flexible exchange rates are likely to have the strongest impact on timber and cash crop production and therefore on the forest.

There is a general consensus that the most direct contribution to deforestation is the agricultural sector in developing countries. Even though Cameroon is still richly endowed with tropical forests of high quality (in fact in terms of quality, its forest is second only to Democratic Republic of Congo) and deforestation does not take place at a high rate yet, steps need to be taken to avoid what is happening to most tropical forest in West Africa. For the case of Cameroon, it has been estimated that conversion of forested land for agricultural purposes is the cause of approximately all deforestation.

Most of the deforestation is the result of small-scale agricultural activities: shifting cultivators are estimated to be responsible for 79% to 95% of all deforestation in Cameroon. However, it was noted the indirect role played by timber in deforestation in Cameroon. The first, are the inefficient logging methods and the second is the improved infrastructure provided by timber firms which opens up the forest for agricultural purposes. Although the expansions of agricultural and timber production activities are basically the proximate factors causing deforestation in Cameroon, the more important underlying factors, mainly the economic incentive effects that may have been influenced by the SAP still need to be identified. The following study aims to examine these linkages with the following objectives:

- Find out the relative importance of cocoa and timber production as causes of

deforestation in cameroon;

- Find out what specific economic policies instigated through the SAP and other factors have aggravated or mitigated the problem;
- Establish whether there is a case for intervening in the trade regime in order to mitigate the environmental effects of the trade;
- Help identify complementarities for forest conservation.

Essentially, for analysing the impact of the Structural Adjustment Programme on deforestation in Cameroon, the study develops a model based on a dynamic optimal control problem of a renewable resource. The model assumes a three-sector tropical forest land use (cash crop, food crop and timber extraction) with well-behaved production functions. Maximizing the stream of total net benefits, the first order conditions are used to derive relationships for forest land conversion to cash crop and food crop lands and timber exploitation, that is the demand for the stock of forest land as an input for the production of cash and food crops and timber, as functions of output and input prices. A forest loss equation is also derived. These equations will be estimated using secondary data for the periods= 1965-1997. A Chow test and a piecewise linear regression approach are used to investigate the extent to which the Structural Adjustment Programme has impacted on the forest through its influences on input and output prices. Policy simulations are also undertaken to investigate the impact of different policies