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Towards Accelerated Growth and Transformation of the Nigeria Economy:

Missed Opportunities, Existing Prospects and the Way Forward

James A. Sackey



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PREFACE

The Nigerian economy is today at a critical juncture. Looking backward, average real GDP growth was about 4% per annum during 1960-2010, barely large enough to match population growth. The poor growth performance in the 1980s and 1990s mirrors a debilitating political economy characterised by political instability, distortive public sector dominance and failed efforts to deploy oil revenues for economic and human development. Clearly, any hope of economic transformation during these decades would not have been reasonably supported by the erratic and abysmal growth performance. But, the last decade marked some positive turning point in the growth story. Real GDP growth surpassed 6% in most of the years during 2001-2010, thereby renewing hopes for brighter longer-term prospects for growth and transformation of the economy. These hopes are however muted by the fact that recent growth improvements have not yielded desirable impacts in terms of poverty reduction, creation of jobs and better access to basic services.

In this paper, James Sackey, a seasoned development economist, reflects on Nigeria's economic history and future. James Sackey clearly points to the opportunities that Nigeria has missed, particularly, the oil boom of the late 1970s and how Nigeria has lagged behind her former contemporaries at political independence. With salient lessons from Nigeria's economic planning and policymaking in the past five decades, the paper examines the emergent opportunities for re-inventing the growth trajectory as well as key prerequisites to achieving 'growth with transformation'.

"Towards accelerated growth and transformation of the Nigerian economy: missed opportunities, existing prospects and the way forward" gives a distinctive political economy exposition on the growth retrospect and prospect for Nigeria. The retrospect is typical of similar accounts of Nigeria's economic under-performance, including inappropriate public sector, inadequate economic foresight and poor strategy of public financial management and failure to nurture a competitive private sector.

Beyond dissecting past and current growth challenges, the paper advocates key imperatives that can positively alter the growth narrative and position Nigeria on a transformation process. The imperatives include appropriate macroeconomic environment, democratic decentralisation accompanied with greater accountability and the reforms of the agriculture and industrial sectors and tackling infrastructure and institutional obstacles to overall economic competitiveness. Also important is 'shared growth' from human capital formation and improved market access.

Overall, this paper contains well-organised theoretical literature, empirical evidence and policy insights that will immensely benefit different users, including, academics, professionals, researchers, policymakers and development practitioners.

Prof. Eric Eboh

Editor, AIAE Research Paper Series
12 October 2011



Towards Accelerated Growth and Transformation of the Nigeria Economy: Missed Opportunities, Existing Prospects and the Way Forward

James A. Sackey

Abstract

The story of the post-independence economy of Nigeria, as of most ex-colonial countries in Sub-Saharan Africa, is a mixed tale of good intentions, reforms, reversals and an increased sense of likely prolonged and lingering crisis of poverty and inequality. This is evidenced by the long-term growth performance of the Nigeria economy which, until the recent past, has been widely erratic; and so were the only marginally satisfactory outcomes of most of the development plans and supporting policy initiatives undertaken during the period under review. Long-term real GDP growth averaged at about 4 percent per annum during 1960-2010, barely large enough to cover the growth of population. Public sector intervention through increased investment has failed to act as the stimulus for growth and transformation and for most part stunted private sector initiatives.

This paper reviews the structural transformation process in Nigeria with particular focus on the role played by the agricultural and industrial sectors. It seeks to explore the issue of whether Nigeria's economic transformation process is capable of leading to the achievement of the developmental goals enunciated in the government's vision statements. In view of the broad dimensions of the concept of economic transformation and modernization, the study briefly reviews the various theoretical postulates underlying the concepts, analyzes the nature of transformation in Nigeria since the 1960s and concludes by highlighting critical characteristics of the evolving Nigeria economy that might need to be explored if the long-term vision of the authorities is to be realized. The latter are the central messages of the review which include putting the economy on an accelerated growth path through enhanced reform of agriculture and industry, seeking to facilitate the sharing of the fruits of growth with all Nigerians, resolving the infrastructure limitations, and deepening the decentralization process to support democratization and good governance.

Key Words: Structural transformation, poverty, inequality, growth, modernization, decentralization.

August, 2011



ABBREVIATIONS AND ACRONYMS

AAS	Average Agricultural Surplus
ACCOMEX	Agricultural Commodity Exchange Market
ADP	Agricultural Development Project
CAADP	Unions Comprehensive Africa Agriculture Development Program
CBN	Central Bank of Nigeria
DAPRS	Developing Agricultural Policy and Regulatory Systems
DCGE	Dynamic Computable General Equilibrium
EAP	Economically Active Population
FAO	Food and Agricultural Organization
FCT	Federal Capital Territory
FG	Federal Government
FMARD	Federal Ministry of Agriculture and Rural Development
FMAWR	Federal Ministry of Agriculture and Water Resources
GDP	Gross Domestic Product
GHI	Global Hunger Index
ICOR	Incremental Capital Output Ratio
IDCC	Industrial Development Coordination Committee
IFPRI	International Food Policy Research Institute
NAFPP	National Accelerated Food Production Program
NBS	National Bureau of Statistics
NDHS	Nigeria Demographic and Health Survey
NDP	National Development Plan
NEEDS	National Economic Empowerment Development Strategy
NFSP	National Food Security Program
NSS	National Seed Service
OFN	Operation Feed the Nation
PPP	Public-Private Partnership
RAISE	Raising Agriculture Income and Sustainable Environment
RBDA	River Basin Development Authorities
RIGA	Rural Income Generating Activity
RUSEP	Rural Sector Enhancement Program
SAM	Social Accounting Matrix
SAP	Structural Adjustment Programme
SMEs	Small and Medium Enterprises
SSA	Sub Saharan Africa
TFP	Total Factor Productivity



UN	United Nations
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
WDI	World Development Index
WFS	World Food Summit



ABOUT AIAE RESEARCH PAPER SERIES

AIAE Research Paper Series presents technical research results from work done by the Institute and/or its affiliate scientists and researchers. The purpose is to disseminate research and analyses that informs policy debate and choices. It is directed to a professional audience and readership among economists, social scientists in government, business as well as in universities, research institutes and international development agencies. Before acceptance for publication, the Papers are subjected to rigorous independent technical reviews to assure scientific quality. AIAE Research Series seeks to engender high quality scientific and intellectual discourse on key developmental questions, and hence, enhance strategic understanding of policy and programmatic options.

The papers bear the names of the authors and should be used and cited accordingly. The findings, conclusions and interpretations expressed in this series are those of the authors and do not necessarily represent those of AIAE or of the co-sponsoring organisation. By emphasising policy-relevant and evidence-based research, the series seeks to promote scientific and intellectual discourse on crucial developmental questions and enhance understanding of policy issues.



TOWARDS ACCELERATED GROWTH AND TRANSFORMATION OF THE NIGERIA ECONOMY

BACKGROUND

The story of the post-independence economy of Nigeria, as of most ex-colonial countries in Sub-Saharan Africa (SSA), is a mixed tale of good intentions, reforms, reversals and an increased sense of the likely prolonged and lingering crisis of poverty and inequality. Good intentions derived from the recognition after independence that in order to shift emphasis from an economy predominantly based on primary agriculture (and commerce) to industry, the government would need to play a catalytic role (Eleazu, 1988). Successive national governments in Nigeria (including during the period of military intervention) subsequently prepared development plans, which continue to be used as a way of outlining the authority's development objectives and to demonstrate initiative in tackling the country's development challenges. So far, Nigeria has had four 5-year development plans, a structural adjustment program, two 3-year rolling plans and three vision/strategy documents covering the period between 1962 and 2020. Since then, the influence of government in the economy has been all pervading; in particular following the expansion of state and local governments after the civil war (1967-70). The three levels of government in Nigeria have not restricted themselves to the traditional areas of providing infrastructural support, law and order, but have made direct investments via their numerous publicly owned corporations, companies, joint ventures and agencies in the direct production of goods and services. This has been facilitated by the advent of rising oil revenues in the early seventies as the Federal

¹Development planning was seen as the appropriate vehicle for formulating and implementing development policy and was an indispensable requirement for foreign aid, much in the same way that commercial banks ask companies for feasibility studies (Robinson, 1971).

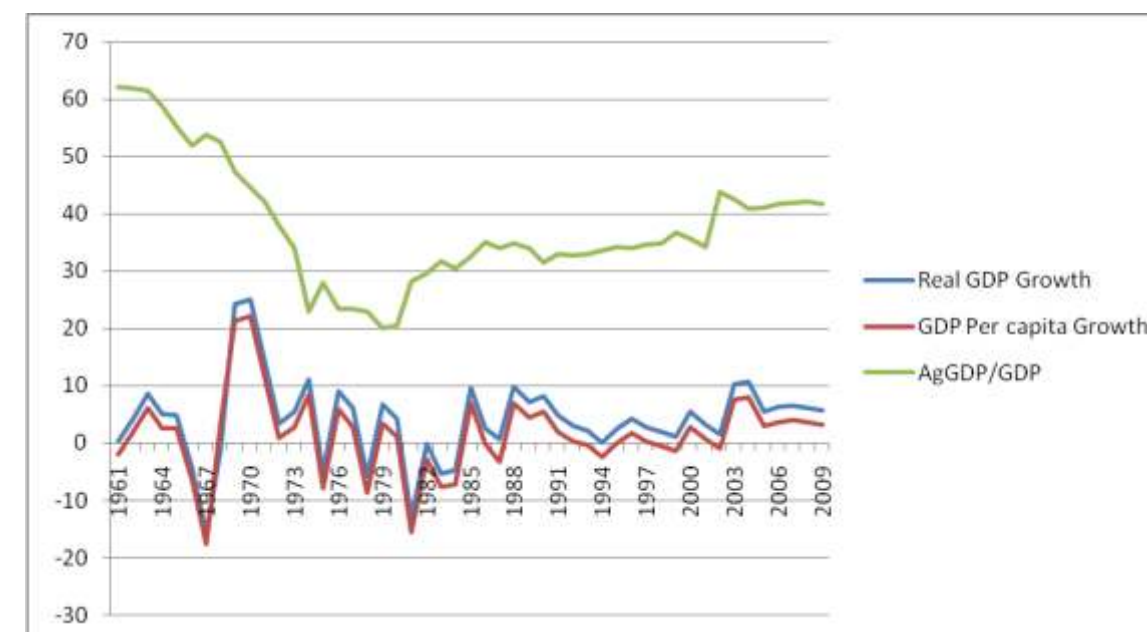
Government (FG) assumed the “commanding heights in the quest for purposeful national development and provide the leadership and honest administration necessary for the attainment of a national sense of purpose” (Second NDP, quoted from Eleazu, 1988:99). The most recent national plan, the Nigeria Vision 20:2020 is also characterized by similar high optimism. It seeks to accelerate the country's economic growth and position it on a path of sustained and rapid socio-economic development, thereby ensuring that Nigeria becomes one of the top 20 economies in the world by 2020.

But the growth performance of the Nigeria economy, until the recent past, has been widely erratic; and so were the outcomes of most of the development plans which were below expectation. Long-term GDP growth averaged at about 4 percent per annum during 1960-2010 (based on adjusted national accounts reported in the world development indicators, WDI). This was mirrored by the per capital real GDP growth, which yields a simple arithmetic average of 1.43 percent during 1960-2010 (Figure 1). Agriculture (crop, livestock, fishing and forestry) has remained dominant over the period under review, despite its share of GDP falling substantially from 62 percent in 1960 to as low as 20 percent in the mid-1970, only to rise again into the forties. Much of the decline might be accounted for by the rapid expansion of oil and gas sector in the seventies and eighties, while manufacturing and services failed to expand as expected by transformation theories.

²We include in the count, plans referred to explicitly as national development plans (First NDP, 1962-68; Second NDP, 1970-74; Third NDP, 1975-80; Fourth NDP, 1981-86; the Structural Adjustment Program, 1986-88; the First Three-Year Rolling Plan, 1990-92; the Second Three-Year Rolling Plan, 1993-95; the First National Economic Empowerment and Development Strategy (2004-2006); the Second National Economic Empowerment and Development Strategy (2007-2009); National Vision 20:20-20, 2010-20).

³From a base of three provinces at independence, Nigeria now has 36 states (and the Federal Capital Territory) and 774 local governments.

Figure 1: Nigeria- Long-term Growth Profile and the Share of the Dominant Sector in GDP (In Percentages)



Sources: Real GDP and GDP per capita derived from WDI of the World Bank (2009). Agriculture share of real GDP (AgGDP/GDP) is calculated from CBN (2010). Sharp fluctuation in GDP series around 1973 and 1980 may be accounted by the rebasing of the series.

Similarly, public sector intervention through increase investment has failed to act as the engine of growth and transformation. In the early seventies, Nigeria appeared to have successfully leveraged two oil booms

⁴Eleazu (1988) comments that these hopes were perhaps understandable for a country just fresh from a civil war when every attempt was being made to heal the wounds of the past.



for growth. Both industry and service sectors grew rapidly with the overall growth of the economy reaching as high as 25 percent in 1970 and averaging about 14 percent per annum during 1969-1974. The growth episode (the best so far in Nigeria's recorded economic history) was short-lived, in part because significant portions of all plans since the 1960's were not executed, largely because of unanticipated financial constraints and limited internal capacity. For example, the execution of the Fourth National Development Plan (1981-85) was adversely affected by the collapse of international oil prices soon after its inception. The volatility of the oil and gas sector (the main export revenue source) largely undermined economic policy direction as well as the financial capacity to execute public investment programs.

But the content of national policy and the consistency in its execution may also explain performance failures in economic transformation in Nigeria. The adoption of the structural adjustment program (SAP) after 1986 was the government's response to macroeconomic policy distortions as much as to the unpredictability of revenues from the oil and gas sector. Subsequently, the economy witnessed a number of policy reversals during 1988-89 in response to the adverse effects of the reform measures introduced by the SAP, leading to the nullification of some of the adjustment gains. The shift to the 3-year rolling plans in the 1990s and the economic empowerment programs in the 2000s reflected the need to deal with the increase incidence of poverty and inequality.

⁵As noted in Figure 1, real GDP was compiled by the Nigerian Statistical authorities from 1960-1973 using 1962/63 constant basic prices; 1974-80 using 1977/78 constant basic prices; and 1981-2008 using 1990 constant basic price (CBN, 2010). As such, there are two major breaks in the series which required adjustment to smoothen out the series as done in the WDI.



When oil prices crashed in the 1980s, the Nigerian economy went through several years of contraction, with stagnation continuing into the 1990s. Per capita GDP (in constant US\$ in 2000) fell sharply from 422 in 1980 to 368 in 2000, while income poverty levels rose from 27.2 percent to 65.6 percent over the same period (see Table 8 below). Other indicators of welfare, notably access to education and health, also declined. The FAO (2009) reported that during 2004-06 (the latest for which data are available), Nigeria had about 11.3 million people or 8 percent of the population reported as undernourished. The proportion of the population considered undernourished has declined from 15 percent in the early 1990s to 8 percent in the mid-2000 and the FAO projects that Nigeria is likely to meet the World Food Summit (WFS) target of reducing between 1990-92 and 2015, the number of undernourished people by half. On the other hand, the 2009 Global Hunger Index (GHI) published by the International Food Policy Research Institute (IFPRI), which ranks countries on the basis of the three dimensions of hunger (the number of undernourished as a percentage of the population, the prevalence of underweight in children under the age of 5 years, and the mortality rate of children under the age of 5 years) shows that Nigeria's progress in reducing hunger remains slow, but in line with worldwide progress. Nigeria's GHI for 2009 (based on data for 2002-07) remains in the alarming range at 18.4, compared to 24.4 for the 1990 GHI (based on 1988-92 data). The GHI ranges from 0-100 with 0 being a state of no hunger and 100 being the worst status of hunger.

⁶As will be established in this paper, the transformation process in Nigeria does not fully validate the hypotheses propounded to explain the process from a rural to a modern industrialized economy. The shares of manufacturing and services averaged 5.8 and 13.8 percent respectively during 1960-2010 (Table 1 below).



This paper reviews the structural transformation process in Nigeria with particular focus on the role played by the agricultural and industrial and sectors. It seeks to explore the issue of whether Nigeria's economic transformation process is capable of leading to the achievement of the developmental goals enunciated in the government's vision statements. In view of the broad dimensions of the concept of structural transformation, we begin by briefly reviewing the various theoretical postulates underlying the concept. We then analyze Nigeria's transformation process since the 1960 and conclude by questioning critical characteristics of the evolving economy that may be in contradiction with the national vision. The intention is not to provide definitive answers for the way forward but rather to trigger and support policy debate on issues of concern in the context of past structural transformation of the country.

STRUCTURAL TRANSFORMATION THEORIES REVISITED

The process of structural transformation generally involves the movement of economic activities from agriculture and the rural sector into industry and services in the urban sector. Timmer and Akkus (2008) suggest that, this is usually reflected in four patterns: a declining share of agriculture in gross domestic product and employment, rural-to-urban migration, the rise of a modern industrial and service economy and a demographic transition from high rates of births and deaths (commonly associated with the rural economy) to low rates (associated with better health standards in urban areas). During the structural transformation process,

⁷The concept of SAP was christened by the World Bank and the IMF as the two institutions' policy response to the global financial crisis in the early 1980's. In the case of Nigeria, it was designed by the authorities to deregulate the economy and to prepare it for growth (Odife, 1989).



although the relative importance of agriculture declines, agriculture continues to grow and contributes to overall economic growth. Agricultural productivity growth and increased farm incomes are prerequisites for structural transformation. Increased farm incomes lead to derived demand for nonfarm products, which in turn leads to the growth of small and medium-size enterprises in rural villages, small towns and larger urban areas (UNECA, 2005; Timmer and Akkus, 2008).

Explaining the transformation process has elicited many theoretical hypotheses, which can be traced to various models of economic growth and development. Two pioneering models worthy of note in discussing the structural transformation of societies are the Lewis-Ranis-Fei (LRF) models of economic development and the neoclassical two sector model. Though similar in their underlying view of the structural transformation process, their different perceptions of rural labor surplus necessitated different implications of population growth and the consequent proposed timing and prioritizing of investments in the agriculture and industrial sectors. A third model worthy of consideration is the theory of economic

⁸This includes the National Economic Empowerment and Development Strategies (NEEDS), the Seven-point agenda (2008) and the Nigeria Vision 20:2020.

⁹The services sector is considered supportive and thus its transformation and growth is perceived as being derived from the nature of transformation of the two main sectors of the economy.

¹⁰This section depended largely on background analysis I conducted in collaboration with Saweda Liverpool, Sheu Salau and Awoyemi Taiwo on rural-urban transformation in Nigeria (see Sackey, et al., 2011).

¹¹Structural transformation is a defining feature of economic development. It is the process through which the relative contribution of agriculture to the overall economy falls while that of non-agricultural sectors rises (UNECA, 2005). It parallels the concept of modernization, in which economic development triggers cultural changes that make individual autonomy, gender equality and democracy increasingly likely (Ingehart, et al., 2005). In this paper the two concepts are used synonymously.

¹²Refer to Lewis (1954) and Fei and Ranis (1961).



Development as proposed by Kuznets. This model explains how inequality could occur during the structural transformation process in a manner consistent with the labor surplus postulates of the LRF model. Supplementing these are the Todaro (1969) and Harris and Todaro (1970) models on rural-urban migration in developing countries and the Growth-Poles and Centre-Periphery theories advanced by Prebisch (1949), Peroux (1955), Freidman (1959), Brookfield (1975) and others.

The LRF models postulate that the development process stems from the transfer of surplus labor in the traditional agricultural sector to the modern industrial sector where some level of economic activities have already commenced. Entrepreneurs in the modern industrial sector can hire transferred workers from the rural agricultural sector and pay them a subsistence wage since there is unlimited supply of labor from the traditional agricultural sector. This ensures entrepreneurial profits (as increased demand for labor would not put upward pressure on wages) which can be used for further investment in the modern sector thus, fuelling further economic growth. The model assumes that this process will continue until the surplus labor in the traditional sector is used up. At the point where rural agricultural labor has been used up, not only will it be impossible to keep the wages of labor in the industrial sector at subsistence, the workers in the traditional sector will also be receiving a wage equal to their marginal product rather than subsistence wage. Consequently, a key assumption of the LRF model is the existence of surplus labor in the rural agricultural sectors of developing countries. This makes continuous capital accumulation possible in the modern industrial sector for a period of time since the profits for entrepreneurs would not be eroded by rising wages as workers are

¹³Kuznets (1961) deal with the determinants of long-run levels and trends in income inequality, as well as the relationship between economic growth and income inequality.



continued to be paid subsistence wage. The model also assumed that the average agricultural surplus (AAS) generated in the traditional agricultural sector would be channeled to the modern sector via means such as new taxes imposed by the government or as savings placed in banks by residents in the traditional sector.

The neoclassical two sector model differs from the LRF model with regards to its assumptions about rural labor surplus and marginal productivities. Contrary to LRF, the neoclassical two sector model considers rural marginal productivity (MP) to be declining but never zero. In most developing countries, even if there is seasonal unemployment, it is well known that planting, weeding and harvesting times are periods of high labor demand in rural areas. A positive MP means that there is no excess supply of labor in the traditional agricultural sector that can be transferred at a subsistence (or just above subsistence) level to the modern industrial sector for a period of time to fuel the development of the modern industrial sector with the capital accumulated and reinvested in that sector. However, here population growth is associated with increased labor supply and farm output and any removal of labor from the rural agricultural sector reduce farm output. Thus, removal of rural labor increases the marginal productivity of the labor left behind thus, increases the wages needed to induce labor to move to urban centers. Consequently unlike in the LRF model, the neoclassical model calls for increased investments in agriculture from the onset to ensure that agriculture can feed workers in both the rural and urban sectors.

In Kuznets' model, as per capita income rises, inequality may initially increase, reach some maximum level at an intermediate level of income and then decline again as income levels characteristic of an industrial society are reached (Perkins et al., 2001). This is similar to expectations under the labor surplus assumptions of the



LRF model. This rise in inequality occurs as labor migrates from the agricultural sector (where wage differentials are small if at all) to the urban sector where wage differentials are larger.

Inequality is also attributed to the fact that during development, the returns to investment in the industrial sector are higher such that capitalists income share rises. However, Kuznets postulates that as society develops, mass education provides greater opportunities which decrease the inequality and the lower income portion of the population also gain political power to change governmental policies. This effect is also achieved in the LRF model as a rise in the general wage levels brings about a reduction in inequality which was also expected to end poverty (Perkins et al., 2001). This ties with the Todaro (1969) and Harris and Todaro (1970) model, which postulates that rural-urban migration in less developed countries is a function of the difference between the expected wage from migration (urban wage) and the agricultural wage. That expected wage is equivalent to the actual industrial wage weighted by the migrant's probability of obtaining a job in the modern urban sector. Hence, rural-urban migration can coexist with high levels of urban unemployment.

The growth-pole and the center-periphery hypotheses have common premises. According to the growth-pole hypothesis, as Perroux (1955) originally conceived it, a growth-pole could be seen as a set of expanding industries located in an urban area and inducing further development of economic activity throughout its zone of influence. Later, some writers turned this around to mean that a growth-pole is an urban centre containing a set of expanding activities which induce further economic development throughout its hinterland. According to Brookfield (1975), a growth pole is an urban growth centre from which growth diffuses through its hinterland. The



concept of distance is critical here. It is argued that the farther a rural area is from the urban-industrial centre, the less promising its outlook for development will be.

Though first advanced by Prebisch (1949), the center-periphery theory was popularized in the literature by Friedman (1959). Friedman argues that economic growth tends to occur in the matrix of urban regions. It is through this matrix that the evolving special economy is organized. The spatial incidence of economic growth is a function of distance from a central city (Friedman, 1959). The centre-periphery theory is in many ways similar to the growth-pole theory in the sense of interactions between centre and periphery although, Friedman seems to admit that this interaction may not always be beneficial to the periphery. This assertion that rural-urban interactions may not always bring benefits to rural areas had earlier been raised by Hoselitz (1955) who recognized generative and parasitic cities. The parasitic cities take in the proceeds of the surrounding rural areas especially food and raw materials, grow fat on them without passing anything on to the rural areas.

Despite their different perceptions of labor supply or the reasons why inequality increases and decreases during the structural transformation process, the LRF, neoclassical two sector model, Kuznets's theories, and their extensions provide a basis for understanding the expected strategies for the transformation process. All the structural transformation models expect the transformation process to be accompanied by increased agricultural productivity, rural to urban migration and urbanization, increased incomes that fuel the demand for non food items and the consequent expansion of the industrial and service sectors.

THE PROCESS OF ECONOMIC AND STRUCTURAL TRANSFORMATION IN NIGERIA

Overview: The pathway of structural transformation in Nigeria largely reflects the

stylized features characteristics of all countries going through modernization (Table 1). The share of agriculture in GDP declined sharply after independence, although this was not driven by industrial and service sector expansion but largely by the emergence of the petroleum and gas sector. This explains recent upward trend in the share of agriculture since 2000. Similarly, despite the inadequacy of available data (Sackey, 2010), they show that Nigeria experienced an increase in the share of employment in agriculture over the past 20 years, following a likely small decline in the first 25-30 years post-1960 (Table 2). It is estimated that the shares of the economically active population in agriculture, industry and services in Nigeria were 70.8 percent, 10.4 percent and 18.8 percent respectively in 1960. These changed to 56.6 percent, 10.8 percent and 32.1 percent respectively by 1985. Comparable estimates for 2007 (the latest for which data are available) are 57.9 percent, 3.2 percent and 38.9 percent respectively (NBS, 2009). The increase in the employment share of the service sector is largely an expansion of the urban informal sector as a result of the failure of the industrial sector to grow. The recent rise in the share of employment of the agricultural sector may also be explained by the failure of the industrial sector to expand as well as the relative decline in the growth of the petroleum and gas sectors (by about 4.5 percent during 2005-2008).

¹⁴Historically, modernization in Nigeria has its origin in the empires that evolved in the sub-region. They were boosted by external influence through trade in the north and the advent of missionaries in the south with their schools, hospitals and a new religion. Trade and the development of infrastructure (especially roads and railway) facilitated the process.

¹⁵Data on labor force and employment are either unavailable or inconsistent and are characterized by large gaps when available (Sackey, 2010). As such we use information on economically active population and estimated population figures.

¹⁶Quoted from Table 2.2 of Dike (1991, p20).

Table 1: Nigeria - Selected Indicators of Structural Transformation (in percentages, unless otherwise specified).

Indicator	1960	1970	1980	1990	2000	2009
Share of GDP(constant prices)						
Agriculture	64.3	44.7	20.6	31.5	35.8	42.1c/
Industry	5.8	19.4	34.6	43.2	37.0	22.0 c/
Services	29.9	35.9	44.8	25.3	27.2	35.9 /
(of which, building and construction)	4.5	5.2	9.7	1.6	2.0	1.8 c/
(of which, wholesale and retail trade)	12.4	12.2	20.0	13.4	13.1	17.3 c/
Share of Employment (EAP)a/						
Agriculture	70.8	69.8	54.0	43.0	59.5	57.9
Industry	10.4	12.8	8.0	7.0	2.8	3.2
Services	18.8	17.2	38.0	50.0	37.7	38.9
Real GDP per Sector EAP (Naira)d/						
Agriculture	106.6	112.2	378.6	5315.7	5271.9	10258.4
Industry	66.0	265.5	4293.6	44750.8	115649.3	97012.7
Services	186.6	364.8	1168.7	3666.1	6310.1	13046.3
Demographic Transition						
Fertility Rate b/	6.5	6.6	6.9	6.6	5.8	5.2
Birth rate (per 1000)	47.6	47.4	48.8	46.0	42.3	39.3
Death Rate (per 1000)	25.9	23.6	20.2	19.9	17.8	16.2
Annual Population Growth	2.2	2.3	3.0	2.6	2.4	2.3
Annual Urban Population Growth	7.1	4.6	5.2	4.6	4.1	3.8
Urban Share of Total Population	16.2	22.7	28.6	35.3	42.5	49.1
Agglomeration index e/	4.8	6.9	9.6	12.2	13.5	14.9

Notes:

a/ Data for 1960 and 1970 derived from Dike (1991, table 2.2); those for 1980 and 1990 are derived from AfDB (2010); and those for 2000 and 2009, which actually refer to 2003 and 2007, are estimated from NBS (2009). Employment refers to economically active population (EAP) and definition of sectors may differ among sources.

b/ Births per 1,000 women ages 15-19 years.

c/ Refers to 2008.

d/ Real GDP series were compiled from 1960-73 using 1962/63 constant basic prices; 1974-80 using 1977/78 constant basic prices; and 1981-2008 using 1990

constant basic prices. As such, there are two major breaks in the series for 1960-2009, hence the substantial jump in the 1980 estimate. In the absence of employment data, estimates of labor productivity are made on the basis of economically active population (EAP).

e/ Refers to population in urban agglomeration of more than 1 million (as a percentage of total population); from World Bank World Development Indicators (WDI).

Sources: NBS (2009), CBN (2010), World Bank (2010), and AfDB (2010).

Despite the data limitations of Table 1, especially with respect to sectoral employment, the available evidence suggests significant productivity differential for agriculture, industry and services. Except for around 1960, agricultural productivity estimates for the economically active population are lower than those for both industry and services. Furthermore, the growth of agricultural productivity is lower than for industry, although exceeds that of services. Since the rural-urban movement was largely into the service sector (especially the informal sector), this implies a movement into a lower productivity sector with consequential negative implications for the economy and income disparity.

Table 2: Share of Employment in Key Sectors to Total Employment (in Percentage)

Data Source	Year	Employment in Agriculture	Employment in Industry	Employment in Services
ILO	1983	33.60	5.70	56.50
ILO	1986	46.90	7.50	43.70
NBS	2003	59.49	3.33	31.02
NBS	2004	59.26	3.32	31.30
NBS	2005	58.64	3.39	31.92
NBS	2006	58.64	3.39	31.92
NBS	2007	57.89	2.89	33.04

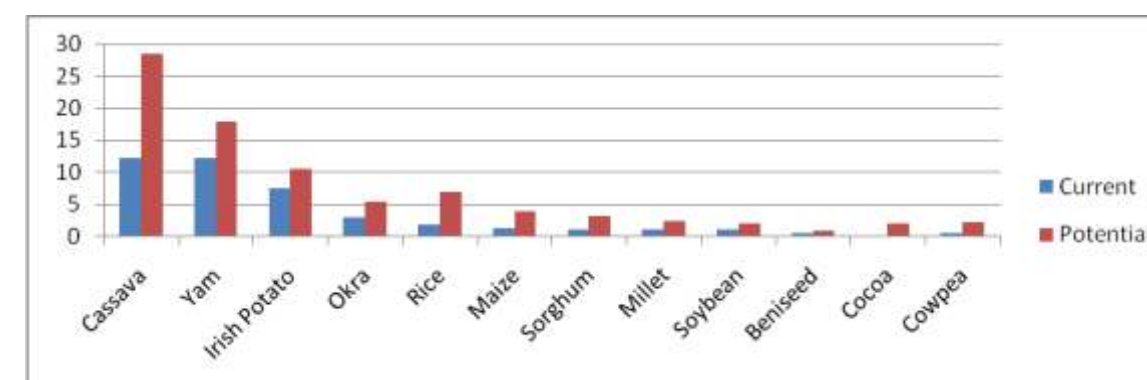
Rural-urban migration, urbanization and demographic transition accompanied these sectoral changes. Between 1960 and 2009, the urban share of total population increased dramatically from about 16.2 to 49.1 percent. In absolute terms, the urban population increased from 6.86 million in 1960 to 73.18 million in 2009. By growing in excess of 4 percent per year, the urban population doubled at almost every fifteen years. The rate of growth, higher than those experienced in other sub-Saharan African countries, may be explained by three phenomena: First, high internal migration is historically determined by climatic patterns in the northern part of the country, soil degradation in eastern Nigeria and internecine war in the southwestern part of the country; second, the emergence of petroleum and gas, which substantially increased urban wages and served as a “urban pull factor”; and thirdly, post-independence political conflicts that ushered in the development of many states and accompanying state capitals. The associated demographic transition was however less dramatic. Nigeria has undergone a modest demographic transition exhibited by reduced birth rates (per 1000 people) from 47.6 in 1960 to 39.8 in 2009 (though the rates actually increased in the 1970's and 1980's when it exceeded 48). Death rates have fallen consistently from about 26 (crude deaths per 1000 people) in 1960 to about 16 in 2009. The faster falling death rates and modest falling birthrates have seen Nigeria's population growth spurt from about 45.1 million in 1960 to 74.5 million by 1980; further increasing to 124.8 million in 2000 and its current estimated population of 154.7 million in 2009. Fertility rates remain very high.

The emerging characteristics of the rural-urban transformation process point to development policy failures (especially with respect rural development) which have led to undesirable consequences, including the inability of agriculture to generate sufficient wealth to sustain the rural community and to underpin the industrial

development process. Understanding the divergence of the outcomes between the transformation process in Nigeria and the theoretical postulates may help sharpen the policy making process for development.

The Role of Agriculture: Following Timmer and Akkus (2008), we first analyze performance of the agricultural sector and explore explanations for the seemingly u-shaped profile for agricultural share of GDP and agricultural share of employment. The sector's growth performance could be attributed to the performance of the four agricultural sub-sectors, crops, livestock, fisheries and forestry. The crop sub-sector had on average the largest share of growth, followed by livestock, forestry and the fishery sector which grew substantially in the post-1974 period. As of 2008, crops contributed about 85 percent to the agriculture GDP, while livestock contributed about 10 percent, fisheries about 4 percent, and forestry about 1 percent. While the share of the crop sector declined up to the early 1980s, the performance of fisheries saw a steady improvement through the past five decades. But overall, crops remain the dominant agricultural activity in Nigeria. Growth performance of the agriculture sector was therefore largely driven by the performance of the crop sub-sector, despite its low yields (Figure 2). The low yield could be attributed to growth of output derived mainly from acreage expansion and favorable weather. The sector has been hampered by the lack of investment in improved farming technology. Over-farming of fragile soil has worsened the problem of soil degradation (UN, 1999). The country is yet to make significant use of its irrigation potential estimated at about 3.14 million ha. The area actually under irrigation is officially estimated at about 40,000 ha, which is less than 1 percent of irrigable land actually in use (Takeshima, 2010). Dealing with the uncertainty of rain-fed agriculture is increasingly becoming a serious concern in view of climate change phenomena that is influencing seasonal patterns and making it increasingly difficult for non-irrigated farmers to plan on the basis of past trends.

Figure 2: Current and Potential Yield for Selected Crops (MT/ha)



Source: NBS (2009)

Agriculture has always been recognized as a leading sector in post-colonial Nigeria. During the period up to the dominance of petroleum and gas (1974), agriculture was seen as the main source of employment, a base from which the new nation could feed its expanding population, a principal avenue for foreign exchange earnings, the basis for providing the raw material necessary for industrial development, and the source for government revenue (Kayode et al., 1989:10). On the latter, public policy towards agriculture prior to 1974 has been characterized by many analysts as taxing agriculture to finance other sectors through export taxes, producer taxes, and use of marketing board surpluses. The policies on agriculture in the immediate post-independence period were driven by five national development plans; the most relevant to agriculture were the First National Development Plan (1962-68) and Second National Development Plan (1970-74). The tax resources from agriculture

¹⁷Urban was defined as a settlement with 5,000 population in 1952 and subsequently 20,000 in the 1963 National Population Census (Refer to Olujimi, 2009).

¹⁸These issues are discussed in detailed later in this paper.

¹⁹Refer to acreage and yield figures for Nigeria in NBS (2009).



however were directed, not to modernize agriculture but to support import-substitution industrialization process as well as build up transport, water, education and health infrastructure (Olayide, 1976). Thus, crop exports, which were a substantial foreign exchange earner in the early post-colonial era, declined sharply after 1970. Similarly, apart from poultry and piggery enterprises that experienced some modernization, very little progress was made in the rest of the livestock (including fisheries) sub-sector. The demand for livestock (and fisheries) products outstripped supply leading to price rises and increased imports.

The post-1974 period marked a turning point in Nigeria's agricultural policy for two reasons: First, the natural calamities (drought, and attack by pest) that took place in the north during 1972-74 revealed the intense fragility of a technologically backward peasant agriculture; second, the post-1974 dominance of the petroleum and gas sector meant that the country no longer had to depend on foreign exchange surpluses generated by agriculture. More importantly, the deterioration of the performance of the sector engendered a drive to increase government intervention, which resulted in a wide range of agricultural policies, programs, and projects, some of which involved government directly in agricultural production. A large proportion of the substantial revenues that accrued from petroleum and gas were subsequently diverted to agriculture, principally in the form of large-scale agricultural development programs: the National Accelerated Food Production Program (NAFPP), Agricultural Development Project (ADP), and the River Basin Development Authority (RBDA).

The rationale behind the new approach to agriculture was to promote the adoption of new technologies by farmers. Apart from these programs, the government in an attempt to popularize agriculture and increase domestic food production launched



additional programs, the most popular of which were the Operation Feed the Nation (OFN) in 1976 and the Green Revolution in 1980. To support these, the government also enacted some legal changes: The Nigerian enterprises promotion decrees of 1972 and 1977 and the Land Use Decree of 1978.

The 1972 decree (known as the Indigenization Decree) categorized all enterprises into two schedules. The first, with 28 enterprises, was reserved exclusively for Nigerian investors. The second, with 25 enterprises, was opened to non-Nigerian investors, subject to a minimum of 40 percent equity participation by Nigerians. Following a review, the 1972 decree was replaced by the Nigerian Enterprises Promotion Decree of 1977 in which all enterprises were categorized into three schedules. Enterprises in the first schedule were reserved exclusively for Nigerians; the second were those which required a minimum of 60 percent equity participation by Nigerians; the third were those in which Nigerians must have a minimum of 40 percent participation. The revision had a substantial negative effect on foreign investment in Nigerian agriculture. Under the Land Use Decree, customary user rights to rural land were granted by the local government. There were also provisions for soil survey and land evaluation facilities for the production of a comprehensive soil map of Nigeria. Certificates of occupancy are issued by the state governors. The Land Use Decree

²⁰Refer to Lewis (1954), which noted that the role of agriculture included generating the relevant surplus to finance the capital formation necessary for industrial growth; and the challenge to this view by Hayami and Ruttan (1971) on the grounds that modern agriculture requires heavy investment in irrigation and water control to need internalization of its surplus.

²¹This was due in part to the drought and pest attack that occurred during 1972-74 and 1975 respectively and especially their impact on the groundnut industry in northern Nigeria.

²²Refer to the National Food Security Program document (FMAWR, 2008), which outlines the major policy initiative over the past five decades.

²³Both NAFPP and the ADPs were launched in 1972 and initially covered the Gusau, Funtua, and Gombe as enclave projects (FMAWR, 2008).



has so far failed to resolve the issues related to land acquisition' especially with respect to land fragmentation and therefore the decree is under review (Onyebinama, 2004).

The government also intervened in the inputs market: It (i) centralized fertilizer procurement and distribution in 1975, and established a superphosphate fertilizer plant with the aim of reducing the country's dependence on foreign sources for fertilizer supply; (ii) created a national network of agro-service centres to facilitate the distribution of modern inputs, including the provision of tractor and farm machinery services to farmers; (iii) established the National Seed Service (NSS) in 1972 to produce and multiply improved seeds for rice, maize, cowpea, millet, sorghum, wheat, and cassava; and (iv) established eleven River Basin Development Authorities in 1977 with overriding responsibility for the development of the country's land and water resources, prepare land for agriculture, develop irrigation facilities, and construct dams, boreholes, and roads. Preliminary research findings on the fertilizer distribution system by Banful et al. (2009) indicate that federal involvement in procurement and distribution has not necessarily brought fertilizer to the end-user when it is required or at the desired quantity. The agro-service centers and the National Seed Service have also failed to enhance adoption rates (Takeshima et al., 2010b)

Paradoxically, this period of massive investments in agriculture and generous credit policy was also associated with the decline and eventual collapse of export crops. The first explanation is that the resources put at the disposal of agriculture and the development programs were aimed at promoting food mainly for domestic consumption. But since some of Nigeria's main export crops, groundnuts and palm oil for example, are also basic foodstuffs widely consumed throughout the country by



all social strata, failure to target these crops resulted in decline in exports. The second reason had to do with increasing demand, especially from the urban sector. The emergence of petroleum and gas led to the creation of numerous new opportunities for paid employment as well as a sudden and substantial improvement in wage incomes in the urban areas; this, obviously, led to yet more migration to the towns. With a rapidly rising urban population enjoying reasonable incomes, the demand for food rose to unprecedented levels resulting in price increases. This resulted in the cultivation of food crops to become more lucrative than export crops, despite the increases in producer prices offered to producers of the latter in the interim (although subsequently the declining terms of trade played a role in discouraging exports). In the absence of significant productivity increases, substantial supply gaps in food crops emerged, which were subsequently met by imports.

Recognizing the weaknesses of past policies, the beginning of the twenty-first century brought in two significant policy pronouncements. First, the presidential initiatives of 2001 emerged out of the government's concern that the agricultural sector's capacity to provide the nation's food and industrial raw materials had diminished as well as the sector's ability to generate foreign exchange. The

²⁴In its application at different tiers of government, at the state level, states could alienate any amount of loans for development projects and this was done in the 1970's for the RBDA's (Kayode et al, 1989). Also, local governments had the right to grant customary user right for rural land which in its application did not forestall the problem of land fragmentation.

²⁵In an attempt to achieve the objectives of an agricultural mechanization policy, an Agricultural Cooperatives Policy was developed to mobilize rural people for social and economic development. The mechanization program has largely not worked because of its emphasis on large tractors at the expense of improvements that could be made to simple agricultural tools.



initiatives specifically sought to encourage the production of cassava, rice, vegetable oil, tree crops, livestock, and aquaculture products. Second, the seven-point agenda (which derived from the NEEDS initiative) emphasized the development of modern technology, research, and a financial investment into research. It also emphasized the production and development of agricultural inputs to transform the sector to 510 fold increase in yields and production. The increased productivity envisioned by this agenda was expected to result in massive outputs for domestic and commercial use as a result of the transfer of technological knowledge to farmers. These policies form the basis of the strategic approaches adopted in the recent past but also raise questions about the consistency of policy over the years (Manyong et al., 2003). Recently (post 2002) the government has become a signatory to the African Unions Comprehensive Africa Agriculture Development Program (CAADP) purported to promote an integrated regional approach to agricultural planning and policy to support dealing with issues of food security and hunger.

Emergence of Manufacturing and Industry: Nigeria's immediate post-independence industrialization policy was based on the principles of import substitution, which was intellectually supported by United Nations (UN) institutions like UNIDO and UNDP. It was applied in the processing of agricultural and other primary raw materials for exports that had begun pre-independence. This included food production (sweets, soft drinks and confectionaries) as well as other largely assembly type industries (radios, bicycles, sewing machines, cards, roofing sheets, rubber tires, plastic shoes, paints, car batteries, etc.) (Kayode and Usman, 1989). To minimize the cost of inputs, the duties on imported raw materials and capital equipment were reduced, although tariff rates on a large number of finished goods were raised.



Thus, by the end of the 1960s, imports of capital equipment and raw materials constituted over seventy per cent of the country's total imports' as compared to less than fifty per cent in 1960 (Ogun, 1987). Although the negative foreign exchange effects (the tariff and quota protection acted as disincentive to export) of these policies were temporarily cushioned by the emerging dominance of the petroleum and gas sector in the 1970's, it had more severe and long-term implications for the development of a vibrant industrial sector with strong linkages to agriculture and the primary sector at large. What is noticeable from Nigeria's experience with import substitution is that imports of intermediate goods and raw material increased. As a result, over-capacity was built at the final stages of industrial production and too little capacity at the intermediate stages, which after all are the ones endowed with the most significant linkage effects (with agriculture) and the ones that could lead to the development of locally adapted technology.

Also characteristic of Nigeria's industrial policy was indigenization as articulated in the Second National Development Plan. While the enterprises promotions acts reserved some enterprises solely for Nigerians, more importantly, the iron and steel complex, petrochemical industries (not the downstream industries), fertilizer

²⁶It is worth noting that the increasing urbanization deprived the agriculture sector of able-bodied youth, and in the absence of modernization of farming techniques and a consequent increase in productive capacity, the prospects of the sector feeding the nation was weak.

²⁷This encompassed, power and energy, food security, wealth creation, the transport sector, land reform, security, and education (Federal Government of Nigeria, 2008).

²⁸The agriculture component of the Seven-Point Agenda is spelled out in the Five-Point Agenda of FMAWR. The key programs of the Five-Point Agenda are: Developing Agricultural Policy and Regulatory Systems (DAPRS), the Food Systems Network (FOODSNet), the Rural Sector Enhancement Program (RUSEP), and the Agricultural Commodity Exchange Market (ACCOMEX). The Five-Point agenda's key agriculture programs also include Raising Agriculture Income and Sustainable Environment (RAISE), Maximizing Agricultural Revenue in Key Enterprises (MARKETS), and Water Aquaculture and Environmental Resource Management.

production, and petroleum products were initially reserved only to the public sector. But since 1982, this has been reviewed and a policy of joint-venture is currently being promoted. As will be noted later in this paper, it is the poor performance of public sector production agencies that could account for the overall failure of the industrial policy. More emphasis has been placed lately on the policy to promote foreign investment, raise the level of intermediate and capital goods produced locally, and to promote the establishment of industries which cater for exports. In view of the above, the Central Bank of Nigeria (2000) classifies Nigeria's industrial transformation into three phases: pre-independence to the end of the civil war (phase 1, 1954-1970); end of civil war to the beginning of the SAP (phase 2, 1970-1986; and post-SAP (phase 3, 1986-till now). Three sub-sectors characterize industry; they are manufacturing, mining and power (electricity) production.

Nigeria's manufacturing is dominated by small and medium-term enterprises (SMEs). A 2004 survey of manufacturing establishments (Table 3) estimated that about 95 percent of manufacturing establishments is SMEs. The consumer goods industries dominate manufacturing activities, accounting for about 75 percent of value added and employment in the subsector and are usually sole- propriety private sector owned (Figure 3). As will be expected, manufacturing and industrial

²⁹The role of CAADP in promoting agricultural transformation in Nigeria is not yet clear. I have argued elsewhere that the over-emphasis of planning under CAADP should be shifted in preference to promoting regional trade in agriculture. On CAADP generally, refer to ReSAKSS web-site: www.resakss.org.

³⁰Import substitution was supported by economists then on two grounds: (i) the type of intervention in foreign trade may offset existing distortions, thereby increasing efficiency; and (ii) promoting self-sufficiency decreases dependence on the terms of trade and uncertain foreign markets (Prebisch, 1959 and Chenery, 1960).

activity is concentrated around the major urban centers of Lagos metropolitan, Kaduna-Kano axis, Port-Harcourt-Aba axis, Ibadan, and Onitsha-Nnewi axis where there are extensive network of roads, power (electricity) supply, pipe-borne water and access to banking facilities.

Table 3: Distribution of Registered Establishments by Year of Commencement and Employment Size

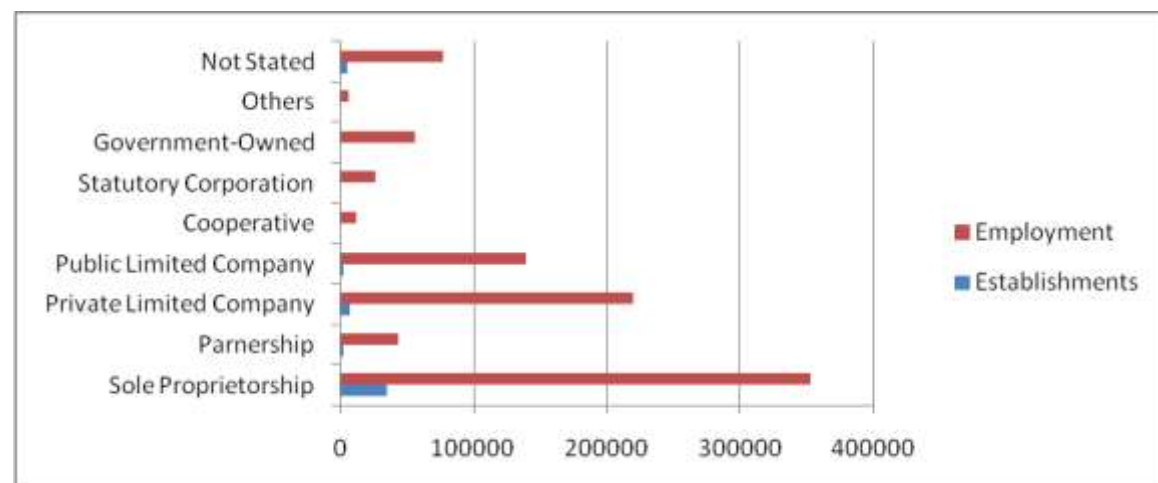
All States	Not Stated	1-4	5-9	10-19	20 - 49	50 - 99	100 - 499	500 - 999	1000+	Total
1900 or before	-	1	4	5	11	-	1	-	-	22
1901-1920	-	2	10	4	6	3	1	1	2	29
1921-1940	-	10	30	18	11	7	5	2	4	87
1941-1960	1	91	214	129	73	26	45	3	3	585
1961-1980	11	758	3,348	1,516	689	174	217	26	17	6,756
1981-2000	72	4,046	7,186	6,649	2,202	394	373	36	16	30,974
2001 and after	43	829	4,287	1,686	620	86	43	3	3	7,600
Not Stated	971	1,721	5,479	1,983	746	183	147	14	16	11,260
Total	1,098	7,458	30,558	11,990	4,358	873	832	85	61	57,313

³¹There was minimum national industrial planning during phase one; the second phase was marked by the centralization of industrial planning and excessive involvement of the federal government in industrial activity. In phase 3, government is seeking to rationalize its role by reducing its direct participation in industrial enterprises.

³²SME is defined as establishment having employment of 5-99 (establishments with employment of less than 5 were not counted), with large-scale enterprises defined as establishment employing greater than 100 (National Bureau of Statistics).

³³The private sector dominate the consumer goods manufacturing, while public sector investments dominate the capital intensive heavy industry, accounting for an estimated 66.7 percent of the total investments in intermediate and capital goods industries (UNDP, 1995). However, the public sector (federal and state governments) also tended to be involved in many joint venture projects in the consumer goods industries involving domestic and foreign capital.

Figure 3: Ownership Structure of Nigerian Manufacturing (in numbers)



Source: NBS (2009)

The evolution of the manufacturing sector in Nigeria reveals a number of constraints and characteristics that account for its failure to pull along agriculture, thereby serving as the dual engines of transformation. Manufacturing sector surveys by NBS (2001, 2003 and 2004) have repeatedly pointed out that (a) Nigerian establishments tend not to invest at all (beyond the initial investment) or to invest very little; (b) the sector is characterized by high capacity under-utilization; and (c) only a small fraction of establishments engage in exports, the vast majority serving only the domestic market. For growth to occur, investment rates have to increase. The survey evidence suggests that less than 50 percent of establishments reported non-zero investments, with investment rates being only large enough to balance depreciation and unable to cover much expansion. As of other SSA countries, large establishments are more likely to invest but tended to have lower investment rates (Soderbom and Teal, 2002). Low investment could be attributed to low domestic

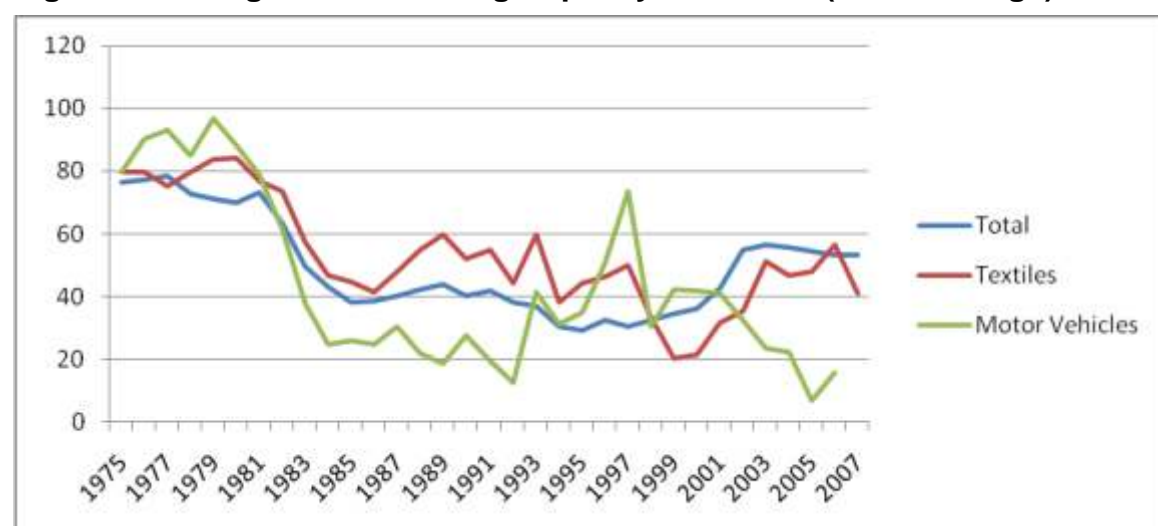
savings within the economy, undeveloped banking environment and weak inflow of foreign investment attributed to poor enabling environment. On the latter, despite the establishment in 1980 of the Industrial Development Coordination Committee (IDCC), excessive bureaucracy in handling important matters concerning the investment process continue to be a common complaint by various industrialists in Nigeria (World Bank, 2010).

The twin problems of the high dependence of the Nigerian manufacturing sector on imported raw materials and the country's checked history of wide fluctuations in foreign exchange availability have meant historically high levels of capacity under-utilization (Figure 4). Large enterprises tended to have the highest capacity utilization rates and since majority of the consumer goods sub-sector with linkages to agriculture are small, the low capacity utilization issue has ramification for the interaction between agriculture and industry. Thus, although the structural adjustment program (SAP) that was adopted in Nigeria in 1986, for example, led to a reduction in government intervention in the foreign exchange and tradable goods markets such that import protection was lowered and a more liberal trading environment prevailed, cheap food imports reduced the market for domestic agricultural product and left many farmers and workers in the agro-allied industries without source of income unless they were able to switch to more profitable production (Nyangito, 2003).

³⁴A comparative study on capacity utilization of five African countries showed that Nigerian manufacturing is about 30 percent less efficient than that of South Africa but has efficiency levels similar to Ghana and Kenya and higher than Tanzania by about 15 percent (World Bank, 2007).

³⁵Nigerian establishments are estimated to be 15 percentage points less likely to export than similar establishments in Ghana and Tanzania (Soderbom and Teal, 2003; quoted in World Bank, 2007).

Figure 4: Average Manufacturing Capacity Utilization (in Percentage)



Source: CBN, 2010

The domestic orientation of the Nigerian manufacturing also had implications for its development. The establishment survey data also suggest that the proportion of establishments engaged in export remains below 10 percent. Even in sub-sectors such as food, textiles and garments where exports are relatively high, the number of establishments exporting was low, with larger and more efficient establishments more likely to engage in exports. Thus, given the lack of competition, compounded by technology gaps, the lack of adequate technical staff with good knowledge of production and design techniques for machinery and other technical processes, and numerous infrastructural challenges, the Nigerian industrial sector has also been characterized by low productivity. Within the textile industry, for example, a recent survey revealed that while the minimum wage in Nigeria in 2000 was equivalent to the minimum wage in China, the Chinese worker produced five times what the Nigerian worker produced (Ogunwusi, 2010). Furthermore, the industry was characterized by lower levels of technology advancement. These technological gaps

are demonstrated by the fact that 12 mills, representing 61 per cent of the total capacity in the 1990's spun only cotton. Although nearly 25 per cent of existing mills in the 1990's were integrated mills, modernization of spinning capacity generally lagged behind technological improvements in the weaving mills. Labor productivity in spinning operations was low because of low capacity utilization (Figure 4) and inadequate provision for on-the-job training (Ogun, 1995).

Overall, although policy efforts were made at expanding industrialization in the early post-colonial period in Nigeria, the manufacturing sector has failed to be competitive, leading to a high level of firm attrition. The policy of import substitution led to the growth of light manufacturing of mostly consumer-goods assembly-type operations for radios, bicycles, sewing machines, automobiles, production of sweets and confectionery, roofing sheets, rubber tires, plastic shoes, soft drinks, paints, car batteries etc. meant for the domestic market (Kayode and Usman, 1989). On the other hand, with the indigenization decrees of the 1970's, foreign ownership of manufacturing which had previously dominated the sector was curtailed but facilitated increased government intervention, leading to a period of government monopoly in manufacturing and a diversion from light industries to heavy industries. Government monopolized industries included steel production, petroleum refining, petrochemicals and liquefied natural gas manufacturing, edible salt, pulp and paper as well as nitrogenous and phosphate fertilizer production. These industries saw an escalation in the cost of production which coincided with unexpected surpluses from the surge in petroleum prices in 1973-1974 that availed substantial funds to the government. An era of wasteful spending, non execution of plans and abandoned projects ensued. This period saw large scale direct investments in a long list of industrial projects which neither the Nigerian government nor the rest of the Nigerian economy had any experience in implementing or operating. Consequently,



government intervention in manufacturing significantly contributed to the decline of the sector. It undermined the development of the private manufacturing sector and was characterized by large and inefficient investments (Kayode and Usman, 1989). The role of the petroleum sector undeniably is also a leading issue in the transformation failures in Nigeria.

Role of the Petroleum and Gas sector: The discovery of petroleum and its exploitation saw a decline in Nigeria's emphasis on export agriculture and a diversion of interest to the petroleum and gas sector. This had several implications for both the agriculture and industrial sectors. In the first decade of independence, primary agricultural produce were the main exports. Nigeria was the world's largest exporter of groundnut, the second largest exporter of cocoa and palm produce and an important exporter of rubber, cotton, and hides and skin. Contrary to many studies that explored the issue of the Dutch disease in Nigeria as the effect of the petroleum price boom on the industrial sector, Olusi and Olagunju (2005) explore the effect of the growth of petroleum exports in Nigeria on growth in agricultural output. Using a vector autoregressive model, the authors find a negative effect of growth in crude petroleum exports on agricultural output growth. Various diagnostic tests are used to confirm the direction of causality as running from crude petroleum exports to agriculture.

Furthermore, petroleum exploration and export was accompanied by a rise in foreign exchange earnings and the value of the naira. This not only led to the abandonment of farming as occupation for the youth, but to a change in the structure of domestic demand for food and agricultural products in favor of imports of grains, beverages and vegetable oils and fibers which Nigeria was once reputed as a leading world producer. The flooding of the Nigerian market by cheap imports



(food and non food) sustained the changing demand structure and combined with the other challenges being faced by the industrial sector, perpetuated its inefficiencies and prevented the development of appropriate linkages between industry and agriculture.

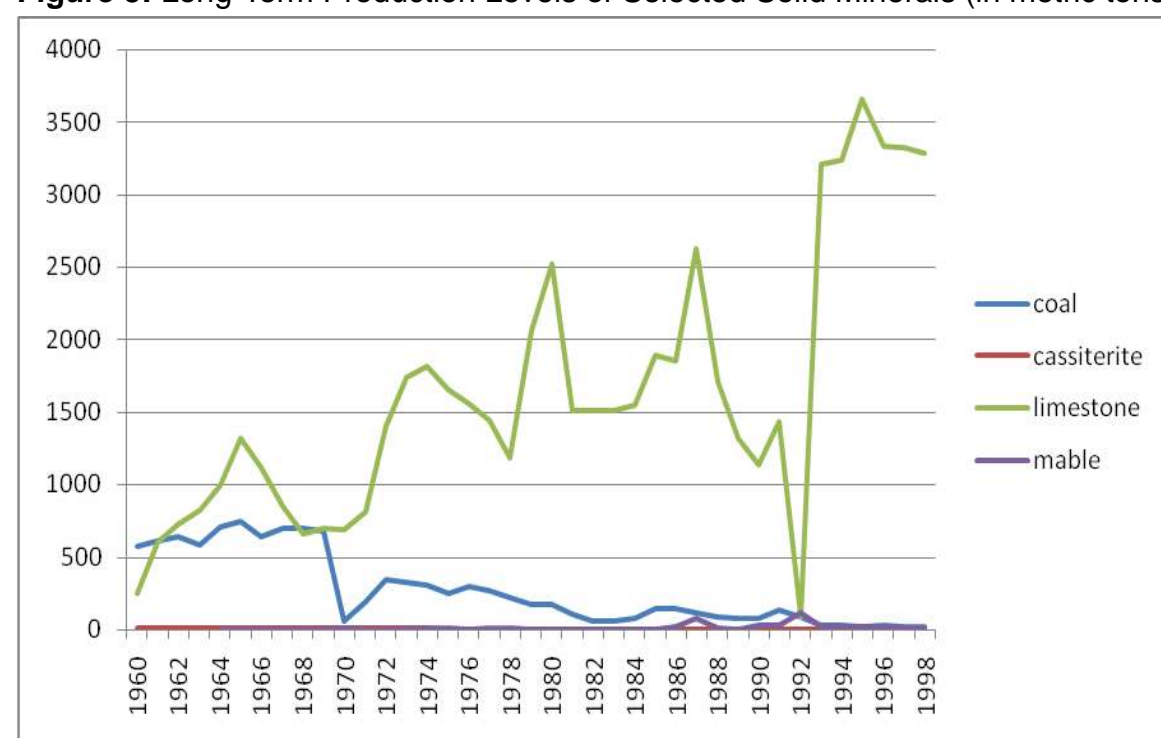
Another important effect of the dominance of the petroleum sector is its impact on the development of the non-oil mining sub-sector, which pre-dated the colonial era. Initial mining activities in Nigeria were undertaken with crude methods largely in tin, gold, coal, iron ore, cassiterite, columbite, limestone, marble (solid minerals) and other non-metallic ores. The output of commercially exploited solid minerals was generally high in the 1960s but has been declining since the 1970s, although official data captures only a fraction of actual output in the subsector (Figure 5). The de-emphasis of the other mining sector was facilitated by, in the case of coal, the energy demand shift by the Nigeria Railway Corporation from coal to diesel locomotives and the adoption of more economically viable alternative power generation sources such as gas and hydro. In addition, the problem of obsolete machinery and equipment, lack of financial resources to support the purchase of spare parts, low productivity and small-scale level of operations, especially of tin ore and columbite, made it impossible for the sector to access modern technology. This was also compounded by infrastructure constraints, such as unstable power supply, and the

³⁶As noted elsewhere, the Nigerian enterprise promotion decree of 1972 (also known as the indigenization decree) was a decree promulgated in 1972 (and modified in 1976) to set the stage for greater participation by Nigerian nationals in the ownership, management, and control of the productive enterprises in the country. The policy was also conceived as a method of enhancing the industrial development of the nation by encouraging foreign investment in intermediate and capital goods production as against foreign concentration in the consumer non-durable goods production. Under this policy it was mandated that there was at least 60 percent equity participation by Nigerians.

³⁷This is based on the argument that contrary to the situation in more developed countries where the main tradable sectors are industrial, the main tradable sector in Nigeria prior to oil discovery was agriculture.

relative high cost of production brought about by rising labor and transportation cost. In conclusion, Dutch disease played a part in the decline in agriculture but structural transformation of industry brought about by the dominance of the petroleum and gas facilitated the process.

Figure 5: Long-Term Production Levels of Selected Solid Minerals (in metric tons)



Source: CBN (2000), Table 5.14.

Effect on Spatial and Demographic Transition: A critical element of the transformation process is the nature of migratory patterns and consequent growth in urbanization. Both factors trigger substantial demographic transitions. The history of migration in Nigeria, as elsewhere in sub-Saharan Africa, reflects the specific characteristics of the nation's economic development process (Ammassari, 1994), as well as the relative stages of development in the country (Tabuchi et al., 2002). The pre-colonial history of Nigeria (characterized by traditional kingdoms and empires) mirrored a pattern of internal migration where people moved seasonally or permanently in response to climate induced factors (Table 4). Movements were in short duration for trading, as nomads in response to seasonal climate change, or as sedentary farmers in search of supplementary income. The colonial era ushered in far reaching structural changes, notably rapid improvement of transportation systems, monetization of the economy, and the development of mining enclaves and plantation agriculture which further facilitated the migratory process and dictated directions of labor movements through the post- independence era (Nwaka, 2005). Furthermore, seasonal migration of Muslim children for Koranic studies in the north of Nigeria has traditionally been important means of relieving dry season pressures on the family granary, as well as channeling external resources to rural households. In the pre-colonial era, such migratory practices played an important role in the adaptation of nomads to uncertain rainfall and frequent drought of northern Nigeria.

Table 4: Typology of Potential Climate Change Induced Migration

Nature of Climate Change	Type of Movement	Time Span
Chronic disasters such as drought, soil degradation	Seasonal labor migration Temporary circulation	3-4 months
Extreme chronic disasters drought/soil degradation	Contract labor migration	12 months
Natural disasters - severe drought/Famine/Floods	Forced/distress migration	3-4 months
Extreme disaster	Permanent migration	Lifetime

Adapted from Kothari, 2002

Similar pattern of seasonal migration existed among the Yoruba and the Igbo but for different motives. While the Igbo migrated to relieve the pressure on already fragile farmland, the Yoruba moved because of the frequency of internecine war (Nwajiuba 2005, and Adepoju 1979). This largely complementary relationship was altered during the colonial and post- independence periods by the unevenness of economic development and increasing economic pressures on peasant agriculture (Meagher 1997). Colonial taxation policies, for example, required cash payments and therefore necessitated wage work (Nkamelu and Fox, 2006). In many areas, production of cash crop led indirectly to out-migration because it disrupted the production of food crops. In addition, high taxes on cash crops led to a need to engage in wage labor to pay for food consumption. In some areas, cash cropping competed with subsistence crops for land, labor, and resources. While often more lucrative than food crops, cash crops also entailed more risk; when prices fell household income flows were threatened, resulting in the need to migrate (Amselle, 1976).

³⁸This section depended largely on analysis I undertook with Saweda, Sheu and Awoyemi (Sackey et al., 2011).

Nigeria (characterized by traditional kingdoms and empires) mirrored a pattern of internal migration where people moved seasonally or permanently in response to climate induced factors (Table 4). Movements were in short duration for trading, as nomads in response to seasonal climate change, or as sedentary farmers in search of supplementary income. The colonial era ushered in far reaching structural changes, notably rapid improvement of transportation systems, monetization of the economy, and the development of mining enclaves and plantation agriculture which further facilitated the migratory process and dictated directions of labor movements through the post- independence era (Nwaka, 2005). Furthermore, seasonal migration of Muslim children for Koranic studies in the north of Nigeria has traditionally been important means of relieving dry season pressures on the family granary, as well as channeling external resources to rural households. In the pre-colonial era, such migratory practices played an important role in the adaptation of nomads to uncertain rainfall and frequent drought of northern Nigeria.

Furthermore, the export oriented policy followed during the colonial era through early period of independence led to enhanced rural-rural migration. The cocoa, oil-palm and rubber in the south, cotton and groundnuts in the north, as well as the mines in both regions attracted significant amount of labor either as migrant tenant farmers, as farm labor and or as migrant traders (Afolayan et al., 2008). The flow was particularly from northern areas with unpredictable rainy seasons to areas where tree-crops could be worked on in the dry season, either via paid labor or on a share-cropping basis. These patterns were disrupted by the spread of oil-wealth and closure of Nigerian plantations. Another important contributor to the rural-rural migration pattern is the effect of the slash and burn/fallow agricultural technology in use at the time to allow for regeneration of soil. Demographic changes such as growing population and the limited access to land have continued to threaten this



practice. While the population density in Nigeria is low compared to many Asian countries, failure to employ new technology in agriculture continued to put land under pressure in many areas (Blench, 2003).

Although the patterns of migration described above are still ongoing, there are new emerging trends. The last quarter of the 20th century was marked by increased labor migration from several parts of the country to the main administrative and economic centers of the country like Lagos, Abuja, Port Harcourt and Enugu and to more varied destinations than ever before (Afolayan et al., 1998). There is also increasing feminization of migration in Nigeria (Dillon et al., 2010). Until recently, migration was dominated by men (de Haan, 2000; Hollos, 1991; Pittins, 1984). Permanent and independent migration by large numbers of young single women in search of higher education though a recent phenomenon, is the direct result of Nigeria's post-independence commitment to universal primary education and to an ever-widening secondary school network (Hollos, 1991). The culture of trading and opportunities for women in the civil service also provided independent incomes and permitted them the mobility that might otherwise have been difficult to justify in traditional cultural frameworks (Blench, 2003). In addition, some empirical evidence suggests marriage as a secondary reason for migration (Watts, 1983; Hollos, 1991 and Pittin, 1984).

The broad spatial patterns of population redistribution in Nigeria resulting from migration are diverse and continue to change in response to socio-political development processes (de Haas, 2006). The diversity in destination in recent years has been estimated as the share of households with a migrant relative, using data on 1,115 households from the 2004 National Living Standard Survey (NBS, 2004). The estimates ranged from 1 percent in a rural-urban migratory context to 3 percent in urban-urban context. The analysis indicated that the rural-urban migration



pattern per-se did not represent the largest group of internal migrants. The estimates indicated that the sequence of household labor movements in Nigeria is in the order of urban-urban, urban-rural, rural-rural and ruralurban respectively. Similarly, data from the 1993 Migration and Urbanization Survey (Mberu, 2005) showed that of the 58 percent migrants of rural origin, 64 percent migrated to other rural areas while only 36 percent moved to urban destinations. This migration transition (declining proportion of rural-urban migration stream in the 1990s and 2000s) contrasts the town-ward migration experienced in the fifties through the late sixties which accounted for between 6 and 8 percent of the Nigeria's rural population recorded in the 1952-55 censuses. However, the preponderance of rural-rural migration which predates the Second World War shows its historical continuities in Nigeria, suggesting that more people are moving from smaller towns to bigger towns, returning back to rural areas than those moving directly from rural to urban centers. This emerging trend in labor migration calls for a more nuanced policy intervention that recognizes the complex dynamics of livelihood and migration and the interactions among them.

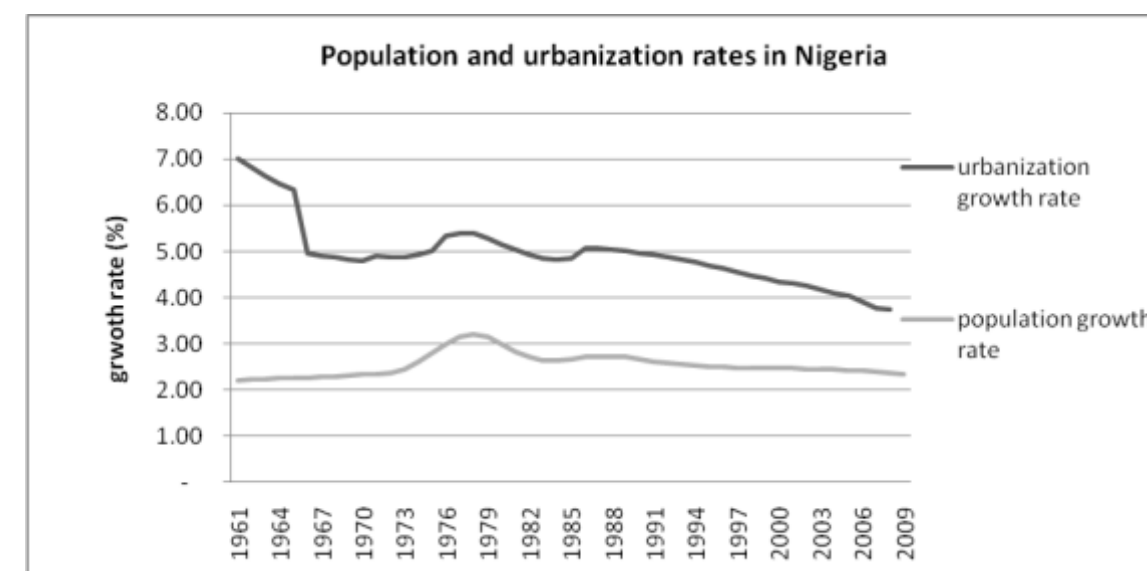
³⁹Migration of transhumant pastoralists from the northern sub-humid and semi-arid zones to the humid zone for dry season grazing still persists, changing climatic patterns, expanding tsetse fly free areas, incident and severity of bush fires, and the long period of drought in the semiarid and arid zones are altering this pattern, thereby making pastoralist settle down permanently in the humid areas (Jabbar 1993; Sodiya et al., 2009; Ayodapo, 2010 and Ahmed, 2010).

⁴⁰The Koranic student ties relate to Islamic religious education under a traditional learning system called Karatu. Karatu entails dry-season circulation of Koranic students and it is practiced by a large region of the Hausa and Kanuri-speaking people of northern Nigeria. It involves the movement of teenage boys from one community to another to study under notable mallams (scholars). They may earn income by seeking alms or selling embroidery caps, although they must largely fend for themselves, thereby taking pressure off scarce family food resources throughout the dry season (Blench, 2003).

With respect to urbanization, its origin predates the emergence of modern cities. Nigeria is one of the few countries in Africa which had many large pre-industrial cities before colonization. The largest concentration of such towns was in the south-western zone, which is by far the most urbanized area of its kind in sub-Saharan Africa. One of the major factors which explain the development of pre-colonial urbanization in this area was the continuous internecine war among the Yoruba. This forced peasants to find refuge in walled cities. Among the 36 towns in the area, six towns had populations of more than 40,000 people each by the mid 19th century (Coquery-Vidrovitch, 1993:252-255). The intra-Yoruba war (1825-1893) and the military Jihad originating from the Sokoto Sultanate, which spread from the north to the south of Nigeria, provoked huge movement of people from the north to the south of Yorubaland, and from the countryside to the walled cities. Thus, many old cities disappeared (Old-Oyo, Owu) whereas a new generation of fortified towns came into being (New Oyo, Abéokuta and Ibadan). Urban development was a process not generated in recent years, but had its origin in internal geo-political instability of the region and its attendant internal migration.

⁴¹The large plantation farms in Nigeria disappeared following the shift in government policy focus in the late 1970s from export agriculture to petroleum and gas as well as government's direct involvement in supporting commercial farms. In addition, the liberalization policy under SAP, which promoted privatization, encouraged the transfer of the few remaining plantations to the private sector. An example of the few plantation farms still in operation is the Okomu Oil Palm plantation in Benin State.

Figure 6: Urbanization and the Population Transition



Source: World Bank, African Development Indicators (various issues).

In addition, the breakup of Nigeria's four former regions (prior to 1967) into thirty six states by 1996, as well as the creation of as many as 774 local government areas and the development of the Federal Capital territory, Abuja, have fostered the growth of intermediate and small urban centers as the capitals of the new states, headquarters of the new local governments, and brought about new dynamics of internal migration within the north central zone of the country. Abuja which used to be a sparsely populated area is now the second largest city after Lagos and has become the major migration pull center (Afolayan et al., 2008; Nwaka 2005).

Overall, the urbanization pattern in Nigeria has been uneven as a result of the uneven industrialization policies of the 1960s and the population dynamics (Figure 6). Recent growth of urban concentration has focused on the Lagos/Ikeja-Ibadan cluster to the southwest, the Port Harcourt-Aba-Onitsha-Enugu group of cities to the



east, the Kano-Kaduna-Zaria axis to the north, and the chain of urban centres in the Benin-Sapele-Warri area (Mabogunje, 1977; Okafor, 1985). As noted above, these clusters attracted a disproportionately high percentage of national industrial investments, modern infrastructure and productive resources, as well as commercial, administrative and educational facilities (Nwaka, 2005). As such, migrants have strong preference for state capitals, especially those in the densely populated coastal areas as well as Abuja and Kano as major inland destinations (de Haas, 2006 and Afolabi, 2007). The preference for these locations may be explained by the ease of starting a new business, for example in the case of Abuja and high economic activities for Kano (World Bank, 2010).

The urbanization process has in a way facilitated the demographic transition in Nigeria. Nigeria has undergone a modest demographic transitions exhibiting evidence of reduced birth and death rates. Another effect of the urbanization process is a demographic imbalance in which the male/female and adult/children ratios have become skewed. Because the great majority of migrants are men of working age, the rural areas show signs of demographic imbalance, dominated by women, young children, and older people. For example, the 2008 Nigeria Demographic and Health Survey (NDHS) indicates the sex ratio (the ratio of men to women, multiplied by 100) for ages fifteen to forty-nine years was 98 and 104.1 for rural and urban sector respectively pointing to a large surplus of females in the rural areas.

The imbalance has affected the rural economy in several ways. First, it has created marked changes in the gender division of labor in agriculture. Traditionally, farm activities are allocated based on gender. For instance, men are mostly involved in energy-demanding tasks like bush slashing, stumping and ridge making while women are mostly engaged in harvesting, processing and marketing of agricultural



products. Migration of working-age men to urban areas has therefore created labor shortages which left children, wives and hired labor to fill the gap. This in turn has made the rural wage market to be more vibrant, facilitating male and female laborers to be commonly hired to perform agricultural tasks such as land preparation, weeding, and harvesting, which in the past were performed by the household itself. Furthermore, the growth in demand for hired labor has fostered an increase of seasonal and longer term intra rural migration. But the ties between the rural and urban residents persist; Gugler (1978) in his work on south-eastern Nigeria characterized the involvement of Igbo resident in the urban areas with their home villages in the rural area as 'living in a dual system'.

Second, the population imbalance has facilitated livelihood diversification. It has been noted that, one important pathway towards livelihood sustainability involves avoidance of long-term dependency on only one or two income sources. In Nigeria, non-farm incomes have traditionally been an important element in the livelihood of the poor. In several areas, as noted earlier, the population density and natural resources depletion are such that agriculture cannot possibly remain the only, or even the main, source of income. Haggblade (2005) remarked that, although

⁴²The town-ward migration (rural-urban migration) occurred in the three growth poles (Lagos/Ikeja-Ibadan cluster to the southwest, the Port Harcourt-Aba-Onitsha-Enugu group of cities to the east, the Kano-Kaduna-Zaria axis to the north, and the chain of urban centers in the Benin-Sapele-Warri area) but was first noticed in Lagos during the 1952 census. From 1953 through 1963, the population of Lagos grew at 11 percent annually. During the same period, Kaduna, Zaria and Kano growth pole grew at 7.6 percent while Enugu, Onitsha, Port Harcourt and Aba grew at 8.2 percent annually (Green and Milone, 1972; Odumuko, 1974). Available evidence showed that these phenomenal growth rates are mostly attributable to rural-urban migration (Caldwell and Okonjo, 1968).

⁴³With 49.9 percent of its population in urban areas in 2008 compared to 46.6 percent in 2005 and 23.4 percent in 1975, Nigeria has experienced a rapid pace of urbanization. Urbanization growth patterns have closely followed the population growth rate since the mid 1960's (Figure 6).



agriculture remains the backbone of most rural economies, given the scale of rural non-farm earnings, the simplistic notion of rural economies as purely agricultural is clearly obsolete. For instance, estimate from the Rural Income Generating Activity (RIGA) in Nigeria shows that 17.7 percent of rural households are involved in nonfarm wage employment (7.1 percent of total income) while 40.1 percent (10.8 percent of total income) are engaged in nonfarm self employment (Davis et al., 2007). Diversification is not a purely rural phenomenon, and the reliance of hundreds of millions of urban residents on agriculture, either for household consumption or as an income-generating opportunity, is also well documented (Smit et al., 1996; Mougeut, 2001; Nelson 1996; Egbuna 2001).

Impact on the Services Sector: The service sector in the economy plays a supporting role in the transformation process. Modernization would not be possible without the service sector (Ingehart et al., 2005). It is essential as an integrating instrument for the development of the other sectors by facilitating their production activities and making it possible to derive the gains from such production. The focus here is on economic services comprising transport and communications as well as distributive trade. The Nigerian services sector is currently growing rapidly and has mirrored the growth pattern of urbanization over the past five decades (World Bank, 2007). The rather large share of the service sector relative to GDP (Table 1)) cannot as yet be interpreted as a positive process in the transformation of the production structure as otherwise would be dictated by theory. In Nigeria, it reflects the massive expansion of public administration following the creation of states, the decline of agriculture and subsequent outflow of labor into urban informal sector, and the

⁴⁴From 4 regions, Nigeria was divided into 6 states in 1967. In 1976, 10 states and the federal capital territory (FCT) were created. In 1987, two additional states were created. A further 12 new states were created in 1991 and 6 more in 1996 leading to a total of 36 states and the FCT (Wikipedia).



consequence of rapid urbanization (following the discovery of petroleum and gas) which has led to the expansion of economic service facilities. The growth of the service sector (especially distributive trade) therefore reflects the growth of the informal sector.

A growing concern with the sector is the increase in activities that are largely informal and characterized by a dearth of data and information on their performance. The expansion of the informal services sector could be attributed to the failure of both agriculture and industrial sectors (especially manufacturing) to provide employment opportunities for the increasing population in the urban areas. The large influx of people into urban areas in the absence of employment opportunities implies that these migrants either settle at the outskirts of urban areas (where amenities are less developed and accessible) or move in to become dependants on relatives in urban areas. Retailing has subsequently become an occupation of choice because of its limited capital and infrastructure requirement leading to the multitude of street and market hawkers. This has tended to pull down the productivity and income level of the service sector, although this is associated with extremely wide disparity.

Conclusions and Reflections

Prelude: This concluding section uses the findings from the preceding sections on the nature of Nigeria's structural transformation to initiate a discussion on a way forward in the context of the government's recent development vision. The National Vision 20:2020 is used as the reference point and the discussion will focus on the key central messages from the review.

During his Aggrey-Fraser-Guggisberg Memorial Lectures on some aspects of economic development at the University of Ghana in 1968, Lewis (1969, p37) remarked that "making Development Plans is the most popular activity of the



governments of underdeveloped countries since the war, and it is also nearly their biggest failure.” Nonetheless, he acknowledged that the legitimate role of a development plan is to help create conditions favorable for growth, in particular to bring order into the planning and execution of government expenditures (a critical function of the authorities). In effect, planning forces governments and its agencies to review their objectives, both the short- and long-term goals. Governments are thus forced to adopt priorities following a review of all the problems of the economy, whether private or public, and to initiate policies needed to resolve them in order to stimulate growth. This process thus seeks to establish targets and in a broader framework has constituted the “vision” statements or “national agenda.”

The current development vision for Nigeria is an amalgamation of previous development goals and agenda, which brings together the key principles and aspirations of the National Economic Empowerment and Development Strategy (NEEDS) and seeks to accelerate the country's economic growth and position it on a path of sustained and rapid socio-economic development aimed at facilitating Nigeria to become one of the top 20 economies in the world by 2020 (hence, Nigeria Vision 20: 2020). The vision is built of four pillars: (a) a social dimension embodying a peaceful, equitable, harmonious and just society; (b) an economic dimension, which seeks a resilient, diversified and industrialized economy; (c) an institutional dimension which envisages a stable and functional democracy in a market friendly and globally competitive business environment; and (d) an environment dimension

⁴⁵The RIGA database is composed of a series of constructed variables about rural income generating activities created from the World Bank Living Standard Surveys. The RIGA database is made up of two subsets, the household-level income aggregate or RIGA-H, and the individual wage employment dataset or RIGA-L. RIGA-H includes a comprehensive measure of household income presenting aggregated and disaggregated data on income from different sources such as crop and livestock production, household enterprises, wage employment, transfers, and non-labor earnings. The RIGA-L database includes only one component of income, wage employment, which can be analyzed at both individual and job levels.



as an embodiment of environmental consciousness and sustainable management. In its sequencing, the vision seeks to address the most debilitating constraints to Nigeria's growth and competitiveness; develop the fabric of the envisioned economy; and strengthen the capability of government to consistently translate national strategic intent into action and results by instituting evidence based decision making framework in Nigeria. How does the vision address the key messages emerging from past structural transformation efforts?

Central Messages: Four critical messages related to the structural transformation process are embedded in the preceding review. They are:

- * The economic history of Nigeria is characterized by missed opportunities for growth. Nigeria failed to leverage the resource boom of the late 1970s to achieve fast and sustained growth. Also, the productivity improvements in agriculture which was necessary to fuel industrial expansion did not materialize. Instead, the oil boom fostered the misguided policy of import substitution which was short-lived and did not produce productivity improvements in industry. As such, long-term growth has been erratic.
- * The demographic transitions took place, albeit rather weakly, despite the inability of the structural transformation process to develop opportunities for sharing the fruits of growth with all Nigerians. Instead, wide disparities in access to resources and subsequent income levels emerged. The failure to develop various infrastructural sectors has led to movement of the population to a common geographical point of convergence urban centers. About one half of Nigerians live in urban areas, of which about 43 percent live in poverty (Table 7). The absence of growth and development in the rural



areas feeds the migration flows to urban areas, giving birth to peripheral suburbs burgeoning around already congested metropolis. The informal service sector (akin to subsistent agriculture) has become the fastest growing economic activity.

* The quality of government deteriorated as most plans failed to achieve their goals and accountability requirements dawdled. Policy inconsistencies and reversals reflected unclear national agenda. As noted by Lewis (1969:74) on the transformation (modernization) process in Africa, “the educated African elite grew very slowly, and had little economic or political effect on what had been happening. As for the politicians, they came in only at the end of the process, not to promote modernization, but to reap the benefits of what had already happened. They were not men with a new economic vision...”

The messages are backed by the current summary state of the economy (depicted in Table 5) as compared to Nigeria's African and Asian comparators as well as other low income countries.

This brings us to the central question of this analysis: Given its quest to join the top 20 advanced countries in the world, what are the key elements of the development agenda that needs to be followed to bring structural transformation on course? From the central messages of this analysis, the first priority is to seek fast and sustainable growth in the context of an appropriate macroeconomic framework. Second, reform

⁴⁶The discussion excludes social services, which covers education, health and water supply and focuses largely on distributive trade.

⁴⁷In recent years, based on NBS data, the services sector (both economic and social) has grown at 3.2 percent during 1997-2000; 13.8 percent during 2003-2005; and 13.1 percent during 2006-2008. This growth is much faster than for agriculture and industry (Table 1).



of agriculture, which currently provides the livelihood of close to 60 percent of the population (Table 2), along with rebirth of the rural economy, is suggestive from the findings of the review. Without agriculture, industrial growth, which is a key element of modernization, may be stunted. Third, dealing with infrastructure limitations stands critical for achieving the key objectives of the preceding two themes. Fourth, growth will mean little to the estimated 80 million Nigerians that lived in poverty in 2004 if they are not given the opportunity to access its benefits. For most of them, better human capital formation mechanisms and improved markets in which to sell that capital, will be the answer. Finally, it will be necessary to deepen the decentralization process in an effort to deal with democracy and governance concerns emerging from increased urbanization and pervasive informality.

⁴⁸The failure of development planning has been a topic of much debate; refer to the famous dialogue between Oskar Lange, Abba Lerner, Von Mises, and F. Hayek in the 1930s and 40s (see Lerner, 1946).

⁴⁹The NEEDS, launched in 2004 by President Obasanjo's administration, aimed to implement a priority action plan for wealth creation, create seven million new jobs, alleviate poverty and eliminate corruption during its first four years implementation cycle (2004-2007). NEEDS was a medium term strategy, which shared the country's long term goals of poverty reduction, wealth creation, employment generation and value orientation. It however failed to achieve all its basic objectives (Center for Democracy and Development, 2008).

⁵⁰The process of developing the vision included the setting up in May 2009 by the President Yar'Adua's administration the National Council on Vision 2020; inputs from ministries, agencies, state and local governments as well as the private sector with the National Planning Commission playing a co-coordinating role. It also involved the analysis of 29 thematic areas and the participation of 12 special interest groups including the legislature, judiciary, media, women, youth, traditional rulers, religious groups, security, Nigerians in Diaspora, persons with disability, labor and the civil service. In November, 2009, the Nigeria Vision 20:2020-Economic Transformation Blueprint for Nigeria was released to the public.

⁵¹In his review of the vision document, Igbuzor (2010) points out some positive aspects of the strategy including the introduction of integrated sectoral planning, cluster based approach to industrialization, performance management and accountability system for the public service and plans to institutionalize monitoring and evaluation.

Table 5: NIGERIA Selected Economic and Social Indicators*

	Nigeria	African comparators a/	Asian comparators b/	Low-income Countries
Economic Indicators				
GNI per capita (current US\$)	400	240	717	506
Agriculture value added per capita (constant 2000 US\$)	104	81	118	100
Manufacturing value added per capita (constant 2000 US\$)	17	24	137	60
Service, etc. value added per capita (constant 2000 US\$)	85	91	279	207
Social Indicators				
Immunization, DPT (% of children ages 12-23 months)	25	78	74	64
Mortality rate, infant (per 1000 live birth)	100	85	54	75
Mortality rate, under 5 (per 1000)	194	131	69	115
School enrolment, primary (% net)	68	68	86	79
School Enrolment, secondary (% net)	27	14	41	40
Infrastructure Indicators				
Road density (km of road per 1000 sq. km of land area)	21	6	79	..
Telephone mainlines (per 1000 people)	7	5	27	30
Electric power consumption (kwh per capita)	97	151	348	374
Improved sanitation facilities, urban (% with access)	53	50	72	61
Improved water source, urban (% with access)	67	79	88	88

- *Based on 2006 data to permit international comparability. Nigeria's indicators have improved substantially since then.
- a/ The African comparator countries are Ethiopia, Mozambique and Tanzania (un-weighted averages).

- b/ The Asian comparator counties are Bangladesh, Indonesia, and Pakistan (un-weighted averages).

Source: World Bank: World Development Indicators (various issues).

Opportunities for Accelerated Growth: Putting the economy on a rapid and sustainable path has been the focus of the authorities since the launching of NEEDS in 2004. Reaching a higher growth plateau, however, requires a multi-dimensional approach. Both macro and micro interventions are necessary maintaining prudent fiscal stance, completing the reform of the financial sector, fostering private sector participation in infrastructure, diversifying the rural economy, and protecting the environment. The macro interventions are well underway, but structural reforms of the public finances that seek to improve the efficiency of public investment would need to be vigorously pursued. A review of the efficiency of public investment by Diao et al. (2010) noted that growth in the agricultural sector and rural economy depends on public investment in both agriculture and non-agriculture (i.e. infrastructure, education, health, etc.). Estimated outcomes of required agricultural spending will be quite different when possible impacts of increased non-agricultural spending on agricultural growth are taken into account. Given the current inefficient agricultural spending patterns, the required agricultural spending estimated by Diao et al. (2010) is extremely high (23.8 percent in annual growth). Improvements in investment efficiency can lower this rate to 13.6 percent. Public sector investment has generally been characterized by low level of efficiency as evidenced by Nigeria's high incremental capital output ratio (ICOR) levels. Clearly, improving investment efficiency is the most important step for the Nigerian government to effectively support accelerated agricultural growth.

Table 6: Nigeria - Investment and Savings Trends (in percentage of GDP at current prices)

	1975-84	1985-89	1990-98	2000	2001	2002	2003	2004
Gross Domestic Investment	22.3	15.1	18.6	20.3	24.1	26.2	23.9	22.4
Public	-	-	9.1	9.6	13.8	10.0	9.7	9.1
Private	5.2	6.1	9.2	10.7	10.3	16.2	14.2	13.2
Gross Domestic Savings	21.5	17.7	23.2	-	-	-	-	-
Gross National Savings	20.6	17.0	15.7	32.0	28.6	14.5	21.1	27.0

Sources: Data for 1975-98, from World Bank (1999), African Development Indicators 2000, Washington DC. Data for 2000-04 derived from World Bank (2007).

Beyond efficiency, investment levels have generally been lower than comparable economies and trended downward in the last three decades (since mid-1970s). Boosted by the oil boom in the 1970s, investment levels were high (largely in public works to primarily support the building of import-substituting industries), but have declined as a share of GDP from over 30 percent to around 22 percent in mid-2000 (Table 6). Overall, investment level has exhibited significant pro-cyclicality largely due to its dependence on oil revenues. Private investment has tended to dominate public investment, largely because investment in the oil sector (which is mainly foreign private sector) has been sustained at high, though fluctuating levels relative to GDP, while non-oil private fixed investment (attributable to domestic capital) has been low and declining. Thus, there is the need to capitalize on the considerable scope for investment in the non-oil sector to drive growth and diversification of the

⁵²As part of the requirements of CAADP, IFPRI provided assistance to the FMARD in estimating the investment requirement in agriculture to meet the CAADP growth target. Diao et al (2010) addressed two questions: What are the potential sources of growth in the economy, and what investments are needed to exploit that potential? The former required economy-wide analyses of the implications of alternative economic growth scenarios; the latter used econometric methods to estimate returns to public investments in the context of pro-poor growth.

economy.

Despite high levels of poverty (see below), Nigeria's large population could in principle be a source of domestic consumption to support rapid growth in the medium-to-long-term. Public consumption has been the driving force in the past, but this has been very erratic on account of its dependence on oil revenues. The growth of private consumption has generally followed the same pattern as that of the public, but has tended to be erratic on account of uncertainties and contractions in the economy. Since private consumption could be the driving force for aggregate demand (besides exports), Nigeria would need to explore options for stimulating private demand, which could significantly come about by spreading the benefit of its oil wealth, thereby reducing the high levels of poverty and inequality (see below).

At the microeconomic level, basic concerns with production would require attention. Policy interventions at the micro level, however, needs to be more cognizant about sectoral interactions and linkages than has been in the past. An understanding of the inter-linkages in the modern Nigerian economy and the growth drivers is provided by the analysis of the social accounting matrix (SAM) for Nigeria (Nwafor, et al., 2010) and the use of the dynamic computable general equilibrium (DCGE) model (Diao, et al., 2010).⁵⁶

⁵³Trends in the national savings rate have generally reflected the investment rate both in levels and pro-cyclicality, with the residual being filled in by foreign savings. Foreign savings have thus been extremely cyclical (Refer to World Bank and IMF data sources).

⁵⁴Real government consumption expanded rapidly during the 1970s, contracted sharply in the 1980 before recovering modestly since then.

⁵⁵Exports are widely seen as an important driver of economic growth at the macroeconomic level. Besides oil, Nigeria's non-oil export performance has lacked dynamism, declining substantially since the 1970s. The role of exports is not dealt in this paper; nevertheless it is an important issue requiring focus by the authorities in Nigeria.

The 2006 Nigeria SAM (the latest available) shows that the mining sector, which is dominated by petroleum and natural gas, has the largest GDP share in 2006, reflecting the country's high dependence on the petroleum and gas sector. Nigeria also remains essentially agriculture-based (with 29.7 percent of GDP share), with crops playing a dominating role by accounting for 88.1 percent of Agricultural GDP. Like in other sub-Saharan African countries, the Nigerian crop subsector is labor-intensive. More than half of household income comes from labor and it is spent largely on crops and other agricultural goods.

Table 7: Growth decomposition in DCGE Model (in percentage)

Share in the economy	In GDP	In AgGDP	In NagGDP
Land	11.0	37.0	
Labor	45.7	59.4	39.9
Capital	43.3	3.6	60.1
Contribution to growth	To GDP growth	To AgGDP growth	To NagGDP growth
Land	9.5	33.3	
Labor	20.2	21.2	21.7
Capital	31.6	5.0	41.2
TFP	38.7	40.6	37.1

Source: Diao et al., 2010.

⁵⁶The Nigeria SAM portrays the economy in 2006, the most recent year for which sufficient data are available from the publications of the National Bureau of Statistics (NBS), the Central Bank of Nigeria (CBN), and the Federal Ministry of Agriculture and Rural Development (FMARD). Data were also sourced from an earlier SAM developed by the UNDP (1995) representing the country's economy in 1989.

⁵⁷The three main agro-ecological zones are: humid forest zone in the southern states, moist savannah in the central states, and the dry savannah that covers the northern states (Maziya-Dixon, et.al 2004). Each of these could be split into east and west to yield six geo-political zones.

In terms of the growth decomposition of the economy as illustrated by the DCGE model (Table 7), factor contribution to growth depended on the growth rate of each factor and its share in value added. For the economy as a whole, growth is largely influenced by labor and capital, while labor dominates in its contribution to GDP in agriculture (AgGDP) and capital dominates with respect to non-agriculture GDP (NagGDP). In addition, sustainability of growth depends on productivity change, assumed to exert its influence exogenously at the sector levels across the six agro-political zones through total factor productivity (TFP) changes. Thus, the calculation by Diao et al. (2010) suggests that for the economy as a whole, 61.3 percent of growth could be attributed to factor accumulation while 38.7 percent comes from TFP growth. Similarly, almost 60 percent of agricultural growth could be attributed to land expansion, increased labor supply and capital accumulation, whereas productivity can only explain 40 percent of growth. Within the crop sector, productivity gains come both from improvement in yield and more efficient allocation of land to produce those commodities with higher returns.

Table 7 also reflects a high level of duality between agriculture and non-agriculture, with the non-agriculture sector further exhibiting a glaring duality between oil and non-oil. We deal with the reforms of the agriculture sector later in this review. The dualities in Nigeria's non-agricultural sector and weak inter-sectoral linkages have had substantial implications for growth in the past. The oil economy has high productivity, it is competitive, operates with modern technology and is externally focused (World Bank, 2007). It has limited linkages with the non-oil economy (including agriculture), which in contrast has low productivity and competitiveness, operates with outdated technology (except for few modern manufacturing establishments) and essentially produces for the domestic economy. In each of the major sub-sectors in the non-oil economy (excluding agriculture), there is also a



sharp divide between a small number of highly productive, internationally competitive producers and a very large number of small producers characterized by high level of informality and low productivity. Dealing with the inherent duality and informality within the economy, thereby seeking productivity improvements in both agriculture and non-agricultural sectors, should be central to the reforms goal of the economy. Providing incentives to formalize will facilitate inter-sectoral linkages, especially in manufacturing.

Reforms of Agriculture: It is now widely recognized that reform of agriculture should go hand in hand with interventions to revive the rural economy (World Bank, 2008). After many years of unclear policy directions, the Federal Ministry of Agriculture and Water Resources (FMAWR), in responding to the Seven-Point agenda, developed the National Food Security Program (FMAWR, 2008). The vision of the program was to ensure sustainable access, availability and affordability of quality food to all Nigerians, in accordance with the spirit of the 1996 World Food Summit held in Rome, and for Nigeria to become a significant net provider of food to the global community. The program set as its goals to (i) significantly improve Nigeria's agricultural productivity in the short-term; (ii) expand and improve large-scale production, improve storage and processing capacity, and provide the required infrastructure to support food supply stability in the medium-term; and (iii) seek to derive more than 50 percent of the country's foreign exchange through agricultural exports in the long-term.

Subsequently, the Government announced the Nigeria Vision 20: 2020, which seeks a modern technologically enabled agriculture sector that fully exploits the vast agricultural resources of the country, ensures national food security and contributes significantly to foreign exchange earnings. To this effect, the NV20:2020 outlines the following strategic goals for agriculture for the next ten years (2010-2020): (a)



Rehabilitate and complete existing irrigation projects, establish new ones across the nation and provide incentives for the development of new community-based and privately initiated irrigation projects; (b) facilitate acquisition of farmlands and title holdings for agriculture production through an intensive review of the Land Use Act and encourage commercial agriculture through Public-Private Partnership (PPP); (c) significantly enhance the level of production, adoption and utilization of appropriate technology and mechanization of small, medium and large scale farms, making adequate provision for utilizing home-grown technology, promoting greater use of biotechnology tools in the selection and breeding of crops, livestock, fisheries and forestry, promoting the use of "green" technology to ensure sustainable agricultural production; a safe and clean environment and adopting the use of natural river and/or stream flow; solar and wind to generate electricity to power agricultural equipment such as irrigation pumps; and (d) create a new generation of farmers by incorporating modern technology, especially ICT (e.g. farmer information call services), incentives (e.g. scholarships, grants, soft loans), and professionalize agriculture to attract the youths and new graduates into agricultural production, processing and marketing in order to sustain agricultural growth through the entire value chain.

While largely on the right direction, a critical limitation of the agricultural strategy is in its implementation. First, translating ideas into programs for financing is undertaken through a medium-term sector strategy (MTSS), which constitutes the plan document for budget purposes. But while the preparation process are technically sound, resource release and project implementation oversight are fraught with

⁵⁸This form of discontinuity in which output is dominated by large number of small operators coexisting with small numbers of efficient established enterprises is also characteristic of the agriculture sector.



inadequate consultation leading to resource allocations that may not match the original planned objectives. More recently (2010), the government in responding to its commitment with CAADP has initiated a parallel investment plan (the National Agricultural Investment Plan), which contains some projects from the MTSS that are deemed high priority. Secondly, uncertainties with project financing tend to significantly delay project completion, thereby reducing the efficiency of capital. Until recently, public expenditures on agriculture were very low and tended to be concentrated on a few politically targeted areas (World Bank, 2008). Dealing with the limitation of expenditure allocation and implementation in the agricultural sector is a major requirement for turning the sector around; there is no evidence so far to suggest that recent output improvements in the agricultural sector could be attributed to government policy intervention.

⁵⁹An internal review of the execution of the 2008 MTSS by FMAWR concluded that (i) budgetary resources allocated to many of the projects were grossly inadequate; in some cases, the amount allocated was less than half of what was requested or none at all, thereby halting project implementation; (ii) releases during the first two quarters were generally very low or none at all, thus hampering the ability of the implementing agencies to execute projects according to schedule; and (iii) despite the resource constraints, a significant number of un-programmed projects were supported in the capital budget. Of the N150 billion appropriated for the 2010 capital budget, N13 billion were accounted for by projects not in the MTSS.

⁶⁰With respect to small holder agriculture, the Federal Government policy as defined in the National Food Security Document (FMAWR, 2008) notes that an aggressive program will be pursued to recruit a new breed of small-scale farmers through the process of driving a complete overhaul of the support system for small scale farming in Nigeria. Young, educated and knowledgeable individuals will be encouraged to take up farming through the provision of seed funding, guaranteed minimum pricing for products and provision of continuous technical support. The sheer number of small-scale farmers in Nigeria suggests that a collaborative approach be adopted in their recruitment. Farmers' cooperative societies will therefore be promoted through which technical and funding support will be provided to these farmers.

⁶¹This section, like the review of the structural transformation theories, depended largely on prior joint work done with Saweda, Sheu and Taiwo (refer to Sackey et al., 2011).



A more important policy direction for the agriculture sector is a need to facilitate the revival of the rural economy. While the FMAWR strategy document acknowledges the need for a value chain approach to the development of the sector, no clear and comprehensive rural development framework is laid out. The revival of the rural economy would require four approaches. First, it might be necessary to define the framework of rural development and its linkage with agriculture. This would bring to public debate the issue of the nature of transition from a small-holder household agriculture to medium-to-large-scale agriculture. Second, associated with the concern with farm size are the issues of land fragmentation and the constraints they pose for adoption of new technology, especially of mechanization. The Land Act of 1980 has failed to resolve this issue and should be overhauled. Third, all public interventions in the rural sector should be made farm-size neutral. At present, only a small percentage of small household farmers has ever managed to access government facilities such as subsidized fertilizer and agricultural credit (Banful et al., 2009). Finally, the revival of Nigeria's rural economy should be spearheaded by a massive effort to improve markets, including instituting a guaranteed minimum pricing and government acting as a purchaser of last resort.

Dealing with Infrastructure Limitations: An adequate provision of physical infrastructure services will be needed to support a higher growth plateau and reach the poor in human capital development and poverty reduction (Fay et al., 2005; Aigbokhan 1999; Calderon and Serve, 2010). Fan and Rao (2008) also note that public investment in agricultural research, rural education, and infrastructure lead to direct increases in farm incomes by facilitating productivity improvement. Indirect impacts come from higher agricultural wages and improved non-farm employment opportunities induced through the value chain by the increase in agricultural productivity. Therefore, the expected positive aspects of growth may not be possible



without public investment in key infrastructure such as roads, power, and telecommunications, among others. In this respect, it is estimated that across Africa, infrastructure contributed 99 basis points to per capita economic growth from 1990 to 2005, compared with 68 basis points for other structural policies (Calderón, 2008). The estimated contribution is almost entirely attributable to advances in the penetration of telecommunication services. The deterioration in the quantity and quality of power infrastructure over the same period retarded growth, shaving 11 basis points from per capita growth for Africa as a whole and as much as 20 basis points for southern Africa.

Infrastructure has been and still remains a major constraint for doing business in Africa, constituting a disproportionately large share of production and trade cost, and depressing firm productivity by about 40 percent (Ndulu et al., 2007; Escribano et al., 2008). In Nigeria, infrastructure is regarded as a binding constraint to attaining pro-poor growth (Willoughby, 2004). The nature of the constraint has quality, quantity and access dimensions.

With respect to quality, it is estimated that the percentage of paved (that is, all-season roads) to total roads in Nigeria, stood at 30 percent in 1990, increased to 30.9 percent in 1998 but declined to 15 percent by 2004 (World Bank, 2010). The 15 percent paved road in Nigeria in 2004 is lower than the comparable ratios in the Middle East, East Asia and South Asia's, which stood at 68.4 percent, 34 percent and 31 percent in 2000 (World Bank, 2009). In addition, it is estimated that 60 percent of rural roads and 37 percent of the main roads to urban centers are in poor condition (Willoughby, 2004).

In terms of quantity and access, the estimated 137.2 kwh electricity consumption per



capita for Nigeria in 2007 is lower than the SSA average of 534 kwh and much lower than that of East Asia with 1665.5kwh for 2000 (World Bank 2009; 2010). Similarly, the percentage of electricity transmission and distribution losses relative to total output (a rough measure of the efficiency of the power sector) has been historically high and exceeded 30 percent in 2004; although this has been reduced to 12 percent by 2007. In addition, despite recent improvements, the findings from a recent household survey in Nigeria (NBS, 2006) showed a significant urban bias in the supply of electricity. More than eight in every ten households (86.6 percent) in the urban area reported having access to electricity, compared to only four in every ten (38.9 percent) in the rural areas). The findings also indicate that 60.5 percent of the urban poor households have access to electricity, compared to 12.6 percent of rural poor households. There is also substantial disparity across the geo-political zones of the country. The rural-urban divide in the supply of electricity applies to other infrastructure and remains one of the many factors driving inequality, rural urban migration and urbanization in Nigeria.

The costs of the infrastructure gaps for Nigeria are very large. Willoughby (2004) estimated that in 2001, for instance, unreliable power supplies from the National Electric Power Authority (NEPA) imposed an additional cost on the economy equivalent to about 3 percent of GDP. Similarly, it is estimated that the annual cost of shortfall in road maintenance in the form of increases in vehicle operating costs and higher costs of deferred maintenance amounted to some 3.5 percent of GDP in 2002. Part of the high cost could also be attributed to operational inefficiency of existing infrastructure.

The infrastructure limitations have serious implications for growth in Nigeria and may provide plausible explanation for the paradox of the limited linkage between agriculture and the non-agriculture sectors (especially manufacturing).



Infrastructure limitations, especially rural transportation, are often cited as a binding constraint to the shift of small farm operations from subsistence to commercial basis and to increased use of inputs to raise farm productivity (USAID, 2010). Poor state of farm to market roads raises costs of or even prevents delivery of bulk supplies of outputs to markets. Empirical evidence showed that farmers in areas with comparatively good access roads received prices for their crops significantly above those by farmers in areas with poor access (Boadi, 2003).

Beyond the farm environment, poor infrastructure inhibits social development. In a 2003 Nigeria Demographic and Health Survey (NBS, 2003), transport problems were cited by parents/guardians as the reason for non-enrolment of 30 percent of the rural children who had never attended primary school, while just over 30 percent of rural women stressed distance to health centre, or non-availability of transport, as problems in obtaining medical care. This has serious implications for human capital development and demographic factors such as birth/death rates as well as infant and maternal mortality.

Admittedly, both the spatial distribution and rapid movement of Nigeria's population create major challenges for reaching universal access. In rural areas, over 20 percent of the population lives in dispersed settlements where typical population densities are less than 15 people per square kilometer; hence, the costs of providing infrastructure become prohibitive. In urban areas, on the other hand, population growth rates averaging 3.6 percent a year place a high burden on infrastructure service providers. As a result, urban service coverage has actually declined over the past decade, and lower-cost alternatives are filling the resulting gap (Banerjee et al., 2008; Morella, 2008). The lack of adequate transport facilities in many urban areas has led to long distance trekking by workers. In addition, because population densities in the urban areas are not concentrated enough by international



standards, they do not benefit from large economies of agglomeration in the provision of infrastructure services. As a result, the costs of providing a basic infrastructure package can easily be twice as much as in other developing cities in Nigeria than elsewhere (Dorosh et al., 2008). Dealing with the infrastructural issues will require a master plan that defines the role of the public sector vis-à-vis the private sector and provide the necessary incentives to attract private intervention.

Seeking an Incomes Policy: Nigeria society is highly unequal. While in the post-independence era, wealth from petroleum and gas and government intervention have attempted to deal with the issue, poverty and inequality continues to be pervasive. The profile of poverty shows a progressive increase from 1980 and has reached alarming proportions since 1996 (Table 8). Poverty is highest in the rural areas, where in 2004 (the latest when data are available) an estimated 63 percent or 47 million people are below the poverty line. Poverty is extreme among households whose head is employed in agriculture and forestry, for which the incidence is estimated at 67 percent in 2004. In addition, poverty in Nigeria is compounded by high levels of inequality. The Gini coefficient, a measure of income inequality, is estimated at 42.9 percent for 2004, which is among the highest within the class of comparable countries. The inequality does not only affect the distribution of income but also of assets and of the access to infrastructure the coverage of electricity, water, sewerage and other public services mostly stop at the door of the fast-growing informal settlements where most of the urban poor live.

⁶²The Apapa (the port at Lagos) is Nigeria's main export and import corridor. But the cost of transit through the port is an important obstacle to Nigeria's prospects for international agricultural trade. It is estimated that the average cost for transiting one cargo container through Apapa is between \$2,600 and \$5,500, compared to best practice cost of about \$300. Similarly, the average dwell time of a container in Apapa port exceeds 20 days, in contrast to international best practice time of less than five days. Refer to USAID (2010).

What can policy makers do to deal with poverty and hunger? Two approaches which are already being pursued by the authorities need to be strengthened. They are (i) reform of the public system of human capital formation (education, health, labor markets) and (ii) the necessity to attend directly to the needs of those for whom the markets will not cater (those that need a “safety net” to cope with systemic shocks, the displaced such as street children and young hawkers, and those discriminated against on the basis of gender).

Table 8: Basic Characteristics of Poverty in Nigeria, 1980-2004 (in percentage) a/

	1980	1985	1992	1996	2004
National	27.2	46.3	42.7	65.6	54.4
Urban	17.2	37.8	37.5	58.2	43.2
Rural	28.3	51.4	46.0	69.3	63.3
Zones					
South-South	13.2	45.7	40.8	68.2	35.1
South-East	12.9	30.4	41.0	53.5	26.7
South-West	13.4	38.6	43.1	60.9	43.0
North-Central	32.2	50.8	46.0	64.7	67.0
North-East	35.6	54.9	54.0	70.1	72.2
North-West	37.7	52.1	36.5	77.2	71.2
Size of Household					
0-1	0.2	9.7	2.9	13.1	12.6
2-4	8.8	19.3	19.5	51.5	39.3
5-9	30.0	50.5	45.4	74.8	57.9
10-20	51.0	71.3	66.1	88.5	73.3
20+	80.9	74.9	93.3	93.6	90.7
Educational Level of Household Head					
No Education	30.2	51.3	46.4	72.6	68.7

⁶³ According to the NBS (2007), Nigeria has a more unequal distribution of income than Ethiopia, Madagascar, India, Niger and the United States. According to the World Bank (1996), poverty in Nigeria would have decreased by 13.6 percent between 1985 and 1992 had income distribution remained unchanged.

Primary	21.3	40.6	43.3	54.4	48.7
Secondary	7.6	27.2	30.3	52.0	44.3
Higher than secondary	24.3	24.2	25.8	49.2	26.3
Derived Indexes b/					
Income share by highest 10%	-	28.2	31.5	37.1	32.4
Income share by highest 20%	-	45.0	49.4	52.1	48.6
Income share by lowest 10%	-	2.5	1.4	1.9	2.0
Income share by lowest 20%	-	6.0	4.0	5.0	5.1
Gini Index	-	38.7	44.9	46.5	42.9

? a / Refers to poverty ratio, defined as the proportion of the population below the national poverty line; source: NBS (2009).

? b/ Estimated by the World Bank using NBS data.

Apart from the inequality between the urban and rural residents at income levels, the quality of public education requires attention. The key issues include low teacher morale, which is traceable to the lack of basic infrastructure, poor remuneration and conditions of service and late and irregular payments; indiscipline on the part of student culminating in cultism in almost all levels of education; and inadequate public funding and the monitoring. A similar problem of inequity affects the health sector, which is further characterized by under-funding, inadequate procurement and storage of drugs and equipment and inconsistency of policy over the years. Despite the country's abundant water resources, access to water and sewerage is exceptionally problematic even in urban areas. The per capita water consumption remains below international minimum standard as many households still resort to the use of unsafe water sources, such as ponds, streams, springs, shallow wells and boreholes with their attendant health hazards. Indiscriminate human activities such as deforestation, over-grazing and population pressure are bringing stress on water resources, the depletion is being heightened by recent climatic changes. These three sub-sectors require reforms as acknowledged in the NV20:2020.



Improving the three main mechanism of human capital formation education, health and water supply will mean little in terms of inequality reduction if the poor cannot count on functioning labor markets in which to convert that capital into employment. However, Nigeria's formal labor markets are excessively rigid. High and binding minimum wages (in the face of low worker productivity), liberal social security benefits such as long maternity and sick leaves; complex restrictions on hiring and firing, and powerful unions that are primarily concerned with maintaining real wages characterize the market. This calls for a major overhaul of the legal and regulatory framework in which the labor markets function. Legal provisions extending equal benefits to all workers in an "economic entity" (principal firm, subsidiaries, and affiliates); those imparting seniority-based promotions; compensation and training; and those mandating indefinite rollovers of fixed-term contracts, should be reviewed.

While strong human capital and functioning labor market will be an effective means for many Nigerians to share in the fruits of growth, there will be others for whom market-based solutions will simply not work and for whom direct government support will be necessary. They include those that cannot cope with systemic crisis, those who have been displaced such as street children, and those that are discriminated against on the basis of gender. Nigeria never really had a formal social safety net, something that became painfully clear during the period of the SAP. The sweeping reforms that accompanied SAP did not adequately consider a strategy for social assistance. A social safety framework needs to be developed through

⁶⁴Consequently, Nigeria ranks among the lowest in the world especially in areas such as infant and maternal mortality, life expectancy, nutritional status and accessibility to health care facilities.

⁶⁵The water sources in Nigeria are estimated at 267.3 billion cubic meters of surface water and 52 billion cubic meters of ground water (CBN, 2000).



participatory processes. Such a framework will attempt to cover all forms of existing formal and informal support systems (including activities of non-government organizations). It will seek to give the displaced a means for political representation. Second, support mechanisms would move from mere humanitarian aid to schemes that provide access to formal employment. Third, the public and private interaction in providing safety net support will be established and strengthened. Fourth, the local governments should be equipped to take the lead in preventive action in high-risked regions, for which resource transfers from the federal government should specify. Finally, a uniform methodology to track, classify and ultimately understand the characteristics of those needing safety net support should be pursued.

Deepening the Decentralization Process to Support Democratization and Governance:

Pursuing a path of fast and sustainable growth and giving the people the tools to share in the fruits of that growth, are difficult policy agenda that may require a good governance environment. It is well known that since economic development involves *making decision* on what to produce, when, how and to whom leading to welfare improvement, while decision-making involves shared authority, which defines the *relationship* between governments and governed, an effective economic development may require both governance and democratic principles. There are, of course, many ways in which good governance can be pursued, but promoting decentralization is perceived to facilitate participation (democracy) and make it possible to broaden the dialogue.

Focusing on improving the functioning of the lower tiers of government (the state and local government) will naturally lead to upgrading the quality of government. This is because it is the best option for bringing policymaking closer to its beneficiaries as a tool to address region specific challenges. But the decentralization



process in Nigeria may require a revisit to the principles of fiscal federalism. In this respect, fundamental issues such as the growth of federating units (the number of states and local governments) and inter-government relationships would need to be evaluated. The number of states and local governments cannot be increased indefinitely without rendering the fiscal position of each unit unviable. At the present state of affairs, most of the states depend wholly on the federation transfers. In a growing economy, this could be accommodated but failure to generate own resource has meant limited local/regional discretion on long-term aspiration. In addition, the failure of the Federal Government in the 1980s to provide take-off grants for newly created states and local governments had strengthened the case for the need to identify the optimum number of states and local governments required to support the long-term growth vision of the economy.

Inter-governmental fiscal relations have also tended to be sacrosanct. Rather than pursuing reforms in this area, the Federal Government has tended to assume responsibilities that could better be shouldered by states and local governments. Research on development domains as pertains to agriculture, for example, points to substantial regional heterogeneity in crop production and marketing potential. This heterogeneity is also aligned to the wide diversity in the poverty incidence across states and ecological zones (Omonona, 2009). On the other hand, the functioning of fiscal relations forces homogeneity of policy throughout the country. The 1999 Constitution of the Federal Republic of Nigeria puts agriculture on the concurrent legislative list, and broadly prescribes the roles and responsibilities of each tier of

⁶⁶Governance is the art of governing; it relates to the decisions that define expectations, grant power or verify performance. It is thus the physical exercise of management power and policy, while government is the instrument that does it.



government as joint partners in the implementation of government's agricultural development policies. This has subsequently resulted in some form of disconnection at the federal, state and local government levels with respect to policy consistency, implementation, funding and sustainability which require further clarification (Okojie, 2009). For example, in the case of fertilizer, the preliminary results of research conducted by IFPRI indicated that Federal Government involvement in procurement and distribution has not necessarily brought fertilizer to the end-user when it is required and in the desired quantity. Fiscal federalism would be more effective if the Federal Government could provide special grants for projects or programs that it has mutually agreed with the state and local governments to execute and establish regulatory mechanisms to ensure that they are executed satisfactorily. Finally, clarifying the relative roles of the three-tiers of government under changing development challenges should be a frequent preoccupation of the authorities.

Both the reform of the functions of the three-tiers of government and the adjustment of the decentralization process will be mutually reinforcing with the third key element in improving the overall quality of governance better budgetary processes and institutions. Significant progress in this area under the President Obasanjo's administration (1999-2007) fell short of embracing the state finances. Technical requirement for a budget has not yet been matched at the state level by policies in designing and operating the budget itself in most states. Several areas for policy action stand out. As required of the national development plan (the MTSS at the federal level), the state investment plans should be strategic, indicative roadmap, rather than a bloated, legally binding list of wished-for projects the execution of which is then controlled discretionally through cash management. International accounting standards (like the IMF's Government Finance Statistics Manual) should



replace the rather loose definitions currently applied in the budget execution process (for example, in regards to investment outlays). More broadly, state level budget information should be made regularly available for public consideration.

⁶⁷Development domains refer to geographical locations sharing broadly similar development constraints and opportunities.

⁶⁸Banful, et al. (2009) conclude that according to extension agents, the primary constraint to fertilizer use is the physical absence of the product at the time it is needed, rather than problems of affordability or farmers' lack of knowledge about its importance.



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