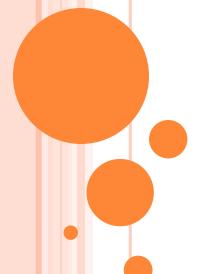
# AN ANALYSIS OF POPULATION GROWTH AND SUSTAINABLE AGRICULTURAL PRODUCTION IN NIGERIA



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### CONTENT

- 1.0. Introduction
- 1.1 The Dynamics of Demographic change in Nigeria
- 1.2 The Rural –Urban Nexus
- 1.3. A comparative Trend in Agriculture and Population Growth in Nigeria
- 1.4. Increase demand without corresponding increase in food production
- 1.5 High consumption of goods and services leading to waste generation, environmental degradation, climate change among others
- 1.6. The rural-urban Migration and Agricultural output drivers in Nigeria today.
- 1.7. The way forward
- 1.8. Conclusion

### Introduction

- Population growth rate especially its demographic change affects its prospects for economic growth and its agricultural development.
- Rapid population growth in a developing country impedes the provision of basic infrastructure.
- High migration net can create an imbalance in the population structure of a country.
- Sustainable food production is appreciably affected by the dynamics of increasing change in the demographic characteristics of a population.
- Agricultural activities in the rural areas depend on manual labour provided by the economically productive age group.
- The Agricultural sector is facing many challenges and fast declining in meeting up with the food demand of the growing population.

### THE DYNAMICS OF DEMOGRAPHIC CHANGE

### IN NIGERIA

|           | 1963       | Census | 199        | 1 Census | 2006 Census |       |  |
|-----------|------------|--------|------------|----------|-------------|-------|--|
| Age Group | Total      | %      | Total      | %        | Total       | %     |  |
| 0 - 4     | 9,549,163  | 17.2   | 14,438,889 | 16.2     | 22,594,967  | 16.1  |  |
| 5 - 9     | 8,439,298  | 15.2   | 14,500,458 | 16.3     | 20,005,380  | 14.2  |  |
| 10 - 14   | 5,937,125  | 10.7   | 11,148,681 | 12.5     | 16,135,950  | 11.5  |  |
| 15 - 19   | 5,251,184  | 9.4    | 9,335,788  | 10.5     | 14,899,419  | 10.6  |  |
| 20 - 24   | 6,923,188  | 12.4   | 7,671,570  | 8.6      | 13,435,079  | 9.6   |  |
| 25 - 29   | 5,570,585  | 10.0   | 7,311,671  | 8.2      | 12,211,426  | 8.7   |  |
| 30 - 34   | 4,325,578  | 7.8    | 5,913,927  | 6.6      | 9,467,538   | 6.7   |  |
| 35 - 39   | 2,478,446  | 4.5    | 4,214,933  | 4.7      | 7,331,755   | 5.2   |  |
| 40 - 44   | 2,410,144  | 4.3    | 3,845,918  | 4.3      | 6,456,470   | 4.6   |  |
| 45 - 49   | 1,168,048  | 2.1    | 2,416,703  | 2.7      | 4,591,293   | 3.3   |  |
| 50 - 54   | 1,216,899  | 2.2    | 2,570,799  | 2.9      | 4,249,219   | 3.0   |  |
| 55 - 59   | 463,476    | 0.8    | 1,119,769  | 1.3      | 2,066,247   | 1.5   |  |
| 60 - 64   | 785,792    | 1.4    | 1,690,374  | 1.9      | 2,450,286   | 1.7   |  |
| 65 - 69   | 272,899    | 0.5    | 763,940    | 0.9      | 1,151,048   | 0.8   |  |
| 70 - 74   | 314,323    | 0.6    | 886,302    | 1.0      | 1,330,597   | 0.9   |  |
| 75 - 79   | 125,838    | 0.2    | 351,823    | 0.4      | 579,838     | 0.4   |  |
| 80 - 84   | 191,156    | 0.3    | 480,686    | 0.5      | 760,053     | 0.5   |  |
| 85+       | 246,893    | 0.4    | 424,989    | 0.5      | 715,225     | 0.5   |  |
| TOTAL     |            |        |            |          | 140,431,790 | 100.0 |  |
|           | 55,670,055 | 100.0  | 88,992,220 | 100.0    |             |       |  |

Soffice: Dependent laying from pistion Publish in 2009 far outstripped the productive age group (15-59)

### THE DYNAMICS OF DEMOGRAPHIC CHANGE IN NIGERIA...... Age and occupation distribution

Table 2: Distribution of Population by Age and occupation

|   | Total          | Age In Ten Years Age Groups |           |                |           |           |           |           |         |        |  |
|---|----------------|-----------------------------|-----------|----------------|-----------|-----------|-----------|-----------|---------|--------|--|
| NIGERIA   |                | 10 - 19                     | 20 - 29   | 30 - 39        | 40 - 49   | 50 - 59   | 60 - 69   | 70 - 79   | 80 - 89 | 90+    |  |
| Total   | 36,634,54<br>1 | 2,662,394                   | 8,261,921 | 10,005,29<br>7 | 7,480,587 | 4,284,651 | 2,243,920 | 1,069,960 | 535,481 | 90,330 |  |
| Professional Technical and Related Workers                                    | 6,013,059      | 88,571                      | 982,724   | 2,045,836      | 1,698,786 | 841,967   | 259,071   | 62,524    | 28,800  | 4,780  |  |
| Administrative and Managerial Workers   | 709,675        | 78,057                      | 165,427   | 101,459        | 154,362   | 73,227    | 74,413    | 39,462    | 20,253  | 3,015  |  |
| Administrative and Office Support Workers                                     | 789,041        | 49,614                      | 227,653   | 233,968        | 137,429   | 78,926    | 29,833    | 19,344    | 10,726  | 1,548  |  |
| Sales and Related Workers   | 8,721,791      | 563,757                     | 2,295,823 | 2,621,502      | 1,623,744 | 855,571   | 478,780   | 180,712   | 89,064  | 12,838 |  |
| Service Workers   | 1,558,221      | 116,206                     | 522,959   | 451,901        | 241,874   | 124,455   | 51,519    | 31,629    | 15,315  | 2,363  |  |
| Installation Maintenance and Repair Workers                                   | 2,068,970      | 125,040                     | 569,213   | 506,650        | 382,513   | 262,767   | 126,391   | 58,437    | 31,737  | 6,222  |  |
| Agriculture Animal Husbandry and Forestry Workers Fishermen/Women and Hunters | 11,891,49<br>0 | 999,387                     | 2,217,799 | 2,781,976      | 2,353,506 | 1,605,695 | 1,041,279 | 562,972   | 278,938 | 49,938 |  |
| Production Construction and Extraction Workers                                | 2,465,096      | 126,989                     | 828,526   | 675,309        | 402,184   | 207,416   | 113,370   | 69,620    | 36,238  | 5,444  |  |
| Transportation and Material Moving Workers                                    | 2,417,198      | 514,773                     | 451,797   | 586,696        | 486,189   | 234,627   | 69,264    | 45,260    | 24,410  | 4,182  |  |

Source: National Population Commission, 2012

Only 26% of the population is gainfully employed in the productive sector of the economy where only 8.5% are in the Agricultural sector and a high proportion practise subsistence farming.

#### THE RURAL — URBAN NEXUS

Majority of migrants from rural areas to urban areas are between the ages of 16-40 years and a greater percentage are males

- Rural- Urban Migration as a result of:
- 1. Search for job pportunities;
- 2. Education attainment,
- 3. Insufficient land for farming,
- 4. Low income from farming,
- Effects of rural-urban migration
- 1. Acute shortage of farm labour,
- 2. Increase in child labour,
- 3. Increase in workload for women,
- 4. Underutilization of arable land,
- 5. Declining food production.

Remittances sent back to the rural areas by migrants also discourage agricultural practices

### A COMPARATIVE TREND IN AGRICULTURE AND POPULATION GROWTH IN NIGERIA

| Year | Population in Millions | Agricultura<br>I output | Per cap |   |
|------|------------------------|-------------------------|---------|---|
| 1991 | 88.9                   | 191.7                   | 2.156   |   |
| 1992 | 91.5                   | 206.4                   | 2.256   | Agricultural output over time has not       |
| 1993 | 94.1                   | 211.4                   | 2.247   | significantly increased with population     |
| 1994 | 96.7                   | 209.7                   | 2.169   | growth as per capita output mean score is   |
| 1995 | 99.5                   | 216.8                   | 2.179   | $2.232 \ (\pm 0.056).$                      |
| 1996 | 102.3                  | 224.8                   | 2.197   |   |
| 1997 | 105.2                  | 231.1                   | 2.197   | This implies that agricultural productivity |
| 1998 | 108.1                  | 242.4                   | 2.242   | is on a decline and this is suggestive of a |
| 1999 | 111.2                  | 249.1                   | 2.240   | likely mode of change in the demographic    |
| 2000 | 114.3                  | 252.0                   | 2.205   | structure, economic and environmental       |
| 2001 | 117.5                  | 260.1                   | 2.214   | situation in the rural areas where          |
| 2002 | 120.8                  | 272.4                   | 2.255   | agriculture is majorly practised            |
| 2003 | 124.2                  | 294.6                   | 2.371   | V V 1                                       |
| 2004 | 129.7                  | 301.4                   | 2.324   |   |
| 2005 | 134.3                  | 303.7                   | 2.261   |   |
| 2006 | 140.0                  | 309.2                   | 2.209   |   |
|      |                        | Meanscore               | 2.232   |   |
|      |                        | S.D.                    | ±0.056  |   |

Source: Adapted from Onwuka, 2006

INCREASING DEMAND WITHOUT CORRESPONDING INCREASE IN FOOD PRODUCTION

Table 4: Comparison of Food production and demand with Shortfalls and Imports (Million tonnes)

| Description/Year                                | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   | 2001   |  |  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--|--|
| Production in tonnes                            | 86.70  | 89.25  | 93.35  | 95.64  | 98.74  | 100.41 | 102.12 | 103.86 |  |  |
| Food demand in tonnes                           | 87.23  | 89.55  | 96.26  | 99.03  | 101.87 | 104.63 | 107.46 | 110.37 |  |  |
| Shortfall surplus                               | (0.53) | (0.30) | (2.91) | (3.43) | (3.13) | (4.22) | (5.34) | (6.51) |  |  |
| Food import                                     | 0.67   | 0.58   | 2.95   | 3.47   | 3.24   | 4.48   | 5.59   | 6.91   |  |  |
| Source: Federal office of statistics (FOS) 2002 |        |        |        |        |        |        |        |        |  |  |

Source: Federal Office of Statistics (FOS), 2002

Rapid increase in population does not enjoy corresponding rate of increase in food supply (local Supply). The food demand far outstripped the level of supply which is creating an immense pressure on the teaming population.

However, increase in importation by government is making up for the deficit.

## HIGH CONSUMPTION OF GOODS AND SERVICES LEADING TO WASTE GENERATION, ENVIRONMENTAL DEGRADATION AND CLIMATE CHANGE

- Increase in population leads to increase in the consumption of good and services.
- Consumption in good and services exacerbate waste generation and disposal.
- Improper management of waste contaminates and pollutes the arable land (soil).
- Increase in Green house gases emissions from goods and services consumption and waste affects the micro climate and adds up to the climate change phenomena.

### THE RURAL MIGRATION AND AGRICULTURAL OUTPUT DRIVES IN NIGERIA TODAY

- Inaccessibility to farm produce and Market.
- 1. Poor infrastructure: Road network, storage facilities, market among others
- 2. Poor pricing mechanism and access to loan
- Declining productivity
- 1. Non availability of farm inputs,
- 2. Continued cultivation,
- 3. Environmental degradation and climate change impacts
- Herdsmen Conflict and Insurgency.
- 1. Expansion of herdsmen and farmers conflict.
- 2. Insurgencies in the North eastern and South- south regions

### THE WAY FORWARD

- Government is advised to encourage the practice of urban agriculture
- Government should provide a lasting solution to the incursion of herdsmen to farm lands by encouraging ranching.
- Multi-cropping system is advocated among farmers
- The peasantry should be assisted to upgrade by mechanization
- Reproductive health education should be encouraged among rural dwellers and the urban poor.

#### CONCLUSION

The reduction in agricultural output per capita due to rapid population growth is the major envisaged trouble leading to food insecurity and migration. Therefore it is obvious that this increasing growth rate is exacerbating some of the economic challenges found in the country. It is very imperative to put in place measures to first solve the alarming demographic changes and then the agricultural sector as well as resultant food insecurity.

#### THANK YOU FOR YOUR ATTENTION

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