

## THE DILEMMA OF FOOD IN AFRICA

by  
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### ABSTRACT

*Although over 70 per cent of the labour force is engaged in agriculture, Africa is loosing the capacity to feed itself. Drought, a fast growing population, widespread deterioration of the countryside, as well as a chronic underinvestment in agriculture, have all contributed to declining yields and a vicious cycle of poverty from which the peasant farmer and African countries have increasingly found it difficult to escape.*

*The need therefore is most urgent for African governments to re-examine their food and agricultural policies to enable them provide more food for their growing population. Encouragement of large and medium scale commercial farming, land reform, environmental management, reduction of population growth, improvement in storage and transport facilities as well as pursue political stability and a cessation of the violent conflicts that have characterized the continent, will reduce the food problem in Africa.*

### INTRODUCTION

Food is among the most basic of human needs, and producing it is the main economic activity of over 70 per cent of the women and men in rural tropical Africa (Figure 1). Despite this large involvement of it's labour force in agriculture, Africa is slowly loosing the capacity to feed itself. In fact food has become a critically important dimension of Africa poverty; for over much of the continent, food production, even together with food from livestock and fisheries, falls far short of what is regarded by WHO as the minimum necessary for health.

Between 1970 and 1980 net grain imports have quadrupled from 5 million tons to 20 million tons. This means that grain from abroad now feeds about one-quarter of

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the continent's 513 million people. And some 24 African countries need emergency food aid to avert widespread starvation.

The paradox here is NOT that food production is not expanding. In fact the continent's total food production has increased by an internationally respectable 2 per cent annually. However, per capita grain production has been falling year by year since the 1960s in many African Countries; and there is no reason to suppose that this trend will be reserved in the 1990s. The consequence of this inadequate food supply has been seen in the 1973-4; and again in the 1984-5 periods when the prevailing chronic malnutrition and hunger turned into, widespread FAMINE that eventually hit the world's headlines (O'Connor, 1991).

This paper has looked at the causes of the continued food crisis in the continent. The paper has also tried to provide preliminary suggestions for the understanding of the African food problems as well as offer some solutions. For many people "TO THINK OF AFRICA IS TO THINK OF POVERTY", but for most of us who live in Africa, this statement is not true. However for those in the rich countries who saw something of the mid-1980s famines on their televisions this may seem true. This paper will therefore try to provoke the necessary discussions that will enhance a fuller appreciation of Africa food crisis.

### FOOD PRODUCTION TRENDS

Food has become a major issue in discussions of contemporary Africa. This is not only because of the appalling famines of the 1980s, but moreso, because food production has failed to keep pace with population growth thereby causing widespread hunger and malnutrition. Even today, the food crisis has become critical as internal strife has torn apart many countries in Africa.

It is sometimes difficult to ascertain that food production is falling. This is because there are no records of production anywhere in Africa, and at the same time there are not even records of areas under cultivation.

Food production rose by 1.5 per cent annually during the 1970s. Over the period 1980-6, production rose to just 6 per cent, averaging 1 percent annually. This compares with 16 per cent for this period for the whole world, with 24 per cent for India and 34 per cent for China. However per capita production fell sharply in much of Africa in 1983 and 1984 and still below the 1980 level in 1986 (Table 1).

Of course variation exist between countries (Table 2), though the overall trend is the same. For the different crops for individual countries, the annual fluctuations can be much greater. In Sudan, the sorghum harvest averaged 2.5 million tons in 1979-81, but fell to a little over 1 million in 1984 and then recovered again to 3.5 in 1985 and 1986. There was another fall to 1.5 million tons in 1987 but recovered fully in 1988. The maize crop in 1984 in both Zimbabwe and Kenya was just half its usual level and for Zimbabwe, the situation was also bad in 1987. The large fluctuations in Sudan, Kenya, and Zimbabwe is a part reflection of the commercialization trends in these countries. In areas where crops are cultivated entirely for subsistence, a constant production is the case.

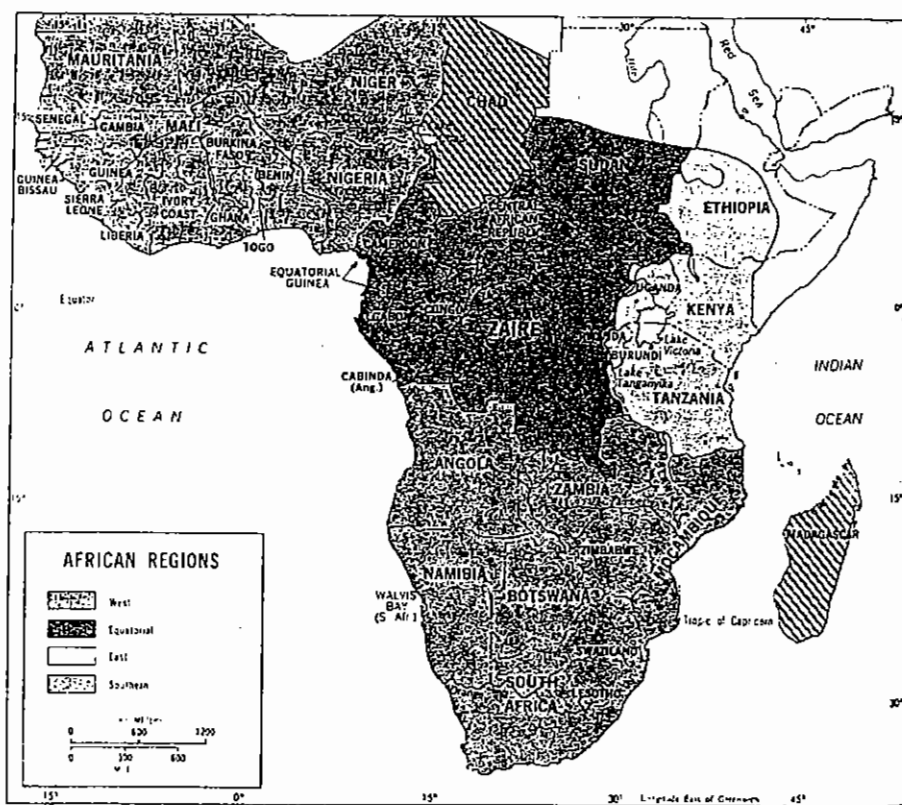


Figure 1. Tropical Africa (after Deblji & Muller, 1992)

**Table 1: Per Capita Food Production Index 1975-88**

Annual Variations (1979-81 = 100)				
	Trop Africa	Near East	Far East	Latin America
1975	110	100	97	95
1976	108	102	96	99
1977	103	98	99	100
1978	102	101	101	100
1979	100	98	98	99
1980	111	100	99	100
1981	99	102	103	102
1982	99	103	101	102
1983	95	100	107	99
1984	92	96	108	100
1985	97	99	109	101
1986	98	101	106	99
1987	94	96	103	99
1988	94	96	109	99

Source : FAO, Production Yearbook 1988

**Table 2: Per Capita Production Index For The Larges Countries (1982-189)**

Annual Variations (1979-81 = 100)								
	1982	1983	1984	1985	1986	1987	1988	1989
Nigeria	102	97	96	104	108	96	96	95
Ethiopia	102	94	83	88	96	91	88	89
Zaire	100	99	99	98	99	96	94	92
Tanzania	96	96	94	94	92	91	86	89
Sudan	93	92	83	97	93	78	98	85
Kenya	105	101	83	97	106	97	102	103
Uganda	106	108	88	86	81	84	82	80
Mozambiqu	96	90	88	87	87	84	84	83
Ghana	92	81	114	104	106	104	108	118

Source : FAO Production Yearbook 1988, FAO Quarterly Bulletin of Statistics, 3 (1), 1990.

In this inadequate food production and consequently food supply, the need for imports has become very great. This has accounted for the rapid growth in the African food imports (RAIKES, 1988), (Table 3). In the past, food imports were only restricted to luxuries for the elite. Around 1970 there was no country in tropical Africa that imported more than 300,000 tons of cereals annually, but by 1978 Nigeria imported 2 million tons of cereals and these imports trebled in several countries including Ghana and Ethiopia, and Mozambique became a major importer of grain.

Table 3: Leading Tropical African Importers of Cereals (1984-7)

	Volume in thousands of tons			
	1984	1985	1986	1987
Nigeria	1377	1957	1369	677
Sudan	518	1148	651	707
Ethiopia	252	717	974	609
Ivory Coast	536	554	580	675
Senegal	662	496	512	431
Mozambique	430	365	393	406
Zaire	236	331	361	415
Somalia	330	300	291	344
Angola	374	284	159	280
Kenya	557	279	190	275
Tropical Africa	8740	9620	7840	7480

Source: UNDP/WORLD BANK, African Economic and Financial Data (1988)

It must be stated here that most of the imports were normally obtained at commercial rates; but the proportion of food moving in as food aid has increased since the 1970s. This is as a direct response to famine in the Sahel, Sudan, Ethiopia, and Mozambique. In the 1985-86 period, 900,000 tons of cereals moved into the Sudan as food aid whilst another 800,000 tons were sent to Ethiopia. Mauritania, with a population of just 2 million, received 140,000 tons of food aid.

The main food staples grown on small farms throughout most of tropical Africa are the main grain crops of maize, millet, and sorghum as well as cassava. According to FAO annual production amounts to 20 million tons of maize, 10 million tons of each of millet and sorghum, and 50 tons of cassava. Millet and sorghum are indigenous to Africa, and have provided the staple diet of the great majority of our people. Maize came in from the Americas several centuries ago, but because it is much higher yielding than millet and sorghum, and especially more resistant to losses to birds, it has displaced them in several areas. But, it is more demanding in terms of both soils and rainfall. Cassava is also from South America and was promoted by the Colonialists as a famine reserve crop. It tolerates poor soils, drought, and event locust damage. Rice has become a staple food in the coastal zone in West Africa, from Senegal through Guinea and Sierra Leone to Liberia. Yields are much lower than in most parts of Asia, and while rice has become a first preference food in many African cities, these have generally been supplied with rice much more cheaply through imports from Thailand and the U.S. than supplies from the local hinterland. Rice perhaps offers more prospects for tropical Africa than wheat.

### CAUSES OF FOOD CRISIS

There is indeed no consensus on the causes of the slow growth of food production in the 1970s and 1980s. But, the drought has been identified as a major factor that has precipitated the deteriorating African food economy that has been under way for two decades now. The fastest growing population of any continent in history; widespread deterioration of the countryside; including soil erosion, soil

degradation, and desertification as well as a chronic underinvestment in agriculture have all contributed to declining yields.

The population in Africa is now 513 million, and with a continental growth rate of 3 per cent per annum, African farmers must now feed an additional 15 million people every year despite the severe limitations of climatic variability in several places in the continent. This population explosion is the product of a decline in mortality rates without any corresponding decrease in birth rates. In fact Africa is known to have very high birth rates of 46 per thousand as compared with 16 and 17 per thousand for Europe and North America respectively (Dickenson et al, 1983). Besides, Africa has the smallest contraceptive use of any continent as well as being the only continent where birth rates are still rising (Global Issues, 1986). As Dickenson et al (1983) rightly confirmed, "the ratio of growth of population of between 2.5 and 3.5 per year has outstripped the capacity for many rural communities to support it by traditional methods of intensification relying on local resources."

However, Africa's population-land ratio is far lower than that for even Asia. Consequently, many African governments did not realize that land was a limiting resource. But what we also need to understand is that the simple people-land calculation completely disregarded the fact that only a small percentage of the continent is arable. Besides, productive agriculture requires water as well as land, and it is sad to note that much of the continent is already short of water.

Farming systems are extremely varied in Africa; but in the context of prevailing poverty and inadequate food production, this paper has identified two common features. Firstly, most of the farms are very small by world standards, rarely having more than 5 hectares of cultivated land. Secondly, most of the farms are family holdings with no regular hired labor and very few technological inputs beyond a hoe (Richards, 1985). For the increased need of food and food supplies for the short term, marginal lands were brought into production, fallow cycles were shortened, and traditional cultivation methods were abandoned. Consequently, there was an increase in grain production between 1970 and 1982 which came at the expense of long term production potentials.

Over much of tropical Africa, women are responsible for growing their families food. There are of course regional variations, such as small role for women in strongly Islamic areas (O'Connor, 1991). At the same time children have traditionally contributed to farming almost everywhere, but the spread of schooling has reduced their role thereby contributing to food supply failures. Furthermore, children too young to make a contribution have constituted an increasing share of the population over the past 20 years. Even more alarming is the Massive Migration of young adults from rural areas to the cities. This migration may have benefited most of them, at least in part, or benefited the national economies; but it has clearly had a NEGATIVE IMPACT on food production.

I submit here that it is the RURAL-URBAN migration and consequent rapid increase in the proportion of the total population living in towns and cities which is the most important single reason for the falling per capita food production in most African countries in the 1970s and 1980s (O'Connor, 1991, p.86). A lot of people

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\* Dickenson, J.P., et al. A GEOGRAPHY OF THE THIRD WORLD, Methuen London, 1983. p.77-78

believe that food production may have also suffered from a supposed massive shift of effort not to farming activities but to no-food crops. This may be true for the 1950s and 1960s when food production was keeping pace with population growth. However, during the 1970s and especially the 1980s, cash crop production has lagged just as badly as food crop production.

Overcultivation has severely depleted the productive soils and so aggravated the continent's food insecurity. Moreover, in the semi-arid climate of much of Africa, rainfall, when it comes, is often intense, thus increasing the losses from impoverished soils. The use of animal dung for fuel when fuelwood is scarce has removed one source of organic nutrient that could have been used to replenish the soil fertility. Desertification has also accounted for environmental deterioration in Africa. This is the deterioration of formerly productive semi-arid lands and NOT so much the outright spread of existing deserts. In the same way, persistent droughts have intensified environmental deterioration such that 36 African countries have received less than adequate rainfall in recent years. Thus the combined effects of drought, land degradation, and the extension of marginal lands have sapped the productive potential of the African soils. The consequence is that the output of most grains per harvested acre has not increased. Maize, millet, and sorghum yields have remained below levels harvested a generation ago. Whilst Africa may be ripe for a GREEN REVOLUTION, the diversity of its environments, demands thousands of miracle crops as in the case of the hybrid crops of South East Asia and India.

### LOW LEVELS OF AGRICULTURAL INVESTMENTS

Although nearly half of all Africans live in countries where 80 percent are farmers, agriculture has received, and is still receiving less than one-tenth of the already modest government spending for agricultural development. Few countries in the continent have created colleges of agriculture or national agricultural research centers. Today most lands are still being cultivated without modern tools or methods. This low investment has generated a correspondingly low productivity of the agricultural sector, which in turn has led to a low standard of living; an inability on the part of the farmer to accumulate capital and too often this has led to MALNUTRITION, which has limited productivity (Dickenson et al. 1983). Thus has emerged a VICIOUS CYCLE OF POVERTY from which the peasant farmer and many African countries have increasingly found it difficult to escape.

The pattern of agricultural support and hence surplus production in the DEVELOPED COUNTRIES has had a global impact on agricultural development in tropical Africa. This has led to a serious distortion of the market. Farmers in the developed countries have received about three times the world price for sugar, wheat, barley, rice and butter. The surpluses are frequently dumped (PL480 SCHEMES) on African countries at such low prices and under various aid programmes that local farmers cannot compete, and in most cases are driven out of business. Far from helping African countries, these surpluses have caused severe damages and problems in the development of agriculture, as well as create an increasing inability for African countries to provide food for themselves.

African governments have neglected the producers other than marketing. Efforts to assist them through advisory services, credit facilities, or provision of inputs

such as fertilizers, have certainly been very feeble in most countries. The obvious explanation has been their lack of funds. Perhaps more resources devoted to reasearch on food crops would have brought a GREEN REVOLUTION for millet, cassava, and sorghum as they did to a limited extent for MAIZE.

There is also the issue of POST-HARVEST losses due to inadequate storage facilities on and off the farms. In many areas 10 to 20 percent of the food produced is lost to pests every year. These are not new problems and also may not explain the fall in per capita production or availability.

### RESPONSES TO FOOD CRISIS

Understandably, there will be no shortcuts in the agricultural development process of Africa. In many parts of Africa, food supplies are barely adequate. Consequently, many of the poor in the continent suffer from HUNGER and MALNUTRITION. This is because even when imports are included, tropical Africa does not have sufficient basic foodstuffs available year by year to meet the needs of her 53 million people.

African governments, whatever their individual circumstances, need therefore to REEXAMINE their food and agricultural policies to enable them to provide more food to their growing population. It is in understanding that I propose both short-term and long-term strategies to lessen the dilemma of food in Africa.

### SHORT-TERM STRATEGIES

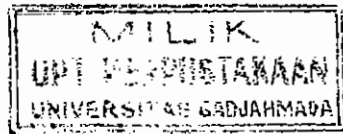
There should be increased food campaigns as was the case in Nigeria and Ghana in the 1970s. These Operations Feed the Nation Campaigns though felt to have little impact, have however, seen increased food crop production through the encouragement of large-and medium-scale highly commercialized farming.

Giving poor people in the essentially rural areas of African countries a livelihood and enough food means primarily giving them access to land. I believe that any real progress in eliminating hunger in the continent will mean social change, and LAND REFORM is one of such changes. We all know that the societies that have made the most progress towards eliminating food problems have not denied this land hunger but have made it a part of their system. In Africa where land is plentiful, BUT where it is unequally distributed, cutting up huge estates and redistribute to small farmers could theoretically be sufficient to produce more food.

Real reform also means that there should be established a cooperative system where the farmer can get his inputs and necessary credit, but this will also guarantee him access to the market at fair prices. So, like Zimbabwe did in the 1980s to give her increased food production, prices paid for food crops were raised and credit was also given to small farmers to purchase seeds, fertilizers, and tools. In this way, small farmers in Africa were not only able to feed their families, but they were able to have some to market.

There is some need to improve environmental management, to encourage some reduction in the rate of population growth, as well as improve transport





facilities. Added to this is the need to improve the rural farmer's access to fuel and water so that he can concentrate on food production.

### LONG-TERM STRATEGIES

In the long term, there is need for an increased investment in agricultural development for all African countries. The countries of the continent and their decision-making bodies should recognize that SCIENCE and TECHNOLOGY can make a significant contribution to the development process if linked with the appropriate government policies. This means that for the long term, there should be intensive research on improved storage facilities at the local level. The improved storage will play a very important role in FAMINE PREVENTION, and in the same way will establish early warning systems that monitor both climatic fluctuations and farmers reactions to them.

Perhaps the best way to guarantee increased food production through improving the overall agricultural situation and more especially prevent famine, is to PURSUE POLITICAL STABILITY and a CESSATION of the VIOLENT CONFLICTS that have characterized the continent.

### CONCLUSION

By and large, it has been the individual farmer working within a gradually changing traditional environment who has accounted for most of whatever progress has been achieved in food production in Africa. It is therefore surprising that independent governments in the continent still follow this path to agricultural development.

The experience of many efforts at agricultural development has shown that large scale projects based on modern technology are high risk ventures and extremely costly. If these projects are said to achieve their design objectives, their effects would probably be marginal in the context of the prevailing rural crisis. The reason is that the area and the number of farmers involved in them is so small as a proportion of the total. So is their potential contribution to output when measured against the scale of increase required to alleviate the current food shortages and crisis.

The alternative to creating alien agricultural systems is to build on the experience of local farmers acquired over generations of using local environmental resources through the indigenous systems. The success of such a strategy depends of course upon the capacity for the development of indigenous technology. The solution of the rural crisis and hence the food problem, and indeed for the wider development problem of which it is a part, is not to be found merely in technological progress, important though it may be. Existing technologies and resources are under-used, technological innovations are not adopted, producing a food crisis in the continent.

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