


SOME ISSUES AND EXPERIENCES ON POLICIES AND INCENTIVES TO REDUCE DEFORESTATION IN AFRICA

**GODWIN KOWERO
SUSTAINABLE FOREST MANAGEMENT IN AFRICA
c/o WORLD AGROFORESTRY CENTRE (ICRAF)
NAIROBI, KENYA**



EMISSIONS FROM DEFORESTATION IN AFRICA

- Africa has 14% of the world population, hence relatively few consumers.
 - Almost 75% of energy consumed in Africa comes from traditional fuels.
 - Africa is industrialising slowly relative to other regions. However, urbanisation is growing very fast at around 4 % / year.
 - Africa's emission of climate-change inducing carbon dioxide is low, estimated at 3.5% of world's total.
 - Africa has vast forest resources (650 million hectares), about 17% of the world total.
 - The forests are a significant sink for carbon dioxide emissions. They play an important role in alleviating and balancing emissions from industrialised countries.
- 

CLIMATE CHANGE IN AFRICA

- Africa is one of the potentially most vulnerable regions in the world to climate change.
- Climate change will significantly impact on biodiversity and food security.
- Current climate is already marginal in terms of precipitation in many parts of Africa. In the 20th century there was:
 - a 0.7°C temperature rise
 - a decrease in rainfall over large portions of the Sahel
 - an increase in rainfall in East and Central Africa
- Further predicted warming in these semi-arid areas will worsen crop and livestock production.
- In the moist tropics increased heat is expected to reduce crop yields.
- Much as African farmers have adapted to climate and other adverse conditions in the past, climate change might make large regions of marginal agriculture unproductive.
- Current farming technology is basic, and farmers' incomes are low limiting options to adapt to climate change.

DEFORESTATION IN AFRICA

- **An important feature of forests in Africa is their uneven distribution between the different sub-regions and countries and the population they support.**
- **There are vast tree resources outside forests, like in , the agro-forestry parklands in West Africa and the home gardens in the humid zones that provide a wide variety of wood and wood products.**
- **Yes, Africa is losing trees and forests, but some trees are coming up elsewhere. Neither the foresters nor the agriculturalists are taking stock of this.**
- **We need to know the net result (annual deforestation and agroforestry/afforestation) and how to manage this change. This is important in managing emissions.**

DEFORESTATION IN AFRICA

- **Between 1990 and 2000, Africa lost 53 million hectares of forests, accounting for 56% of the world's forests cover loss.**
- **Three countries, Sudan, Zambia and the Democratic Republic of Congo, accounting for almost 44% of this loss.**
- **Forest land in Sub-Sahara Africa has been converted to agricultural uses at alarming speed.**
- **Between 1981-90, such changes accounted for 25% of the loss in forest cover, while between 1990 to 2000, 60% of the tropical forest areas cleared in Africa were converted into permanent agricultural smallholdings.**



POLICIES FOR ECONOMIC GROWTH AND DEFORESTATION

“Policies for economic growth seek to increase people’s incomes. This is argued to increase demand for agricultural products. The expectation is that agriculture will be more efficient and deforestation will be reduced.”

- Africa implemented economic reforms in the last two decades and economic growth has been on the rise.
- But what are the key growth sectors? Mining, tourism, horticulture, timber and oil.
- More than 60% of the people in Africa live in rural areas and agriculture is their mainstay.
- The agricultural sector is the major contributor to the economy of many African countries, ranging from 10-70% of the GDP.
- Average rate of food production per person in Africa was negative in 1995-2004.
- While Africa had good GDP statistics , sometimes reaching 5% per year, this wealth did not reach the majority in rural and peri-urban areas to improve their agriculture and consequently reduce deforestation.

POLICIES FOR AGRICULTURAL DEVELOPMENT IN SUB-SAHARAN AFRICA (SSA): HISTORICAL DEVELOPMENT

- **Conflicting advice, based on divergent theoretical views on agricultural development and economic welfare, from a relatively small group of donor agencies and expatriates.**
- **Limited local agricultural specialists.**
- **Weak local institutions to implement policies.**
- **Lack of strong government support to agricultural sector.**
- **SSA treated as a homogenous region with policies applied evenly across countries with little consideration of country-specific conditions.**
- **Most of the deforestation occurs in this agriculture-forest mosaics and frontier areas where farming is practised.**

Paradigm	Focus
1. Commercialisation via cash cropping (1910-70)	Raising productivity in areas of comparative advantage., through cash cropping. Agriculture viewed as a base for industrialization
2. Community development, participatory development, integrated rural development (1955-73)	Promote equity and poverty alleviation through community based development
3. Basic human needs (1970-79)	Due to failure to stop growth of poverty through cash cropping, the emphasis shifted to smallholder farmers and food production
4. Regional integration in industry, national self-sufficiency in food (1970-79)	Ran concurrent with basic human needs strategy. Was a shift from export agriculture to industrial inputs and regional integration.
5. Structural adjustment 1- demand management (1980-84)	To contain foreign exchange shortages export agriculture was promoted, through devaluation and fiscal austerity measures . Policy reform rather than expensive investment was the prescription.
6. Supply shifters in agriculture (1973-89)	This targeted boosting food production, neglected by above policy through emphasis on institutional and human capacity building and technology development.
7. Regional integration 2, with food first (1973-89)	Given rising world agricultural prices and continuing food imports, this strategy emphasised food self-sufficiency and regional arrangements in food production. (just as no. 3 above).
8. Structural adjustment 2 – equity with growth (1985-2000?)	A macroeconomic adjustment with programs to mitigate the impact on the poor, concentrating on incentives for the poor.
9. Sustainable development, (1990-present); PRSPs	Expand reforms focus to poverty alleviation, widespread degradation of agricultural and supporting natural resource base.

Subsidies for agricultural development

“Subsidies for agricultural production are argued to be less economically efficient in the long run. However, they have potential to reduce deforestation.”

- In a world where agriculture is heavily subsidised and markets for agricultural produce are very protected in developed countries poor third world farmers would need protection and assistance.**
- The question is how we balance the long term losses in agricultural production and elimination of unfair market practices on one hand, with gains in reducing deforestation and overall environmental protection on the other.**

EFFECTS ON DEFORESTATION OF SOME MACROECONOMIC POLICIES IN SOUTHERN AFRICA

Policy focus	Effect on deforestation	Observations from the region
1. Higher nominal product prices	Increase	Smallholder farmers appear to be responding less to producer prices (real prices have been declining). Farmers driven by desire to secure non-declining cash incomes from crop sales in successive years and this drives deforestation (Malawi and Zimbabwe)
2. Higher fertilizer costs (e.g. due to devaluation and elimination of subsidies)	Mixed results	Increased deforestation noted (Zambia). Potential for putting less land under selected crops (Zimbabwe) No short-term effect on land use but increase deforestation in the long-run (Tanzania)
3. Improved marketing of products (trade liberalization)	Increase	Encourage expansion of the area under selected crops (Malawi, Tanzania, Zimbabwe, Mozambique)
4. Improved access to foreign currency	Increase	In the absence of fallow land this can result into: a) switching area between crops; b) expanding on grazing lands and in the forests.
5. Availability of credit	Increase	

Overall: Commercial/Estate farmers have better capacity to respond and take advantage of these policies than smallholder farmers. However, both contribute to deforestation.

Policies promoting involvement of local communities in forestry

“Several policies have come up in the last two decades that seek to increase the political status of forestry, promote good governance and security of tenure, and increase stakeholders in SFM. All have potential to decrease deforestation.”

- **The CBFM is virtually in all countries in SSA. In 2002 it was underway in over 35 countries.**
- **The CMFM could be a good way of putting the vast forests and woodlands of Africa under some form of administration and management.**
- **However, local communities are allocated very poorly stocked forests and they add very little value on the forest products they harvest. In addition they operate in small localized markets and have no significant links with outside markets.**
- **Many of the experiences available are from cases that are less than ten years old, many of which are still at their infancy.**
- **In some cases deforestation has been reduced. However, in the absence of efficient regulatory mechanisms and good markets, harvested volumes are likely to increase so as to raise incomes. This can increase deforestation and degradation of the resource.**

CONCLUDING REMARKS

1. There are policies that promote deforestation, while others discourage it. Both sets of policies act in tandem; sometimes with unclear net effect.
 2. Adverse climatic changes are increasingly becoming common in parts of Africa; with potential to worsen deforestation.
 3. It might be difficult to isolate policy effects on deforestation from those induced by climate change. The two will probably work in tandem in many countries and sub-regions.
 4. On the positive side, many trees are coming up on farms. In some areas close to 40% of household needs are met this way.
 5. There is growing emphasis on out grower schemes for plantations by small farmers.
 6. It is the landscape that is changing. The question is how we manage this change to benefit people and their environment. This way we can design measures to contain emissions from desirable deforestation.
 7. Emissions and deforestation will always accompany socio-economic development in Africa.
- 