

# CONCEPT NOTE ON FOOD SECURITY IN NIGERIA

O.O. Olayiwola

Research Fellow, Development Policy Centre, Nigeria  
Email: olaniyi\_2008@yahoo.com

## ABSTRACT

*The study of food problems would appear to have acquired added impetus in recent years, if one goes by the volume and range of studies now available in the literature. This added impetus is due largely to the intense and still increasing demand pressure on food, arising from rapid rates of population growth in many developing countries, increasing real per capita income in many countries, the growing importance of food and nutrition status as an indicator of National socio-economic development and use of food in relief operations in the many and increasing theatres of war, natural disasters and famine all over the world.*

**Keywords:** Concept note, food security, Nigeria

## INTRODUCTION

It is widely accepted that food is a basic necessity of life. Its importance at the household level and it is obvious enough since it is a means of sustenance, and adequate intake of food and nutrition is a key requirement for healthy and productive life. At the national level, food has economic, strategies and political significance. In many countries, the food subsector of agriculture is a major productive subsector contributing significantly to Gross Domestic Product (GDP), export earning, employment and industrial growth. In some countries, cereals (especially Rice and Wheat) are even regarded as wage goods.

The National strategies importance of food is evident in its consideration as a key variable in matters relating to National security and in planning against national disasters and other emergencies. As a political, food is useful for maintaining political stability and ensuring peace and contentment among the populace.

At the international level, food is of course, one of the largest items of international trade. it is also important economic and political weapon in international relations. it is in view of foregoing that economists and other have often focused considerable attention on the study of food problem at sub-national, national and international levels.

At the same time, the food production and supply situations in many countries are becoming more precarious due to increasing food supply shortfalls and high degree of seasonal and annual fluctuations' in production and supply. In Nigeria, in particular, the last ten years or so have witnessed considerable attention being given to various dimensions of the country's perceived food problem (some say food crises) in research studies, in policy formulation and

in perspective planning. This is partly a fall-out from structural adjustment programme (SAP) which, many believe, has not aggravated the country’s food problem but also given the problem an added complexity.

Generally, food problem is dynamic, changing in magnitude and nature over changing phases of economic development. In most simple, traditional societies where farming is the occupation of nearly everybody and subsistence food production is predominant, there is a tendency to have low-level equilibrium between food production and food requirement. As such, there is often no serious, perceptible food problem. At the end of the scale are developed countries typified by adequate food supply to meet demand, either from domestic production, import or both. In some of these countries like U.S.A, Canada ,Australia and India e.t.c,the food problem is even one of managing food supply relative to domestic demand.

**National food security situation in Nigeria**

The analysis of Nigeria’s food security situation at the national level will involve a detailed evaluation of the major variables associated with food supply, food demand and stability of access to food. The analysis will focus largely on pattern of change in relevant food security variables over time and, in particular, from 1995 to 2010 with a view to evaluating the extent to which Nigeria’s national food security status has improved or deteriorated over time and in what particular respects it has done so.

**Table 1.** Trends in Annual Output of Major Food Commodities in Nigeria

Commodities	Average annual output ('oo/tones)		Average Annual Growth Rate (%)		Coefficient of Variation (%)	
	1995-2000	2001-2010	1995-2000	2001-2010	1995-2000	2001-2010
maize	5820.88	6189.33	4.61	1.22	7.40	4.70
millet	3947.00	4518.67	2.89	-0.80	5.13	7.48
sorghum	4185.60	5236.83	3.50	4.30	25.02	17.54
Rice	1980.61	2771.67	33.47	-0.65	42.60	15.31
Cassava	12714.00	21632.67	19.77	5.48	31.40	7.32
Yam	7667.20	19832.67	19.77	5.48	31.40	18.63
Cocoyam	579.67	996.67	20.97	5.05	27.57	18.63
Plantain	1483.80	1516.17	13.33	3.55	25.90	12.61
Cowpea	1060.00	1499.83	21.47	2.15	30.66	8.79
Groundnut	731.40	1359.17	6.93	1.50	13.59	7.59
Mellon	190.71	235.00	10.37	2.05	22.73	7.42
Palm oil	697.00	799.50	3.29	1.50	3.98	5.42
Beef	253.80	185.50	5.63	-1.32	9.93	7.35
Goat meat	73.95	79.00	3.25	2.37	4.95	11.69

**Table 1.** Trends in Annual Output of Major Food Commodities in Nigeria (Contd...)

Commodities	Average annual output ('oo/tones)		Average Annual Growth Rate (%)		Coefficient of Variation (%)	
	1995-2000	2001-2010	1995-2000	2001-2010	1995-2000	2001-2010
Mutton	79.20	80.50	5.50	1.72	9.76	11.24
Poultry meat	55.60	65.83	-4.14	3.28	12.23	13.93
Pork	39.40	38.00	9.50	-12.01	17.92	50.71
Egg	286.00	384.84	-10.40	2.17	27.31	7.86

**Source:** Computed from National bureau of statistics Report (2010).

Note: All growth rates in this study are computed from the exponential trend equation of form:  $Y_t = \gamma_0 e^{bit}$  where:

Y=Variable with growth rate

e =Euler's constant

t =Time trend variable

**Table 2.** Annual growth Rates in Agricultural production in Nigeria by Commodity groups.

Commodity groups	1995-2000	2001-2000
Cereals	-	1.42
Starchy foods	-	3.66
Grain legumes	-	1.61
Oilseeds and Nuts	-	2.06
Vegetables and Fruits	-	3.88
Vegetable Oil	-	1.47
Sugar	-	2.32
All Food Crops	4.31	2.34
Livestock products	-1.05	0.58
Fish	7.68	-2.87
All Food Commodities	4.10	2.24
Non-food Crops	2.53	1.07
All Agriculture	3.89	2.09

**Source:** Computed from National bureau of statistics Report (2010).

**Table 3.** Trends & Instability in the Real Producer Prices of Selected Food Crops in Nigeria

	Average Real Producer Price(#/Tonnes)	Average Annual Growth Rates (%)	Coefficient of Variation	Real Producer Price Elasticities
Commodities	1995-2010	1995-2010	1995-2010	1995-2010
Maize	476.68 to 824.71	-6.39 to 0.23	35.38 to 24.32	0.23
Millet	502.92 to 832.07	24.01 to 12.22	37.58 to 29.03	0.41
Sorghums	470.92 to 796.70	28.12 to 10.47	43.28 to 24.83	0.20
Rice	1734.42 to 2195.00	22.65 to -0.72	28.94 to 9.85	0.29
Cassava	524.86 to 960.83	2.48 to 11.44	17.82 to 19.83	0.34
Yam	720.82 to 1002.39	17.25 to 7.83	32.22 to 22.53	0.17
Cowpea	1534.10 to 2043.19	2.58 to 3.41	18.56 to 8.66	0.47

**Note:** Rural all-items consumer price index was used as deflator for Producer Price

**Table 4.** Percentage Share of Food in Nigeria’s Total Import Value

Years	Percentages Shares
1995-1996	17.0
1997-1998	13.4
1998-1999	10.5
2000-2001	7.9
2002-2003	6.5
2004-2005	8.2
2006-2007	8.2
2008-2009	8.4
2010	10.6

**Source:** Computed from National bureau of statistics Report (2010).

**Table 5.** Estimated Net Food Supply for Human Consumption in Nigeria, 1995 & 2010 (in'000 tones grain equivalent).

	1995	1995	1995	2010	2010	2010
Commodities Groups	Gross Supply	Net Supply	Percentage Share of Net Supply	Gross Supply	Net Supply	Percentage Share of Net Supply
Cereals	11419.19	10426.68	48.58	21856.52	12802.51	40.16
Starchy Foods	6111.91	5395.65	25.14	16205.72	11459.86	35.95
Grain Legumes	1907.92	1469.02	6.84	4040.93	2277.59	7.14
Vegetables &Fruits	643.14	602.34	2.81	690.18	660.76	2.07
Vegetable Oil	2007.60	2007.60	9.35	3334.60	2831.20	8.88
Sugar	233.90	233.90	1.09	469.73	365.94	1.15
Livestock & Fish product	1043.20	1004.38	4.68	915.00	873.06	2.74
Beverages	48.16	48.16	0.22	66.33	59.76	0.20
Oilseed	301.92	277.12	1.29	594.65	545.50	1.71
Total	23716.94	21464.85	100.00	48173.66	31876.18	100.00

**Source:** Computed from National bureau of statistics Report (2010).

**Table 6.** Net Food Supplies as percentages of gross Supply and Annual Rates of Growth in Net Supplies

Commodity Groups	Percentage Shares of Net Food Suppliers in Gross Food Supplies (1995 to 2010)	Annual Growth Rates in Net Food Supplies (1995 to 2010)
Cereals	58.6	2.1
Starchy Food	70.7	5.4
Grain Legumes	56.4	4.1
Oil seed &Nuts	91.7	6.1
Vegetable Fruit	95.7	0.9
Vegetable Oil	84.9	3.5
Sugar	77.9	4.6
Livestock Fish Products	95.4	-1.7
Beverages	90.1	2.2
ALL FOOD GROUPS	66.2	2.3

**Source:** Computed from National bureau of statistics Report (2010).

**Table 7.** Estimated Per Capita Food Nutrient Intake in Nigeria (1995 to 2010)

Commodity Groups	Net Food Supply('000t onnes grain equivalent)	Per Capita Food Supply (kg)	Per Capital Daily Food Supply(gm)	Per Capita Daily Calorie Intake (Kcal)	Per Capita Daily Protein Intake(gm)
Cereals	12,802.51	129.26	354.13	1,044.74	25.26
Starchy Food	11,459.86	115.70	317.00	912.64	14.48
Grain Legumes	2,277.59	22.99	63.00	226.21	13.23
Oilseeds & Nuts	545.50	5.51	15.09	58.22	2.56
Vegetables & fruits	660.76	6.67	18.28	50.58	1.72
Vegetable Oils	2,831.20	28.58	78.32	269.44	-
Sugar	365.94	3.69	10.11	36.57	-
Livestock Fish	873.06	8.82	24.15	72.10	6.01
Beverages	59.76	0.60	1.64	5.37	0.05
<b>TOTAL</b>	<b>31,876.18</b>	<b>321.82</b>	<b>881.71</b>	<b>2675.87</b>	<b>63.31</b>

**Note:** The 1991 census national population census figure was projected to 2010 at an annual growth rate of 2.9% & then used in estimating per capita food and nutrient intakes.

### Issues in national and household food security

This are-

- a. There is evidence of an imbalance in the relative growth rates of various food groups. Annual fluctuations in their production also high.
- b. Rates of growth in producer food prices are low relative to those of consumer prices, while instability in producer food prices is higher.
- c. There is also a dearth of information on the quantities of various food commodities used by agro-processor and non-food manufactures.
- d. Rates of post-harvest food losses are high due to the ineffectiveness of national food storage and food processing policies and programmes.
- e. Rates of food inflation are high, but it is still lower than that of non-food consumer goods and services.
- f. Policies on food export and import are erratic. Furthermore; there is virtually no information on unofficial food export and import trade.
- g. Average household income is lowest in the southern belt and highest in the northern belt.

- h. There is a wide diversity in incomes and food expenditure patterns among households in the southern, middle and northern belt of the country.
- i. Household income distribution is highly skewed, with a small percentage of household accounting for a disproportionately large percentage of the total income of all household.
- j. The percentage of household income spend on food is lowest in the middle belt and highest in the southern belts.
- k. Urban households tend to spend relatively higher percentages of their incomes on food than rural households.

### **Policy options for poverty reduction and food security**

Policies for national and household food security cannot be divorced from those of socio-economic development and poverty reduction. For socio-economic underdevelopment or maldevelopment is at the root of poverty which, in turn, is a key factor in food insecurity. However, general socio-economic growth and development alone cannot eradicate poverty and food insecurity. Complementary policies and programmes specifically targeted to the poor and food-insecure would also be required to promote the redistribution of the benefits of socio-economic growth and development to the poor, the food-insecure and the vulnerable who cannot normally take adequate advantages of the opportunities offered by general socio-economic policy incentives and benefits of growth.

### **CONCLUSION AND RECOMMENDATION**

It is shown in this study and others that stability of access to food in Nigeria is poor, as evident from the wide seasonal, annual and spatial fluctuations observed in food production, supply and consumption. As at now, the capacity of the country and of a high percentage of households to sustain food security on a long-term basis is very low.

A wide range of policy and programmes options have been discussed in this study to reflect the wide diversity in the factors that determine food security. Poverty and food insecurity are closely related, and both are by-products of underdevelopment or maldevelopment.

Furthermore, there is no illusion that most or even many of the suggested policies and programmes are new in Nigeria. Nigeria is known to be rich in socio-economic policies and programmes but very deficient in effective implementation. This is a persisting problem which only a fundamental reorientation in the concept and purpose of government, purpose of policies and the essence of development can be rectify.

More than anything else, what the country needs is a good governance, which implies an effectives partnership among all interest groups in the society in decisions affecting their socio-economic development, the efficient management of national resources, and the practice of a people-centred development strategy. This is the only environment under which socio-economic development policies can have any meaning.

**REFERENCES**

1. Adamu,S.O(1986): Analysis of Trends and Projection of Food Production and Consumption in Nigeria. Prepared for the International Food Policy research Institute, WashingtonD.C.(mimeo).
2. Adamu, S.O et. al (1989): Food Security Study. Consultants Report submitted to the World Bank.
3. AGRIDEM (1995): Assessment of Post-Harvest Food Crop Losses in Nigeria. Unpublished Research Report (2 volumes).
4. FAO/WHO (1973): Nutritional Requirement, Geneva, FAO.Nutrition Meetings Report Series No.52.
5. Federal Government of Nigeria (1991): Nigeria Country Paper for the FAO/WHO International Conferences on Nutrition.
6. Federal Ministry of Agriculture and National Resources(1993):Food Security and the Nigeria Agriculture: A National Agenda. Unpublished Report.
7. Olayemi J.k (1995): Food Security Study. Working paper Report.
8. Mellor, J.W (2005):' Global Balances and Food Security'. World Development 16(a): 997-1011.
9. National planning Commission (1994):Government Policies and Programmes to Reach the Poor. Unpublished Report.
10. National Beaurea of statistics report : Annual bulletin (2010)
11. Shama, P.R.(2002): 'Monitoring Access to Food and Household Security'. Food Nutrition and Agriculture 2(4).