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FOOD SECURITY IN NIGERIA: A “U” TURN TO RURAL AGRICULTURAL STRATEGY

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INTRODUCTION

Hunger and poverty in the less developed or developing countries have remained one of the most challenging issues that have attracted discussions at different international fora in recent times. Sub-Saharan Africa (SSA) is reported to be the major region where per capita food production has experienced a downward trend in the past twenty years. Persistent drought situations, environmental degradation, rising population growth rate and low productivity in agriculture has continued to widen the gap between food supply and demand. The result has been the continued increase in prices of food, a situation that may have dire consequences on the overall growth of the economies of the nations in this region. This calls for concern, because rising food prices often create pressures for increase wages which will diminish industrial margins and dietary intake of the people given their low income (*Norton and Alwang, 1993*). Also, reduced industrial margins will adversely affect investment and therefore, growth and cause employment stagnation. Low dietary intake will on the other hand, automatically result in low labour productivity. This has been the scenario in many developing countries including Nigeria.

Before the discovery of crude oil, Nigeria had been able to produce enough food for her citizenry and raw materials for exports. In fact, Nigeria was one of the world's largest producer of groundnut, cocoa, palm oil and kernel, rubber, etc. However, with the neglect of agriculture and the total dependence on petroleum (the so called black gold) as the major foreign exchange earner, the country started experiencing food shortages. Food prices started rising while foreign exchange earnings from agriculture declined drastically. These signals were considered not too serious and howbeit would fizzle out. Hence, nothing was done to checkmate it (*Anon, 1989*).

However, between 1970 and 1979, the country's agricultural condition had deteriorated and the food supply demand gap had widened in an unprecedented manner. The result was an astronomical rise in the nation's food import bill. It had been reported that the nation's food import bill rose from N0.4 billion in 1976 to about N2.3 billion in 1984. While the share of food imports into Nige-

ria rose from 8.6 percent in 1976 to about 16 and 20 per cent in 1980 and 1984 respectively.

Statistics have shown that between 1960 and 1969, the agricultural sector's share of the Gross Domestic Product (GDP) was about 56 per cent on the average. However, between 1970 and 1979, it had declined considerably to an average of about 24 per cent. And between 1981 and 1985 it had fluctuated between 21 and 23 per cent.

The continuous widening gap between supply and demand for food have led to skyrocketing food prices over time. Between 1970 and 1985 food prices had increased by about 16.9 per cent on the average (Anon, 1989). And between 1986 and 1988 it averaged about 34.9 per cent relative to 32.8 per cent for all other items indicating a rise on food prices. Since over half of the total consumption expenditures of Nigerians are for food, agriculture therefore perpetrates inflation. Rising food prices has been a cause for concern for many governments in Nigeria in particular and developing nations in general. This is because food will become inaccessible to a vast majority of the populace due to their low income. Since food can be used as a weapon of war, food deficit nations that depend on imports could stand the risk of losing their sovereignty if the situation is not addressed. It is in realization of this fact that successive governments in Nigeria have formulated policies and designed strategies towards addressing the problem of food production in the country, through the various development plans (Ojo, 1991). In fact, in the 1975 - 1980 National Development Plan, it was explicitly spelt out that adequate supply of food in quantity and quality that will keep pace with increasing population will be ensured. Hence, a target of 4.8 per cent per annum was projected. However only 1.1 per cent was achieved. A projected growth rate in food production of 6.5 per cent was also made in the 1981 to 1985 Development Plan. Again this target was not achieved. The inability to meet food production targets has made self sufficiency vis-a-vis food security an uphill task of government in the country over time. With the increasing level of poverty in the country, especially amongst the rural dwellers (who make up about ninety per cent of the entire population, as well as the bulk of food producers) food security becomes a serious issue.

Food security is not only seen as an agricultural problem caused by food production failure at national levels but also as a failure of livelihood to guarantee access to sufficient food at household level (Barrackough, 1991). According to Njoku (2000) it relates to the stabilization of food production and consumption. It is the ability of a food deficit country, region or household within a country to meet target levels of consumption on a yearly basis. It therefore means that food security is not the same thing as food self sufficiency. Food insecurity can either be chronic or transitory. Transitory food insecurity is a temporary decline in a households access to food caused by instability in food production and prices or in house hold income (Reutlinger, 1985). Food self sufficiency refers to a country's ability to produce all the food that she requires and thereby eliminating food deficits and recourse to food imports or aids. However, food security

is achieved when every person at all times has both physical and economic access to sufficient food to lead a healthy and productive life (Tapsoba, 1988; Njoku, 2000). Njoku (2000) broke down issues of food security into four components:

- a. Physical access to adequate food.
- b. Adequate economic access to food.
- c. Utilization of food for growth, nutrition and health
- d. Sustainability of access to food over time

Given the prevalent condition in Nigeria, food security is a serious plague that needs immediate attention.

Physical access to food by many Nigerians have remained a problem given the low rate of food production in the country. With the rising food prices and its concomitant inflationary trend, many Nigerians also do not have economic access to food. These factors (low food production and high prices of food) would lead to low dietary intake and hence, low labour productivity. In fact there has been a decline in kilo calories supply per capita over time in Nigeria. Statistics show that it had declined from 2185 kcal in 1965 to about 1915 kcal/capita in 1999 as seen in Table 27.1.

TABLE 27.1: Estimated Daily Calories Supply Per Capita for Selected Years in Nigeria (1965 - 1999)

Year	kcal/capita
1965	2185 (a)
1989	2312 (a)
1995	2005 (b)
1996	1910.5 (b)
1997	1915.0 (b)
1998	1915.0 (b)

Sources: (a) World Bank Development Report, 1992
(b) CBN Annual Report (1999).

This is an indication that food self-sufficiency vis-à-vis food security is a serious problem that the government in Nigeria must address.

The paper examines food security problem in Nigeria; highlights the various strategies adopted by government to realize the goal of food security as well as the problems encountered. The rural agricultural strategy (RAS) is also examined and emphasized. The problems bedeviling this strategy is identified and solutions proffered to enable the country achieve food security.

FOOD SECURITY ATTAINMENT STRATEGIES IN NIGERIA

Given the precarious food situation the nation found itself as a result of the neglect of the agricultural sector, various strategies that were aimed at increasing food production and agricultural productivity were designed and implemented. These attempts were done given the condition that, increased income or food consumption cannot be achieved except food production is increased to a level where income is enhanced and the food affordable as a result of lower prices. These programmes include the National Accelerated Food Production Programme (NAFPP), Operation Feed the Nation (OFN), Green Revolution Programme (GRP), etc. Also various institutions were set up to address the problem of low agricultural productivity in the country. These include the Directorate for Food, Roads and Rural Infrastructure (DFRRI), National Land Development Authority (NALDA), The River Basin Development Authority (RBDA), The Nigerian Agricultural and Co-operative Bank (NACB), amongst others. The programmes failed as a result of various factors ranging from poor conception and hurried implementation; wrong targeting of beneficiaries; non involvement of the would-be participants in the programme design from inception; poor administration and management; input scarcity and unavailability, among others.

The institutions failed as a result of the duplication of functions of many of them. It is important to point out that while the Directorate for Food, Roads and Rural Infrastructure (DFRRI) was involved in rural roads and other infrastructural development, it was also saddled with the responsibility of providing various agricultural inputs including seedlings to farmers. This was an important role assigned to the Agricultural Development Programme (ADP) across the country. These institution's programme were not properly monitored and evaluated as and when due. Bureaucratic bottlenecks crippled their activities and hence they could not achieve their set out objectives.

Government's agricultural policies that often suffer from somersaults as a result of change in governments, have contributed immensely to the dwindling fortunes of the agricultural sector and by extension worsen the food security situation of the nation. The urge to modernize agricultural production and thus increase productivity had caused the government to encourage large scale agricultural production and government direct involvement to the detriment of the small-scale producers. Various reasons have been put forward to validate the assertions that large scale production was the only way out of our food security imbroglio. These include the issue of economies of scale, higher rates of adoption of improved technologies and farm management practices; reduction in extension problems and thus increase in the effectiveness of agricultural extension; ability to raise credit on favourable terms; ability to enhance product quality due to their ability to process products with large processing equipment; ability to produce marketable surpluses as a result of their commercial orientation of production as well as their high labour absorption capacity amongst others (Olayide, et al., 1981). According to Olayide, et al. (1981) a closer evaluation of these reasons would reveal a lot of misconstruism. They opined that, there have

been no empirical evidences proving that low productivity and stagnation in agriculture can be attributed to the small-scale nature of production. Indeed Japan, China and Taiwan have remained countries that have proved beyond reasonable doubt that small scale agriculture can be as productive or much more when given the right environment of income incentive price policies, efficient support services, credit and extension research, among others. The Nigerian small scale farmers have been the ones who have over the years produced the food and cash crops which the country have been feeding on and earning foreign exchange. Its inability to do so as a result of low productivity have been attributed to government's agricultural policy formulation and implementation and the bias of government in favour of urban industrial development and large scale agricultural production (Olayide, et al, 1981).

On the arguments of economies of scale in agriculture, Georgescu-Roegen (1960) had reported that this condition is of little significance to agriculture given the operating environment of the sector. Unlike the industrial sector, agriculture production is influenced by a lot of factors that are beyond the producers control, such factors as weather, pest and diseases, etc. The case of economies of scale in the United States of America's agriculture is attributed to the decline in supply of farm labour relative to the supply of land. Hence, their reliance on use of machinery in their farm operations. However, in the Nigerian case, the use of mechanical equipment will result in the displacement of the abundant labour prevalent in the rural areas. Since the industrial sector has not developed the capacity to absorb these excess labour, the problem of unemployment will continue to stir us in the face. Olayide (1982) had asked the question – "what do we offer the millions of rural labour force if we continue to plan for large scale modern holdings?"

Studies have also shown that small farmers have higher output per unit of paid inputs than large farms (Rudra and Ken, 1985; Cornia, 1985). Olayide, et al. (1981) had the view that small farms with comparable per capita income and access to credit and new inputs would also have higher rates of adoption of improved technologies as reported for large farms. It has also been shown that yield increasing technologies apart from being divisible is also scale neutral through the experience of the green revolution in Latin America and Asia.

RURAL AGRICULTURAL STRATEGY (RAS)

Evidences abound of the failure of large scale agricultural production to contribute significantly to Nigeria food supplies vis-à-vis employment. Hence dependence on it for food security leaves much to be desired. Therefore, what the country needs in order to make government's goal of food security a reality is a "U" turn to the rural agricultural strategy. Rural agricultural production will continue to remain the mainstay of Nigeria's quest for food security, but the role it has been playing to make food available and affordable to Nigerians over time. It is the realisation of this fact that made government expand the Agricultural Development Programme (ADP) across the country in 1986 to engender the

productivity of small-scale farmers and the socio-economic well being of the rural population. The achievements of this approach to the overall well being of the agricultural sector and the entire economy has remained a pointer to the fact that given the right incentive, rural agricultural production is capable of ensuring food security for Nigeria. An assessment by Olayide (1992) cited in Amalu (1998) shows that the ADP using the small-scale farmers have contributed significantly to food production in the country. Between 1986 and 1991 the annual growth rate of the sector have averaged about 5 per cent while its contribution to Gross Domestic Product (GDP) has risen from 36.3% in 1985 to about 40 per cent in 1989. He further reported that in 1985 alone, ADP farmers produced about 8 million tonnes grain equivalent. This amount represented about 44 per cent of total food production for that year. This effort is commendable. Amalu (1998) also reported that, the ADP's contribution to the national food basket is in the region of 60 per cent. Table 27.2 is an estimate of crop output from ADP farmers between 1981 and 1986.

Table 27.2: Estimated Crop Output From ADP Farmers 1981 - 1986 '000 Tonnes

Crop	Years					
	1981	1982	1983	1984	1985	1986
Sorghum	243	695	1095	2471	1716	2990
Millet	213	446	2895	1979	2381	3497
Maize	160	199	366	468	905	1426
Rice	100	84	42	106	186	212
Cowpea	90	133	230	253	452	517
Cassava (fresh)	643	2778	4176	3454	5243	7849
Yam (fresh)	517	1842	3126	2946	3826	3488

Source: Olayide (1992) in Amalu (1998)

The small-scale farmer have also contributed immensely to increased livestock and fisheries production in the country. The artisanal fisherman in the country have been responsible for about 97 per cent of the total fish production in the country over the years. The continuous decline in fish supplies and the dependence on importation of frozen fish has been as a result of the various factors that have plagued rural agricultural production over time. In the livestock sector the same scenario is obtained. The large-scale enterprises have packed up and others are closing shops continuously as a result of their inability to breakeven. Whatever is left of this enterprise depends on the survivalist strategies adopted by the small scale farmer.

From the foregoing, one could see that rural agricultural strategy is indispensable in the goal of attaining food self sufficiency vis-à-vis food security for the nation, despite the attempts made towards de-emphasizing its importance.

Several reasons can be adduced as to why rural agricultural strategy should remain the focus of government policy as far as food security achievement is concerned.

Firstly, a good majority of the food and fibre producers in the country are the rural farmers. They make up a good percentage of those leaving below the poverty line. Therefore, policies that are aimed at improving their productivity will not only enhance their income but will also accessibility to food. The enhancement of the productivity and therefore income of the rural farmers will have a spill over effect on the entire rural economy. This is because the rural farm families will be capable of becoming a market for the products of the industrial sector including agricultural inputs.

Since small scale farms are productive per unit of capital input purchased than large farms, emphasising their continuous existence through policy will not only ginger up growth in agricultural production but will also enhance efficiency and equity in the long run. Increased in the productivity of the rural farmer will increase domestic production and reduce food imports, thereby improving the balance of payment situation of the country (Onyenweaku, 2000).

Also policies that will positively affect rural agriculture will automatically cause a slow down on rural-urban migration of youths and therefore stem the tide of urban poverty.

However, the strategy may not be effective except the following constraints are addressed:

CONSTRAINTS TO ACHIEVEMENT OF FOOD SECURITY IN NIGERIA THROUGH THE RURAL AGRICULTURAL STRATEGY

Among the myriad of problems plaguing this strategy include:

1. Inadequate and inefficient distribution and high cost of farm inputs that have rendered investment in agriculture relatively risky, unprofitable and unattractive
2. Problem of land tenure that has resulted in the reluctance of farmers to improve their land holdings due to lack of ownership and control rights over land. In some rural areas, women who are very important in rural agriculture are denied access to land.
3. Organising the farmers and involving them in policy formulation and programme planning by government remain a serious problem of rural agricultural development as a result of their scattered domiciles.
4. Inadequate infrastructural facilities such as electricity, portable water, health centres, schools etc, and inefficient transportation and communication and the despicable state of the rural roads has hampered the distribution of inputs and evacuation of output to the urban markets.
5. Inadequate marketing infrastructures such as storage, preservation and processing facilities that have increased the quantum of post harvest losses.
6. Inefficient supply and distribution of farm inputs such as fertilizers, agro-chemicals, improved seeds and breeds of animals etc. Also late de-

livery or sometimes outright diversion of these inputs have contributed to the decline in rural agricultural productivity in the country.

7. Inaccessibility to credit from formal sources and the dependence on informal sources that appear to be exploitative have also been reported to adversely affect rural agricultural production.
8. The weak research-extension and farmer linkage as well as the inappropriateness of some agricultural technologies to the rural farming system have also been a bane of increase productivity of these farmers.
9. Bias against women in the provision of extension services and non provision of mobility and other logistic support to extension staff have further worsened the already bad situation of rural agricultural production.
10. Inconsistent government agricultural policies and the unfavourable terms of trade against agriculture has acted as disincentives to increase investment in rural agricultural production, amongst others.

MAKING RURAL AGRICULTURAL STRATEGY EFFECTIVE IN ENSURING FOOD SECURITY FOR NIGERIA

Despite these enormous problems, there are always many ways out of the wood. It should be known however, that problem identified translates into about 70 per cent of problems solved. Therefore to make rural agricultural strategy an effective strategy in handling the food security problem of Nigeria, then the following actions must be taken:

1. There must be adequate access to farm inputs such as fertilizer, agro-chemicals, credit, etc by the small-scale farmers to enhance their productivity. Government must create the enabling environment for the prompt delivery of these inputs to the farmers by its agencies or private organisation at affordable prices. If need be, direct government involvement should be de-emphasised.
2. Improvement in infrastructural facilities development must be carried out in the rural areas by the three tiers of government and even the private sectors. These facilities include rural roads, transportation and communication facilities; efficient marketing facilities for storage, processing and preservation to reduce post harvest losses and development of health centres, schools, research and extension facilities to enhance labour productivity (Wanmali and Islam, 1997).
3. There must be expanded investment in agricultural research by government and private organisations to engender the development of appropriate technologies that would enhance rural agricultural productivity. Such technologies must be suitable to the farming systems of the rural farmers for ease of acceptability and adoption.
4. The research-extension and farmer linkage must be strengthened and made effective to encourage the ease of transferring developed agricultural technologies to the farmers who are the end users.
5. Policies must be formulated to enhance women access to land, credit

and extension services since they contribute more than 60 per cent of the rural agricultural labour force.

6. Since the small-scale agricultural producer is incapable of mobilising up enough financial resources to improve his production capacity, there is need to ginger them to organise themselves into Co-operatives. This is important because of its role as an effective tool for socio-economic development of the rural area.
7. The Land Use Act 1978 should be revisited to make it effective enough to allow for access to land by potential agricultural production investors. On the other hand, land markets should be established to allow for easy acquisition and expansion of farm lands by interested farmers.
8. There must be an efficient information system that will enable the farmers to be promptly aware of input and output prices. This will enable them plan their production and marketing activities.

CONCLUSION

Food security in Nigeria can be assured if there is increase production of food as a result of increase productivity of farmers. Increased food production will not only bring about increase in income of the farmers but will as well cause a reduction in food prices, thus, enhancing accessibility to food by households.

Since rural agriculture has remained and will continue to remain the backbone of the country's food and fibre production and given its high labour absorption capacity, enhancement of its productivity will be the only solution to the food security problem of the country.

REFERENCES

- Amalu, U. C. (1998). *Agricultural Research and Extension Delivery Systems in Sub-Saharan Africa*. University of Calabar Press, Calabar.
- Anon, (1989). *Agricultural Policy for Nigeria*. Federal Ministry of Agriculture, Water Resources and Rural Development, Lagos.
- Barracough, S. L. (1991). *An End to Hunger: The Social Origins of Food Strategies*. London: Zed Books Ltd.
- Cornia, G. A. (1985). "Farm Size, Land Yield and Agricultural Production Functions: An Analysis of 15 Developing Countries." *World Development*, Vol. 13, No. 4, pp 513 - 534.
- Georgescu-Roegen (1960). "Economic Theory and Agrarian Economics." *Oxford Economic Papers*.
- Njoku, J. E. (2000). "Governance, Management and Partnership Imperatives for Sustainable Agricultural Research, Food Security, Poverty Alleviation and Rural Development in Nigeria." Paper presented at the *Workshop on Enhancing Research and Development in Agriculture and Root Crops Towards Poverty Alleviation and Rural Development in Nigeria*. National Root Crop Research Institute, Umudike, May 22nd - 26th.

- Norton, G. W. and Alwang, J. (1993). *Introduction to Economics of Agricultural Development*. Singapore: MacGraw-Hill Books Co.
- Ojo, M. O. (1991). *Food Policy and Economic Development in Nigeria*. Ibadan Page Publishers.
- Clayide, S. O., Ogunfowora, O., Essang, S. M., Idachaba, F. S. (1981). *Elements of Rural Economics*. Ibadan: University Press, Ibadan.
- Clayide, S. O. (1982). *Food and Nutrition Crisis in Nigeria*. Ibadan: University Press, Ibadan.
- Onyenweaku, C. E. (2000). "Policy Issues and Strategies for Agricultural Production in Nigeria." Paper Presented at the *Workshop on Enhancing Research and Development in Agriculture and Root Crops Towards Poverty Alleviation and Rural Development in Nigeria*. National Root Crops Research Institute, Umudike, May 22nd - 26th.
- Reutlinger, S. (1989). "Food Security and Poverty in LDCs." *Finance and Development*, December, pp. 7 - 11.
- Rudra, A. and Ken, A. K. (1983). "Farm Size and Labour Use: Analysis and Policy." *Economic and Political Weekly*. 18(5 & 7), pp. 391-394.
- Wamali, S. and Islam, Y. (1987). "The Rural Infrastructure and Regional Development in Southern Africa." *Achieving Food Security in Southern Africa*. Haddad, L. (ed). International Food Policy Research Institute, Washington, D. C.