

## **CONSTRAINTS LIMITING THE DEVELOPMENT OF THE AGRICULTURAL SECTOR IN AFRICA – ANOTHER VIEW**

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### **ABSTRACT**

*The inadequacy of the agricultural sectors of most countries in sub-Saharan Africa has continued to attract the attention of researchers, policy makers and commentators. Several factors have been adduced for this. Issues identified and discussed include the manner of previous researches and support for African agriculture, types and diversities of production, the statistical base, structural adjustment and water management. This Paper calls on African researchers and policy makers to rise to the challenges of a modern and globalising world.*

### **INTRODUCTION**

Constraints to the development of the agriculture sector in Africa have engaged the attention of researchers for sometime now. For instance Zeller and Johannsen (2004) examined some of the constraints to development in Sub-Saharan Africa. As they asserted it may be correct that no other region has received the same level of attention by bilateral and international development institutions as sub-Saharan Africa.

This view, widely shared is perhaps well articulated by Oppenheimer (2005) who goes even further earlier than the last two decades as follows: "Over the last 50 years, Sub-Saharan Africa has received more than \$1 trillion in aid, or more than \$5,000 in today's term for every man, woman and child on the continent. And yet today many African countries are poorer than they were 50 years ago. At the time of independence, many African countries had a higher per capita income than much of Southeast Asia. Today however, more than 300 million Africans are living on less than a dollar a day, while South Korea, to take one example, which was much more poorer than many African countries around the time of their independence, is now 37 times richer". The obvious message is that Africa is the world's basket case of hunger and poverty. There are however a number of issues to consider.

### **What manner of attention did Sub-Saharan Africa receive? Are these proper and informed?**

In several cases support for African economies and her agricultural sector has not been suitable. An example is the work on sole and alley cropping systems by the International Institute of Tropical Agriculture. Compare these with the work of the same institute on cassava breeding and extension. While the later has been successful, the former were not. It becomes clear that some of these were neither appropriate nor technically compatible with existing farming systems and social realities. Meanwhile African farmers suffer the problem of adopting and then abandoning those recommendations when undesirable and perhaps unforeseen consequences resulted. For such economically fringe poor farmers the consequences for well-being and attitude to risk can be appreciated.

### **Inadequate Statistics**

Zeller and Johannsen (2004) also asserted that 64% of the total population of sub-Saharan Africa works directly in the fields of plant and animal production. This may not be so. Not even in the totality of the agricultural sector is that likely the case. In appreciating this assertion we must bear in mind that African economic data are notoriously inadequate. However, some recent micro-economic evidences contradict the assertion of such huge population as working in the fields of plants and animal production.

There has been significant rural out-migration, sometime up to 80% of hitherto rural inhabitants (Nwajiuba, 2005). Rural and agricultural sector desertion has been even more so since Structural Adjustment Programme (SAP), irrespective of countries and the degree of implementation of SAP. There are evidences that not only is a smaller proportion of the population engaged in plant and livestock production, but the proportion left in the rural areas have diversified into non-farm economic activities. In some locations this could be up to 100% of rural inhabitants (Akinsanmi, 2005).

Due also to land scarcity and degradation, the predominant agricultural activity in many parts of Africa may actually be just gardening. This raises question as to what ought to be priority research needs. One of this is resolving the paradox of high aggregate population, high unemployment and scarce and expensive rural farm labour. Stagnant technologies in labour dependent but labour scarce crop and livestock production systems call for research focus on appropriate labour saving systems.

### **Heterogeneity of Farming Systems**

There is often emphasis on the productivity of cereals. This may be understandable in the context of more international consumption and spread of cereals. However the heterogeneity of African agriculture teaches distinct lessons from the experience of the Asian green revolution for the transformation of agriculture in sub-Saharan Africa. The emphasis in Asia was on rice, which had been of immense local adaptation both in its production and

consumption. Once again intensification relied on technology improvements especially breeding, fertilizer and irrigation. Africa food crises can therefore be overcome through crops that are ecologically, socially and economically embedded. The success of cassava and the efforts by the International Institute for Tropical agriculture (IITA) recommends this. While there has been poor returns as shown through low yield for cereals which on the average has only increased by 0.69 to 0.99 t/ha this is short of the experience with cassava. Cassava has shown better yield increases.

The lesson from IITA cassava programme is to promote crops embedded in the local systems. IITA (undated) citing the Food and Agricultural Organization (FAO) estimates, 172 million tonnes of cassava was produced worldwide in 2000. Africa accounted for 54%, Asia for 28%, and Latin America and the Caribbean for 19% of the total world production. In 1999 Nigeria produced 33 million tonnes making it the world's largest producer. In terms of area harvested, a total of 16.8 million hectares was planted with cassava throughout the world in 2000; about 64% of this was in sub-Saharan Africa. The average yield in 2000 was 10.2 tonnes per hectare, but this varied from 1.8 tonnes per hectare in Sudan to 27.3 tonnes per hectare in Barbados. In Nigeria the average yield was 10.6 tonnes per hectare. In the past much of the increase in production was due to new land being used for cultivation. In many places this has reached limit. Land improvement and technologies are therefore required for more intensive yet sustainable production systems.

### **Increased Food Imports**

There has nevertheless been increase in food imports even in countries that are neither at war nor suffer ecological crises. These are accounted for by economic and political factors. Examples are the destructive effects of market relations especially for tradables and for domestic production of imported food items. Also the fact that most of the agricultural sectors are smallholdings with low technology means they are unable to compete with international, large producers using technologies guaranteeing them production at large scale and low unit cost, and therefore have market advantages.

In Kenya for instance, agricultural activities have decreased by 30% over the past decade due to poor policies in the past. The share of production in cereal supply in Kenya has been declining whereas imports have been increasing (Fig. 1). This is a likely source of occasionally reported food deficits and rural poverty in the country (GOK, 2003<sub>h</sub>). During 1980, 1981 and 1984 Kenya was confronted with food shortages and was forced to import an average of 350 000 tones of maize, 118 000 tons of wheat and 13 000 tons of milk powder per annum in order to maintain food supplies at adequate levels. The severe drought in 1999/2000 seriously undermined the food security of nearly 4.4 million people and resulted in a massive relief operation. Despite some improvement, the food supply situation is still fragile, particularly in the northern, eastern and Northeastern pastoral districts. In 1999, a

food deficit of approximately 380,000 metric tones in stable foods was estimated and this trend can continue if appropriate measures to improve food security are not taken (G.O.K, 2000<sub>e</sub>).

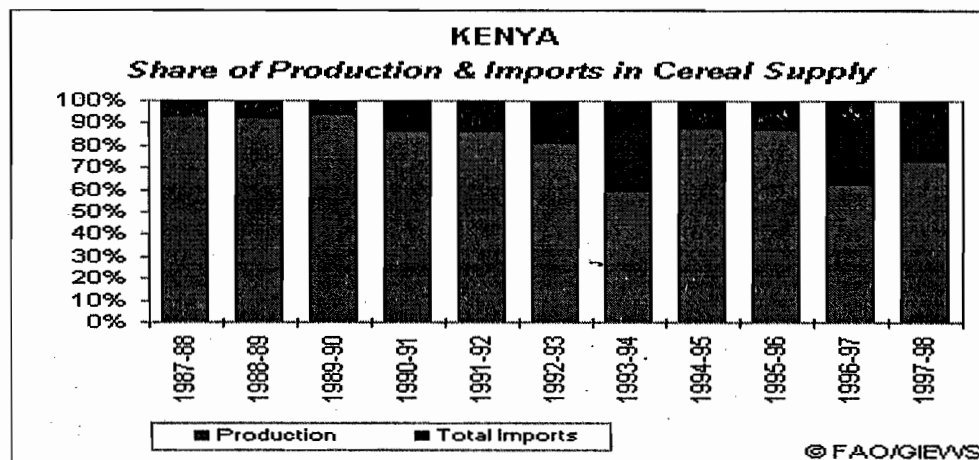


Figure 1. Share of Production and imports in cereal supply in Kenya (1987-1999)  
Source: FEWS/Kenya1999.

### False Assumptions on Structural Adjustment

There is a tendency to blame Africa's inadequate infrastructure and institutions as haven seriously limited the beneficial impact of structural adjustment programmes on macro stability (Zeller and Johannsen, 2004). This may not be all. A basic problem was that the assumptions upon which SAP was built in Africa were false. The micro-effects were sociologically and economically devastating. Nothing perhaps in recent times has shown the strong relationship between economics and other social sciences. The expectation on export agriculture due to devaluation under SAP did not come to be because of lack of rigour in understanding the elasticity of responses to price incentives expected from market liberalization and devaluation. The determinants of supply elasticity may not have been considered especially with respect to specific spatial and temporal issues. Reduced real earning through inflationary impact, which reduced living standards and therefore led to massive rural out migration and the desertion of agriculture resulted.

SAP had negative side effects on the agricultural sector. These arose from increased interest rates, constraints to input purchase and fall in real farm gate prices. This is contributory to significant illegal immigration of young Africans into Europe especially since 1996, an unforeseen externality of SAP in Africa. In addition export agriculture suffers unfair trade practice by Europe and North America. The suggestion of pro-poor long-term investments contradicts the basic approach of the SAP, as was the case in sub-Saharan Africa. The expected potential trickle down effects that were anticipated in respect of smallholders did

not materialize. The smallholder mirage arises basically because smallholder subsistence producers do not behave as smallholder commercial or agribusinesses. Neither in their objectives, resources nor reactions to market and policy stimuli are they alike.

### **Policy failures, urban bias, insufficient investments**

These are some obvious failures of African governments as well as international organizations. This as correctly observed by Zeller and Johannsen (2004) is rooted in inefficient use of development aid and Africa's own public resources because of poor governance. Without doubt there is stagnation in agriculture in Africa. This is however, not only in output but also importantly in the technology of production. In Nigeria for instance the technology of oil palm fruit (*Elaeis guineensis*), a very most important tree crop has been stagnant. The manual harvesting, processing and entire post-harvest systems are manual based, stuck at the same levels in colonial Nigeria over nearly five decades. It calls to question how Nigeria has utilized significant petroleum export earnings in the last decades.

### **Water Resources Management**

Priority areas to improve the agricultural sector and rural development should also include water resource management. Besides wars and other social crises (as in Rwanda, Angola, Sierra Leone, Liberia, Ivory Coast, Sudan which are mostly mineral resource-related), water scarcity is a key factor in food and agriculture crises in Sub-Saharan Africa. Water is a limiting factor in food crises in Niger and Ethiopia, and to an important but less mentioned in other rainfed systems all over Africa including Nigeria, Kenya and others. Yet one abundant resource of Africa is ironically rainwater. In many places annual rainfall exceeds 14000mm per annum. Appreciating this, as a resource and being challenged on what and how to use this resource should be of interest to research and development. But so far it's being a source of sorrow rather than a blessing creating erosion, soil degradation and flooding. At the same time, drought and dryness creates aridization and desert encroachment in the Sahel and other arid and semi-arid parts of sub-Saharan Africa. Properly articulated intra-regional as well as inter-regional water management projects could help.

### **Access to Developed Markets**

To the international community, one way to assist African countries is allow them access to trade in rich countries. This is a more sustainable approach to get Africa out of poverty. Farm subsidies and other trade barriers limit the entry of African products into markets in Europe and Northern America. Another way is a re-examination of the debt saga confronting most countries in Sub-Saharan Africa. Huge debt repayment detracts from resources that could otherwise be spent on investments in Africa. Reversal of these will raise incomes earned by African farmers and public treasuries, and therefore reverse the unhealthy trend in Africa.

## **Conclusion**

There is no doubt that agriculture in Africa has not performed well. The responsibility primary falls on Africa's policy makers and researchers to reverse this. They may do well to bear in mind these words from Theodore Schultz the 1979 Nobel Laureate for Economics, "The man who farms as his forefathers did cannot produce much food no matter how rich the land or how hard he works" (Schultz, 1982). The challenge is the scientific transformation of Africa agricultural economies to bring them in line with a modern and globalising world.

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