



**INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE**
sustainable solutions for ending hunger and poverty
Supported by the CGIAR



NSSP Background Paper 4

Decentralization and Public Service Delivery in Nigeria

Christiana Okojie

Department of Economics and Statistics
University of Benin, Benin City, Nigeria

Nigeria Strategy Support Program (NSSP)

Background Paper No. NSSP 004

Revised September 2009

IFPRI-ABUJA
International Food Policy Research Institute
c/o International Center for Soil Fertility and Agriculture
Development
No.6/ Plot 1413 Ogbagi Street
Off Oro-Ago Crescent
Cadastral Zone 11, Garki, Abuja
Nigeria
E-mail: ifpri-nigeria@cgiar.org
www.ifpri.org

IFPRI HEADQUARTERS
International Food Policy Research Institute
2033 K Street NW
Washington, DC 20006-1002 USA
Tel. +1-202-862-5600
Fax +1-202-467-4439
E-mail ifpri@cgiar.org
www.ifpri.org

THE NIGERIA STRATEGY SUPPORT PROGRAM (NSSP)

BACKGROUND PAPERS

ABOUT NSSP

The Nigeria Strategy Support Program (NSSP) of the International Food Policy Research Institute (IFPRI) aims to strengthen evidence-based policymaking in Nigeria in the areas of rural and agricultural development. In collaboration with the Federal Ministry of Agriculture and Water Resources, NSSP supports the implementation of Nigeria's national development plans by strengthening agricultural-sector policies and strategies through:

- Enhanced knowledge, information, data, and tools for the analysis, design, and implementation of pro-poor, gender-sensitive, and environmentally sustainable agricultural and rural development policies and strategies in Nigeria;
- Strengthened capacity for government agencies, research institutions, and other stakeholders to carry out and use applied research that directly informs agricultural and rural policies and strategies; and
- Improved communication linkages and consultations between policymakers, policy analysts, and policy beneficiaries on agricultural and rural development policy issues.

ABOUT THESE BACKGROUND PAPERS

The Nigeria Strategy Support Program (NSSP) Background Papers contain preliminary material and research results from IFPRI and/or its partners in Nigeria. The papers are reviewed by at least one reviewer from within IFPRI network but are not subject to a formal peer review. They are circulated in order to stimulate discussion and critical comment. The opinions are those of the authors and do not necessarily reflect those of their home institutions or supporting organizations.

This paper received support from the Agricultural Policy Support Facility (APSF), funded by the Canadian International Development Agency (CIDA).

Decentralization and Public Service Delivery

Christiana Okojie

Department of Economics and Statistics
University of Benin, Benin City, Nigeria

Table of Contents

Acronyms	v
Introduction	1
Institutional arrangements for public service delivery	4
Nigeria's fiscal system	4
Allocation of fiscal responsibilities and revenues.....	6
Policies and strategies relating to public service delivery in Nigeria.....	11
Economic services.....	11
Social services.....	15
The National Economic Empowerment and Development Strategy (NEEDS)	23
Constraints on public service delivery	23
Access to, use of, and satisfaction with economic and social rural services	28
What are rural services?	28
Access to and use of rural services	28
The Impacts of Access to Rural Services on Agricultural Productivity and Development Outcomes	42
The Impacts of Access to Rural Services	42
Rural Services, Agricultural Productivity and Development Outcomes	43
Conclusion	52
References	55

List of Tables

Table 1: Tiers of government in Nigeria, 1946-1996	5
Table 2: Allocation of expenditure responsibilities in Nigeria.....	6
Table 3: Disposal of major taxes, 1999	7
Table 4: Vertical revenue allocation in Nigeria	8
Table 5: Horizontal revenue allocation: Weights for determining allocation	9
Table 6: Summary of local government revenue(2001-06) In millions	9
Table 7: Selected agricultural sector indicators	21
Table 8: Rural access to water, sanitation, health and communication facilities (% of population with access)	29
Table 9: Percentage of households using agricultural and other inputs	35
Table 10: Percentage of households using agricultural inputs by the main source of the inputs	36
Table 11: Percent distribution by the area (in hectare) of land owned by the households	37
Table 12: Percent distribution by the number of cattle owned by the households.....	37
Table 13: Gender of household heads, use of agricultural inputs and land ownership	38
Table 14: Percent distribution of income generation from agricultural crop farming and fishing by gender and age.....	38
Table 15: Access to agricultural facilities by gender and age.....	39
Table 16: Women's share of the workload in rural areas	46

List of Figures

Figure 1: Measure of political, fiscal and administrative decentralization in Africa	4
Figure 2: Share of federal allocations in state and local government expenditures	10

Acronyms

ADB	African Development Bank
BAAC	Bank of Agriculture and Agricultural Cooperatives
BRAC	Bangladesh Rural Development Committee
BRDB	Bangladesh Rural Development Bank
BRI	Bank Rakyat Indonesia
BRI-UD	Bank Rakyat Indonesia's Unit Desas
CWIQ	Core Welfare Indicator Questionnaire
COC	Cost of Calories
DBSA	Development Bank of Southern Africa
DFID	Department for International Development (UK)
ECOWAS	Economic Community of West African States
ESMAP	Energy Sector Management Assistance Program
FAO	Food and Agriculture Organization
FCT	Federal Capital Territory
FGN	Federal Government of Nigeria
FOS	Federal Office of Statistics
FRN	Federal Republic of Nigeria
GB	Grameen Bank
GSM	Global System of Mobile Communication
HDR	Human Development Report
MOU	Memorandum of Understanding
MSES	Micro and Small Enterprises Scheme
NACRDB	Nigerian Agricultural Credit and Rural Development Bank
NARS	National Agricultural Research System
NBS	National Bureau of Statistics
NCS	National Consumer Survey
NGO	Nongovernmental organization
NLSS	Nigeria Living Standard Survey
NRWSSP	National Rural Water Supply and Sanitation Program
NWSSP	National Water Supply and Sanitation Policy
OPBC	Output- and- Performance-Based Contracting
PHCN	Power Holding Company of Nigeria
PPA	Participatory Poverty Assessment
RCB	Rural and Community Bank
REA	Rural Electrification Agency
REF	Rural Electrification Fund
RFI	Rural Financial Institution
RPAP	Rural Poverty Alleviation Programs
RUWASA	Rural Water Supply and Sanitation Agency
SME	Small and Medium Enterprises
SMEIS	Small and Medium Enterprises Investment Scheme
SSA	Sub-Saharan Africa
UAF	Universal Access Fund
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WRMS	Water Resources Management Strategy

Introduction

Nigeria is the most populous country in Africa. The 2006 provisional census counted over 140 million people (United Nations 2007), 64 percent of whom live in rural areas. These rural areas are undergoing radical, noticeable change, particularly in the agricultural sector. The agricultural sector is increasingly market-oriented and has seen a diversification of income opportunities and an increasing division of labor. It is therefore important to have a highly efficient rural service sector that fosters agricultural productivity and development outcomes. However, access to rural services, has only had marginal impacts in the agricultural sector. Rural households, therefore, continue to face poor access to agricultural and social services. These gaps in rural service provision need to be closed in order to enable the countryside to mobilize its development potential.

To distinguish rural from urban development, one must define “rural.” Demographers classify a population as rural based on the size or occupational distribution of residents and the geographical characteristics of the area. Most definitions consider an area rural if people work or live on farms. The number of residents in a population considered rural differs from less than 2000 (Reardon et al. 2001) to less than 5001 (Acemoglu et al. 2001) to less than 10,000 people (International Fund for Agricultural Development 2001). In Nigeria, areas with populations above 20,000 are considered urban, meaning that rural areas have sizes below this cut-off (Onokerhoraye 1984).

Decentralization has become a key issue in development policy in the last two decades. Decentralization is a process of transitioning from a governance structure in which power is concentrated at the central or national level to one in which authority to make decisions and implement them is shifted to lower level governments or agencies. It consists of a transfer of public functions from higher tiers to lower tiers of governance.

Governments can have many different reasons for decentralizing—to increase the efficiency of public services, for example, or to allow for greater local participation. But in most countries in recent years the principal motives seem to have been political—to try to quell regional discontent from provinces wanting greater autonomy. In Latin America and Africa, for example, decentralization has been a part of the democratization process as military or autocratic regimes have been replaced by democracies. Similarly, in the transition economies of former socialist states, the disappearance of the central government has given a much stronger say to regional administrations. In East Asia some governments have also chosen this route as a better way to deliver services to large populations.

Conventionally, there are three types of decentralization (IHDR 2001):

- “Deconcentration” is the weakest form and often just shifts responsibilities to field administrations or to local administrators who are closely supervised by central governments.
- “Delegation” involves transferring decision-making and administration to semiautonomous organizations. These can be regional bodies or public corporations.
- “Devolution” is the strongest form and entails transferring some authority for decision-making, finance, and management. In this case local governments can elect their own leaders, raise their own revenues, and make their own investment decisions.

Thus, decentralization can be administrative (transfer of civil servants and public functions to the lower level), fiscal (devolution of fiscal resources and revenue generating powers), political (devolution of decision-making powers), or a mixture of these (Jutting et al. 2005). It is intended to increase power and resources at a level of government that is closer, better

understood and more easily influenced (than was previously the case) in order to enhance participation (Bonfiglioli 2003).

In theory, decentralization can be a powerful tool for initiating improvements in policies for the poor. Effective decentralization results in democratic institutions in which the poor can effectively participate, and lobby for their interests. Improved knowledge also leads to better matching of local needs and better policies. All these lead to improved access to services and better quality and targeting of those services (Jutting et al. 2005).

From the political perspective, decentralization is a key strategy for promoting good governance, interpreted as greater pluralism, accountability, transparency, citizen participation and development. Since decentralization enhances the citizens' ability to monitor local officials, there are possibilities of improved transparency and reduction in corruption and an overall improvement in local governance. Administratively, decentralization is an important process that results in decongestion of the central government and reduces the workload to manageable proportions. The breaking-up of the workload promotes greater efficiency, coordination and effectiveness in public service delivery. Since decentralization transfers decision-making powers from the center to local institutions, it provides an opportunity for local involvement in decision-making and harnessing local knowledge, resources and expertise in the development process (Asante and Ayee 2008). Thus proponents argue that decentralization promotes efficiency. They argue that local governments—because they are local—are better placed than central governments to know what public services are needed, by whom, and how best to deliver them. That is, the power over production and delivery of goods and services should be left to the lowest unit capable of capturing associated costs and benefits. This leads, in economic terms, to allocative efficiency. Proponents say, further, that local councils are more easily held accountable to local groups and individuals than the central government and its agencies. Where a local authority is genuinely accountable to a local electorate, it will have more incentive to improve the services for which it is responsible. They believe, further, that accountability is essential to improved performance and that accountability is stronger when authorities and those they govern are proximate. The electorate can apply their electoral power more effectively on governments that are local—and elected officials will be more sensitive of their reputations if they belong to the local communities they serve (IHCR 2002). Furthermore, the call for devolution of expenditure responsibilities and tax powers is traceable to the citizens' desire for local autonomy, maintenance of location-specific peculiarities along with the benefits of collective strength.

Thus a major objective of fiscal decentralization is to facilitate growth and ensure service delivery in poorer communities by offsetting the fiscal disabilities of subnational governments that rely on limited revenues or face high cost in providing public services, or a combination of both (De Graaf 2005). Theoretically, it is expected to foster growth by transferring spending power to government levels that are best equipped to meet local demands adequately. Proponents of fiscal decentralization expect therefore, that its adoption will not only enhance efficiency in service delivery but also reduce operation costs. It also provides a way for citizens to check the performance of various government levels through voting (Chete 1998).

Decentralization is a process whose success hinges on a range of political, social and economic factors. When a fiscal arrangement is characterized by excessive concentration of power at the highest level of government, the principles of Federalism may be negated. This is especially true if the distribution function does not rest on and does not generate an adequate and independent revenue base. Because when that happens the canon of federalism or decentralization is bastardized and is in jeopardy (Oriakhi 2004). Furthermore, it will take some time before the informational systems, local tender boards, procurement

procedures, auditing systems, sanctions for poor performance, and establishment of accountability to the center are in place. Any effort to use decentralized governance for service delivery and pro-poor policies will depend upon central governments making a real effort to create an enabling environment and to strengthen and broaden accountability mechanisms, at national, regional and local levels. Central governments will need to set minimum standards (for quality, quantity, and access) as well as finance minimum access to some basic services such as education and health, on grounds of inter-jurisdictional equity.

Other difficult issues related to decentralization concern the abilities of districts to raise their own taxes and to borrow. Already districts anxious about their budgets have been introducing new taxes on local businesses. And there are concerns that if districts start to borrow funds this will further hamper the central government's ability to control the money supply and inflation. There are also worries that local governments may be reluctant to invest in social services, seeing these as simply adding to their costs while not producing net revenue. On top of this, there are questions of capacity and coordination—whether the districts will be able to manage their responsibilities. There are also concerns about equity, since those regions with more natural resources can move further ahead of poorer regions. Problems of local elite capture and governance issues (accountability) also affect the efficiency of local governments (IHDR 2001).

In practice, evidence on the comparative advantages of decentralization is mixed. Evidence shows that public services can suffer as a result of decentralization. Decentralization reforms can also lead to inequity (for example, undesirable regional disparities) by making local governments responsible for funding and delivery of services. Furthermore, resources accruing to local governments in developing countries may be so small that there is little for provision of public services. Evidence on the positive impact of decentralization on accountability, efficient resource allocation and cost recovery is very thin (Bonfiglioli 2003).

It is against this background that this literature review of decentralization and public service delivery in Nigeria, with emphasis on rural service delivery, takes place. Nigeria operates a federal system of government, with a central government, 36 state governments and 774 local government councils. In such a multi-level system, fiscal responsibilities are vested in the federal, state and local level governments, resulting in fiscal federalism¹. In a federal system like Nigeria, the division of responsibilities between the central government, states, and local governments is provided for in the constitution. Key policy issues include: How does a decentralized system work in delivering basic services? Are state and local governments equipped with adequate revenue and resources to deliver effective services?

The next section describes the institutional arrangements and expenditure responsibilities between federal, state and local governments for public service delivery in Nigeria. Then section three discusses policies and strategies for public service delivery and their level of implementation, followed by a summary of country-specific literature on access to, use of, and satisfaction with economic and social rural services and the impact of access to rural services on agricultural productivity or development outcomes or both.

¹ Fiscal federalism, or fiscal decentralization, is seen as a series of legal and administrative relationships possessing varying degrees of authority and jurisdictional autonomy. It implies the coexistence or an association of two or more tiers of government within a country each with different expenditure responsibilities and taxing powers (Anyanwu 1997; Okigbo 1965). The different levels of government have joint responsibility in performing the fundamental functions of sociopolitical administration and economic management. Thus under fiscal federalism, any one individual is subject to the influence of the fiscal operations of different tiers of government.

Institutional Arrangements for Public Service Delivery

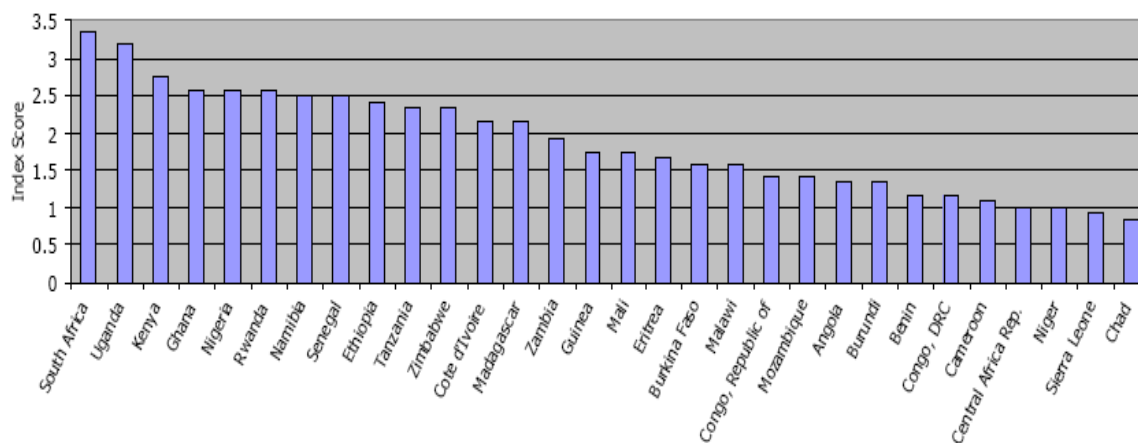
Nigeria's Fiscal System

As discussed earlier, governments can have many different reasons for decentralizing—to increase the efficiency of public services, for example, or to allow for greater local participation. But in most countries in recent years the principal motivations seem to have been political—to try to quell regional discontent from provinces wanting greater autonomy. In Latin America and Africa, for example, decentralization has been a part of the democratization process after military or autocratic regimes are replaced by democracies. Similarly in the transition economies of former socialist states, the disappearance of the central government has given a much stronger say to regional administrations. In East Asia some governments have also chosen this route as a better way to deliver services to large populations (IHDR 2001).

In an era of persistent economic problems and adjustments, many national governments in Africa have been forced by circumstances to withdraw from certain activities and reduce the services they provide. Justifications for government withdrawal from providing certain goods include resource constraints and the need for adjustment. Another justification is that development experience has shown that a highly centralized top-down approach to service delivery is expensive, cumbersome, inflexible and prone to abuse (Wunsch 1999). Although the private sector can and should provide some of these services, the problem is that some of them are unprofitable public goods. In these cases, the most logical step is for subnational or local governments to provide the services (ADR 2001).

Figure 1 shows the mean extent of political, administrative, and fiscal decentralization, with the score ranging from 0-4. The figure shows that Nigeria is one of the most decentralized countries in Africa. The decision to adopt a federal system of political administration has important implications for the fiscal system and economic management of the country. Nigeria's federal system is recognized in the constitution, which broadly spells out the functions to be performed by each government tier. All three levels perform fiscal functions. The constitution makes provisions to generate financial resources for providing public goods and services and to ensure equitable arrangements for distributing resources or sharing revenue among the government tiers.

Figure 1: Measure of political, fiscal and administrative decentralization in Africa



Source: Ndegwa, N. (2002).

At independence in 1960, Nigeria had only a central government and three regional governments, namely, those of the Northern, Eastern, and Western regions. The need to bring governance closer to the people led to the creation of a fourth region—the Mid-West, in 1963. Since then, the number of states and local governments has increased. Nigeria changed from a two-tiered federal arrangement comprising three unequal regions to a three-tiered federal system of a central government, 36 states, a Federal Capital Territory, and 774 local government councils, as can be seen in Table 1 below.

Table 1: Tiers of government in Nigeria, 1946-1996

Year	Federal Government	Regional/State Governments	Local Governments
1946	1	4*	n.a
1960	1	4*	n.a
1961	1	3**	n.a
1963	1	4	n.a
1967	1	12	299
1970	1	12	299
1976	1	19	299
1979	1	19	301
1981	1	19	703
1984	1	19	301***
1987	1	21	449
1991	1	30	500
1991	1	30	589
1996	1	36	774

Source: CBN, 2000, The Changing Structure of the Nigerian Economy and Implications for Development, Table 8.1, p.158.

Note: * - Regions were in existence until the twelve-state structure in 1967.

** - excludes Southern Cameroon which pulled out of the federation in 1961.

*** the Buhari military administration abolished LGAs created by the Shagari administration and reverted to the 301 LGAs listed in the 1979 Constitution.

In May 1967, the government broke the four regions into a twelve-state federal structure to check the power wielded by the Eastern Region. In 1996, the number of states increased to 36 to enhance the unity of Nigeria's diverse ethnic groups.

Although there have been local governments ever since independence, local government councils were not explicitly treated as autonomous, interdependent entities. Instead, they were treated largely as subordinate to the state governments. The regions/states were supposed to take care of the interests of local governments under the portfolios of a Minister or Commissioner for Local Government. The case for autonomous local governments was first justified by the Aboyade Revenue Allocation Commission of 1979, which argued for explicit allocation of functions to local governments. The Guidelines for Local Government Reform of 1975 had initially articulated this position. The guidelines acknowledged the position of local governments as the third tier of government in the federation, implying that they were to have definite powers and functions and sources of revenue for which they were to be held accountable.

Before 1967, the regions were less dependent on the federal government. For revenue, the regions collected taxes on petroleum profits and airport and produce sales and purchase, as well as custom and excise taxes. Then in 1970, Decree No. 13 was passed by the military regime, it reduced the export duties going to the states (through the Distributable Pool Account) from 100 to 60 percent, fuel duty from 100 to 50 percent, and mining rents and royalties from 50 to 45 percent. Then in 1976, the sources of revenues identified above were

either entirely withdrawn or reduced to a position of insignificance in the revenue structure of the states. With the revenue allocation heavily lopsided in favor of the federal government, no subnational government or clique of subnational governments could wield enough financial power to effectively break away from the federation, unless there was external support.

Allocation of Fiscal Responsibilities and Revenues

Does the third tier of government have the required resources to meet its budgeted expenditures? Are services actually reaching the intended beneficiaries? When these essential public services are available, do women have access to them? We will attempt to answer these questions step by step. To provide perceptibly acceptable answers to the first two questions, which are closely intertwined, it is necessary to examine local government expenditure responsibilities and sources of revenue, including revenue from the Federation Account. The Federation Account is where revenues subject to intragovernmental sharing are paid (Anyanwu, 1997).

Local Government Functions

According to the 1999 Constitution of the Federal Republic of Nigeria, second schedule, section 4, the three categories of legislative functions are

- the exclusive list on which only the federal government can legislate,
- the concurrent legislative list on which both the federal and state governments can legislate and
- residual functions on which the federal and state governments can legislate either jointly or individually.

The fourth schedule, section 7 (part 1) of the same constitution articulates the mandatory and concurrent functions which local governments must perform. Table 2 below shows the expenditure assignments of each level of government in Nigeria.

Table 2: Allocation of expenditure responsibilities in Nigeria

Tier of Government	Expenditure Category
Federal only	defense; foreign affairs and International trade (including export marketing); currency, banking, borrowing, and exchange control; use of water resources affecting more than one state; shipping, federal trunk roads; aviation, railways and postal service; police and other security services; regulation of labor, interstate commerce and telecommunication; immigration, citizenship and naturalization rights; mines and minerals, nuclear energy; social security, insurance; national statistical system; guidelines and basis for minimum education; business registration; price control
Federal-State (shared)	health and social welfare; education (post primary/technology); culture; antiquities; monuments, archives; statistics; stamp duties, commerce, industry; electricity (generation, transmission, distribution); research surveys
State only	residual powers, i.e. any subject not assigned to federal or local government level by the constitution
Local government	economic planning and development; health services; land use; control and regulation of advertisement; petty small businesses markets; public conveniences; social welfare; sewage and refuse disposal; marriages, registration of births, and deaths; primary; adult and vocational education; development of agriculture and natural resources

Source: Anyanwu 1999

As mentioned earlier, decentralization in Nigeria stemmed from the central government's desire to neutralize the power hitherto resident in the regional governments rather than as a means or vehicle of economic development. Anyanwu (1999) noted that there are no underlying principles behind the assignment of constitutional functions in Nigeria. However, he reiterated that it is reasonable to infer that the size of the country and economies of scale

must have weighed heavily in the decision to assign responsibility to the various levels of government. From the table, basic services such as health and education are concurrent activities, both the federal and state governments have powers to legislate and implement them. Local governments are responsible for the services closest to the grassroots: primary education and primary health care.

Revenue Allocation

Ideally, each tier of government is assigned revenue or tax sources commensurate with its responsibilities. There are different types of taxing powers. Some can be exercised by one level of government, in which case the revenues that accrue to that level of government alone (independent revenue). Others are exercised by that same level of government but the resulting revenues are shared with other levels of government. Taxing powers can be divided into three parts (Okigbo 1965):

- Those exercised by the center, with the resulting revenue accruing to the center alone
- Those which are exercised by the states, with the resulting revenue accruing to the states or local governments alone
- Those exercised by the center, with the resulting revenues accruing to both the center and the states or local governments

This classification distinguishes between power to raise revenues and rights to revenues. The power and the rights are not always vested in the same authority (Okigbo 1965). In Nigeria, the third category refers to revenues subject to intragovernmental sharing, and these make up the Federation Account (Anyanwu 1997). Table 3 shows the assignment of taxing powers in the Nigerian federal system.

Table 3: Disposal of major taxes, 1999

Type of Tax		Jurisdiction		Right to Revenue
		Law	Administration	
1.	Import duties	Federal	Federal	Federation Account
2.	Excise duties	Federal	Federal	Federation Account
3.	Export duties ¹	Federal	Federal	Federation Account
4.	Mining rents and royalties	Federal	Federal	Federation Account
5.	Petroleum profit tax	Federal	Federal	Federation Account
6.	Companies' income tax	Federal	Federal	Federation Account
7.	Capital gains tax	Federal	Federal	Federation Account
8.	Personal income tax (other than those listed in 9)	Federal	States	States
9.	Personal income tax: armed forces, external affairs officers, non-residents, residents of FCT and Nigeria Police	Federal	Federal	Federal
10.	License fees on television and wireless radio	Federal	States	Local
11.	Stamp duties	Federal	Local	States
12.	Capital transfer tax (CT)	Federal	Federal/States	States
13.	Value added tax (VAT)	Federal	Federal/States	Federal/Local
14.	Pools betting and other betting taxes	Federal	States	States
15.	Motor vehicle and drivers' license	States	States	States
16.	Entertainment tax	States	States	States
17.	Land registration and survey fees	States	States	States/Local
18.	Property taxes and rating	States	Local	Local
19.	Market and trading licenses and fees	State	Local	Local

Notes: 1 Listed but no longer imposed.

Sources: The 1999 Constitution of the Federal Republic of Nigeria and other legislations to date.

The discussion of developments in revenue allocation in Nigeria has centered around the following, also known as principal issues (NRMA&FC 1989; Danjumah 1992):

- the Federation Account

- the allocation of revenue between the different levels of government, or “vertical allocation”
- the sharing of revenue among state governments, or “horizontal allocation,” and the sharing of revenue among local governments within states
- the Special Fund and its allocation

Most proponents of centralizing tax collection note that the tax revenue would be allocated back to the lower tiers of government through an appropriate revenue allocation formula. Table 4 below shows the vertical revenue allocation since the 1981 Revenue Allocation Act to date.

Table 4: Vertical revenue allocation in Nigeria

Level of Government	1981 Revenue allocation Act (%)	Babangida Administration (%)			Abacha Administration (%)	Civilian Administration (%)
		Jan. 1990	Jan. 1992	March 1992		
Federal	55.0	50.0	50.0	48.5	48.5	48.5
State	30.5	30.0	25.0	24.0	24.0	24.0
Local	10.0	15.0	20.0	20.0	20.0	20.0
* Special Fund	4.5	5.0	5.0	7.5	7.5	7.5
Total	100	100	100	100	100	100

Note: The special fund, administered by the President, takes care of ecological problems, funds to mineral producing areas as well as stabilization of the economy.

From the table, it is clear that both the state and local government shares of the Federation Account since March 1992 stood at 24 percent and 20 percent respectively.

If this allocation truly reflects what gets to the local government councils, we have to look elsewhere to explain the paucity of social and economic services delivered at this level. Perhaps the explanation emanates from the fiscal games the federal government played with the revenue sources. First is the Value Added Tax (VAT), which supplanted the sales tax in 1994. Formerly revenue from the sales tax accrued to the states solely, with local governments having access through state and local council transfers. Although the collection and administration of VAT by the federal government was based on convenience, the federal government allocated a substantial part of VAT proceeds to the center. The sharing arrangement is 15, 50 and 35 percent for the federal, state and local governments, respectively.

Horizontal Revenue Allocation

Horizontal revenue allocation deals with the distribution of funds within the same tier of government in a nation-state; for example, among states in the federation, or within the local government or a state. Nigeria adopted several principles before and after its independence. Some of these principles have been contentious, as members of the horizontal components, especially states, usually prefer principles that favor their specific peculiarities. This often constitutes the primary source of conflict and agitations. Some of these principles include derivation, population, equality of state, need, even development, continuity of government services, spread, land mass, and ecological problems. Those currently in use are summarized in the following table.

Table 5: Horizontal revenue allocation: Weights for determining allocation

Principle	1981 Revenue Allocation Act (%)	Babangida Administration (%)		Abacha Administration (%)	Current Civilian Administration (%)
		Jan 1990	Jan 1992	1994 -1998	1999 -
Equality of states	40.0	40.0	40.0	40.0	40.0
Population	40.0	30.0	30.0	30.0	30.0
Social Dev. Factor	15.0	20.0	10.0 p	10.0	10.0
Internal Revenue effort	5.0	10.0	10.0	10.0	20.0
Land mass and terrain	-	-	10.0	10.0	-

Sources: I.B Bello – Iman 1999, M.A Iyoha 2000

A noticeable drain on centrally collected revenue comes from the Autonomous Foreign Exchange Market (AFEM) intervention surplus fund. Before the abolition of the dual exchange rate in 1999, while the fixed official rate remained at ₦22 to US\$1.00, the AFEM rate, which was above ₦ 80 to \$1.00, made government earn a surplus of over ₦60 on every \$1.00. More worrisome was the exchange of pooled revenues received in foreign currency, especially from oil-related transactions at ₦22 to \$1.00. While allocations to state and local governments were based on this fixed rate, the AFEM surplus was exclusive to the federal government.

Before the central government distributes revenues accruing to the Federation Account, it deducts certain “first charges” and puts them aside. These include funds for external debt service payments, national priority projects, oil-related cash calls, the Nigerian National Petroleum Corporation (NNPC) priority projects, the special reserve, and excess proceeds reserves. The central government then distributes Net Federation proceeds, which in recent years have approximated 35 percent of total federation revenue, to the three tiers of government and the Special Funds using the statutory revenue-sharing formula. These leakages aside, the fact is that local government councils in Nigeria are highly dependent on external sources (see Table 6 and Figure 2). Furthermore, there is evidence of state control of allocations to local government, which in many cases are paid into a joint State and Local Government Account. In reality, therefore, in several states, there is little or no fiscal autonomy at the local government level. Hence one can safely conclude that actual fiscal decentralization does not exist in the case of Nigeria.

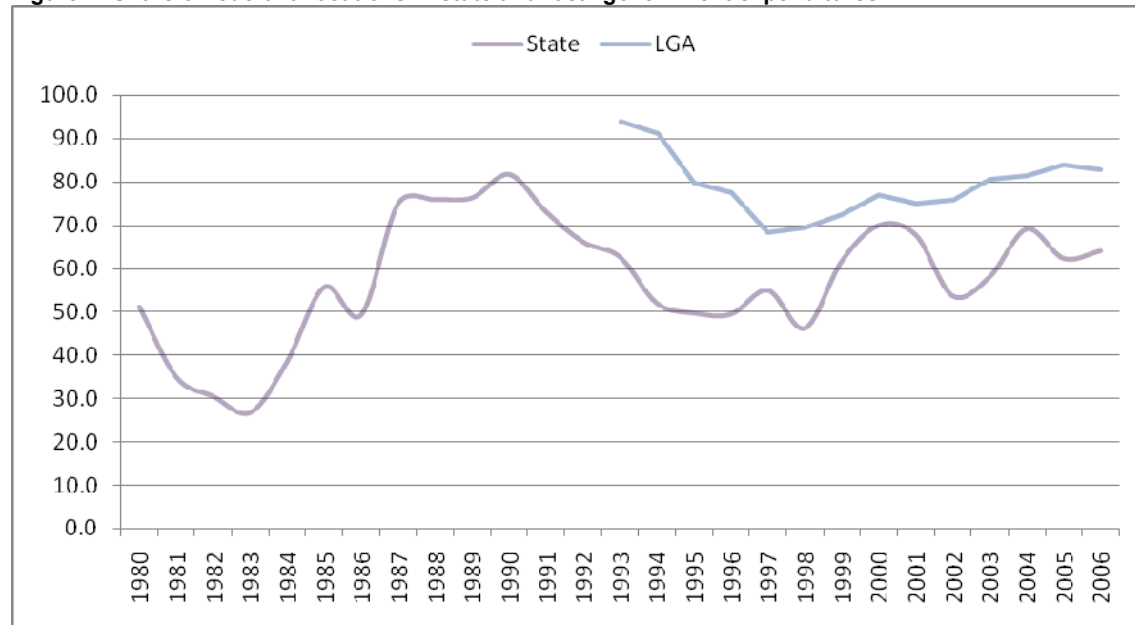
Table 6: Summary of local government revenue(2001-06) In millions

	2001	2002	2003	2004	2005	2006
Total Revenue	171,523.06	172,151.1	370,170.9	468,285.2	597,219.1	674,255.7
Share of Federation Account	128,500.48	128,896.7	291,406.9	375,656.3	493,000.30	550,796.3
Share of VAT	201,002.75	18,727.2	39,648.4	45,985.2	55,793.6	75,920.0
Internally generated revenue	6,020.36	10,420.9	20,175.5	22,407.8	24,042.5	23,225.1
Grants and others	2,320.72	2,537.1	12,210.0	14,537.5	15,101.6	14,819.6
Share of stabilization fund	12,980.17	9,897.0	4,610.3	6,082.7	6,037.3	6,060.00
State allocation	1,598.57	1,672.3	2,119.8	3,625.7	3,243.9	3,434.8

Source: CBN Annual Report and Statement of Accounts, 2005 and 2006.

Figure 2 below shows share of federal allocations in state and local government expenditure over the years, reflecting their dependence on federal allocations.

Figure 2: Share of federal allocations in state and local government expenditures



Source: K. Akramov and C Okojie 2008, Decentralization and Rural Services Delivery in Nigeria,

Sources of Local Government Revenue

Local governments have an important role to play in delivering services to the rural sector. The sources of local government revenues can be classified as internal or external.

Internal Sources

Internal sources of local government revenue include licenses on radios, televisions, bicycles, trucks, canoes, wheelbarrows and carts. They also include utility rates and tenement rates. The tenement rate is a tax on the benefit derived from the occupation or use of a landed property. It could yield substantial revenue to local councils but they lack the capacity and the dynamic will to tap this source.

External Sources

Major external sources of local government revenue are transfers from the Federation Account or from the state and local government joint account. Other sources include loans and advances from the federal and state governments, international agencies, and commercial banks. There is a glaring mismatch between local government revenue powers and their expenditure responsibilities. This probably explains the inability of the third tier of government to deliver social and economic services to their communities. Chete (1998), Iyoha (2000), and Ogwumike and Isumonah (2004) agree that the major sources of revenue come under the jurisdiction of the federal government. These include the petroleum profit tax, import and export duties, mining rents, and royalties and company income tax. The state and local governments have jurisdiction over less lucrative revenue sources. The result is that the central government becomes the revenue mobilizer both locally and nationally while also assigning expenditure functions to subnational government. Consequently, subnational policymaking may be limited in scope and lower-level governments merely become agents of the federal government's spending functions. According to Gbeyesola and Uga (1999), the revenue dominance of the federal government has bred some unfortunate

consequences. Notable in this regard is the federal government's fiscal indiscipline, arising from irresponsible public investments. The surplus funds at the disposal of the federal government have engendered an almost limitless fiscal capacity and the profligate practice of donating large sums to questionable causes both within and outside the country. This comes at a time when states and local governments are experiencing considerable difficulties in performing their statutory functions due to inadequate funds.

Implications for Service Delivery

Due largely to a lack of accountability, the funds earmarked for social and economic services at the local government level for rural communities are often diverted into private pockets. Even when the funds are not fully diverted, local governments provide substandard services. For example, the World Bank (2001) noted that significant budget expenditures in the past did not always bring improved service delivery. Thus, in Nigeria, it is estimated that total spending in the health sector (public and private) exceeds 6 percent of GDP, which is rather high by international standards. However, the health outcomes remain extremely poor and have not improved over the years. Infant and maternal mortality rates remained at 110 and 8 per 1,000 births in 2005 (Nigeria MDG Report 2007). With respect to electricity, during 2001–05, the federal government spent ₦270 billion or more than \$2 billion, through investment grants, subsidies and loans in the sector. Yet massive power shortages remain the major development constraint to the private sector and a critical social problem.

The impacts of poor service delivery are largely human, affecting both men and women. However, women are less mobile than men due to cultural practices and taboos. They are also more dependent on social services because of their multiple roles in the household and community. It is thus important that electricity, adequate health facilities, pipe-borne water, and education facilities are provided in rural communities through appropriately decentralized fiscal systems.

Policies and Strategies Relating to Public Service Delivery in Nigeria

A key function of government is to provide social services or public goods. Despite the emerging consensus on Nigeria's need to rely more on the private sector, there is certainly a case for governments to continue to participate in the provision of certain services. Questions of what the government should provide in terms of services will necessarily depend on a country's circumstances and its stage of development. However, the general consensus is that from the point of view of citizens' rights, governments ought to be active in such basic services as education and health. Also, from the point of view of market failure, they ought to be active in the provision of infrastructure in areas where private sector initiatives are not forthcoming.

Policies and strategies that deliver public services have an overriding goal of improving the wellbeing of the people by providing the basic needs of life. At the very foundation of this objective is the pursuit of a strong, virile and broad-based economy with adequate capacity to absorb externally generated shocks. The policies and strategies discussed below cover various facets of public service delivery.

Economic Services

Economic service delivery includes agriculture and natural resource management, water resources, roads and public transportation, and others. This sector has the highest potential for achieving a broad-based economy, but its performance has been unimpressive, hence the desire to reposition it for more effective performance.

Agriculture and Natural Resource Management

The agricultural sector is the primary source of employment for Nigerians and currently accounts for about 36 percent GDP (Mogues et al. 2008). The sector has performed erratically over the years, although since 2000, it has been growing at an average of 5.6 percent per annum (Mogues et al. 2008). Overall however, the performance of agriculture in Nigeria has been disappointing. The output of cash crops such as cocoa, cotton, rubber, groundnuts, and palm produce has dwindled consistently over the last three decades, while production of livestock has also fallen. There was such a rapid decline in foodstuff production that Nigeria became a net importer of food in the last decade (Obadan and Edo 2004). The years of political instability worsened the situation in three major respects. First, the government's ability to extend infrastructure to the rural areas was severely curtailed as many areas of the country became isolated from the center. Second the decline in infrastructure impaired access to credit, negatively affecting efforts to modernize rural agriculture. But probably the most serious factor was the inability of political leaders at the local government level to mobilize people to develop agriculture in the rural areas. The basic objective of the government in this regard has therefore remained the substantial turnaround of agriculture to adequately play its proper role in food supply, job creation, poverty reduction, supply of raw materials to industry, and diversification of the economy. The various governments over the last two decades have made efforts to provide a conducive environment and incentives to private farmers, sensitize them through promotional and awareness activities, and provide infrastructure to enhance their productivity. These strategies include

- modernizing agricultural production, processing, storage and other practices, by introducing new and improved technology and seedlings,
- providing farm inputs,
- encouraging local fabrication of farm machinery,
- encouraging state and local governments to develop grazing reserves,
- ensuring better and easier delivery of credit to farmers,
- assisting the unemployed to go into agricultural activity,
- reviving the strategic grains reserve program, and
- expanding agricultural extension services.

Some programs and projects were also launched to facilitate agricultural development. They include

The National Special Programme on Food Security (NSPFS)

The main objective of this program was to improve national food security through a rapid increase in productivity and food production, reduce year to year variability in agricultural production, and improve people's access to food (Ihimodu 2007). The main thrust of the program was the innovative approach to soil conservation and fertility improvement, use of water for crop production, as well as intensification and diversification of farm activities. The program became operational in 2001, with pilot schemes in all the senatorial districts in the country including the federal capital territory. The main strategies employed include

- to provide motorized water pumps and tube wells to enable participating farmers to engage in irrigation farming,
- to provide improved seeds to increase yield, and
- to educate and train farmers in the use of improved technologies.

At inception, a total of 23,000 farm families were involved in the 109 farm sites nationwide. This led the government to triple the farm sites to 327 to create a more positive impact.

The National Fadama Development Project

The Fadama 1 project ran from 1992 to 1999. Its goals were to reduce poverty in the rural areas, contribute to food security, and increase access to infrastructure in rural areas. This project was quite successful. The adoption of improved technologies enabled farmers to increase production by more than 200 percent in most cases. Following the success of Fadama 1, the Federal Government established Fadama 2, covering 18 states and the federal capital territory. The project adopted the community-driven development approach, with full participation of all stakeholders. Fadama 2 expanded users to include farmers, fishermen, hunters, gatherers, pastoralists, and others. According to the World Bank (2000a), the Fadama project substantially met its objectives, including increased output, improved farmer income, increased land cultivation, and increased storage capacity. The Fadama 3 project is to increase sustainability of incomes of Fadama users in order to reduce rural poverty. The objectives of Fadama 3 are to

- directly deliver resources to rural communities;
- empower Fadama users to decide collectively how resources are to be allocated and used; and
- get them to participate in the design and execution of the subprojects.

The Memorandum of Understanding (MOU) for Fadama 3 was signed by the Federal government in November 2008 and the project was expected to commence in 2009 (Okereke 2009).

The presidential initiatives

These were efforts of the former president (President Obasanjo) geared toward increased production of cassava, rice, vegetable oils, tree crops (cocoa, oil palm, date palm, rubber, cashew, coffee, etc), and fisheries. The strategies to achieve these included stimulating greater private sector investment in agriculture; providing improved seeds, seedlings, and fingerlings; providing agrochemicals at subsidized prices; providing agricultural credit at highly concessional interest rate through the Nigerian Agricultural Credit and Rural Development Bank (NACRDB); promoting agricultural mechanization; and supporting agricultural research institutes to produce high yielding, disease resistant and early maturing varieties.

Recent reviews of public expenditure in the agriculture sector revealed that Agricultural Development projects (ADPs) have been the main vehicle for public investment projects in the sector over the last 25 years (Mogues et al. 2008, 2008a). The most successful components were the irrigation-focused Fadama development projects. While the infrastructure development projects met their initial targets, maintenance problems emerged. Furthermore, in contrast to state-managed ADPs, federal government ADPs were largely ineffective.

Roads and Public Transportation

The infrastructure base of the Nigerian economy has remained weak in the past decades and further characterized by uneven distribution, unreliability and decay, arising from several years of neglect. In 1999, the central government responded to the problem by expressing a determination to improve basic infrastructure as a means of promoting economic development.

The state of transport infrastructure is generally poor, as road, rail, air, and water transport systems have for several years been characterized by deplorable conditions. This means that most rural areas cannot link up with the rest of the country. Moreover, the different transport modes are not properly linked to serve the socioeconomic needs of the people. Nigeria has roughly 113,000 kilometers of surfaced roads much of which is poorly maintained. Of this, the federal roads network is about 34,000 kilometers (NBS, 2005b). In response to the poor road conditions, the federal government decided to establish a road network that would make a larger part of the country accessible. This was to be achieved by rehabilitating 20,000 kilometers of roads, dualizing 1,230 kilometers of roads, and constructing 1,300 kilometers of new roads before the end of 2003. In addition, the private sector was to be encouraged to construct and maintain roads, and consultants were to be engaged to monitor the quality of the road projects. In 2004, the Federal Roads Maintenance Agency (FERMA) embarked on -- began rehabilitating federal roads.

The rail system has also remained undeveloped for several decades, characterized by outdated narrow-gauge tracks with sharp curves and gradients that limit speed to about 35 kilometers/hr. The system has therefore been underused, with only 50 percent of its 280 railway stations functioning, and passenger capacity use of 10 percent. The goal of the federal government in this regard is to modernize and expand the rail network linking major activity centers such as ports and raw material sources. In addition, the rail system is to be linked to the transAfrican rail network, and fully integrated into the national transport system. Ultimately, the rail system is expected to be the major carrier of goods and people due to its advantage over other modes of transportation. The measures to revamp the system include rehabilitating railway station equipment and facilities, modernizing the obsolete rail tracks, encouraging private sector participation in rail transport, and commercializing the Nigerian Railway Corporation (NRC). Nigeria enlisted China's assistance to expand and modernize its rail network, but with little progress so far.

Water transportation has continued to stagnate along with other systems, even though the country has about 3,300 kilometers of navigable inland waterways. While these ought to provide easy access to the coast from the hinterland, they have not been adequate for navigation due to a lack of dredging and modern vessels. And while Nigeria has many seaports, they are not operating efficiently due to poor facilities and management. The goal of the government, therefore, is to enhance the use of water as a major means of transportation. To this end, the major rivers in the country, especially the River Niger, are supposed to be made navigable all year round by dredging. The other inland waterways would be developed to increase the overall water carrying capacity in the country. In the area of seaports, the goal is to make Nigeria the center of maritime activities in West Africa. The government plans to achieve this by encouraging more private sector involvement in maritime activities, rehabilitating and reactivating port facilities, providing more deep-sea capacity ports, and reforming procedures at seaports.

With respect to rural roads, the objectives of Nigeria's Rural Access and Mobility Project are to improve road access for rural communities in Kaduna State and improve management of the state road network in a sustainable manner. There are two components to the project. The first is the upgrading, rehabilitation and maintenance of the transport infrastructure. This first component will support the upgrading, rehabilitation and maintenance of about 427 kilometers of rural roads selected from the eight top prioritized intervention areas and about 132 river crossings spread across the entire state. Depending on traffic volume and other considerations, about 142 kilometers of roads (or one third of the total length) are to be upgraded to bituminous surface dressed standards while the rest, or about 285 kilometers, will be upgraded to gravel wearing course standards. There will be two parts within the project: (i) Improvement and maintenance of roads within six intervention areas of the state through long term output and performance-based contracting (OPBC), and (ii) construction

and rehabilitation of elected river crossings across the entire state. The second component involves strengthening institutions and building project management capacity. It will focus on supporting project implementation by providing the necessary goods, materials and equipment and by ensuring the existence of the appropriate project management and skills at both the federal and the state levels.

Social Services

Health Care Services

Health care is a shared responsibility of all the three tiers of government. Nigeria's health care sector enjoyed considerable government attention in the years following independence. This explains its rapid expansion in the immediate period after independence. The boom in crude oil earnings in the early 1970s aided the rapid expansion in this sector.

The attention enjoyed by the health sector within this period was based on the government's appreciation of the critical role of health care service delivery in a nation's quest for development. The argument that "a healthy nation is a wealthy nation" largely informed the government's philosophy of rapid expansion in the facilities for health care service delivery.

The rapid expansion in the number of hospitals, clinics and dispensaries across the country was aimed at improving access to health care for a significant part of the population. To this end, Nigeria formulated a National Health Policy, with an emphasis on primary health care delivery. The critical thrust of the policy is to *help Nigerians lead socially and economically productive lives* (World Bank/FOS/NPC n.d.).

Investment in health care is expected to bring about improvement in such key indicators as widespread access to service facilities, improved facility use rates, and a reduction of household expenditure.

The above notwithstanding, available data suggest strongly that the health care sector is in trouble. Service delivery in the country has been largely characterized by waste, inefficiency, and deteriorating quality. Indeed, a World Bank/FOS/NPC n.d. study argues that "although Nigeria has made sufficient progress in increasing access to education and health services, the social indicators show that it is still one of the world's poorest countries."

Available data show that the poor state of service delivery and living conditions have contributed to the low average life expectancy of 47 years in Nigeria (Library of Congress, 2008). In 2007, the World Bank estimated that Nigeria had the 13th highest TB infection in the world and the 5th highest in Africa. In 2004, Nigeria accounted for 63percent of polio cases. Malaria remains a serious problem with 2.6 million cases and 5,343 related deaths in 2003 (Library of Congress 2008).

Nigeria's National Health Policy permits all three government tiers to participate in health care because in Nigeria, health is on the constitution's list of shared responsibilities. Private sector participants are also permitted by law to deliver health care. The underlying idea is to make health care available and affordable across the length and breadth of the country, to deliver it to every nook and corner. It is for this reason too that the National Health Policy makes provision for primary, secondary and tertiary tiers of health care service delivery. The primary consists of local dispensaries and community health centers, the secondary consists of state owned general hospitals, and the tertiary consists of teaching and specialist hospitals.

However, there is a consensus that geographical access to health care facilities, especially by the poor in Nigeria is generally inadequate. The Structural Adjustment era led to reduced public funding of the social sector. As a result, Nigerian health care is now largely characterized by underfunding and shortages of drugs, equipment and skilled personnel. The emigration of Nigerian doctors and nurses to other countries, including Europe and North America helps explained the personnel shortage

Furthermore, the health care system shows spatial variation in terms of availability and quality of facilities in relation to need. The poor, who live mainly in rural areas, generally have to contend with long distances before they can access health facilities. Consequently, there is persistent high infant and maternal mortality, as well as diseases in epidemic proportions. The infant mortality rate was 110 per 1000 live births in 2005, while the under-five mortality rate was 197 per 1000 live births in 2005. Maternal mortality rate remains high at 800 per 100,000 live births (National Planning Commission 2007a, Nigeria MDG Report).

The government has tried to address the situation through the following interventions:

- a massive immunization against all vaccine-preventable diseases
- efforts to ensure universal access to primary health care
- efforts to eradicate and prevent epidemic diseases
- efforts to resuscitate the secondary health care system, the state-owned hospitals
- stepped-up enlightenment campaigns on the HIV/AIDS pandemic

The primary health care program is the cornerstone of the health policy, and is expected to raise life expectancy to 60 years. However, these targets have yet to be met (National Planning Commission 2007a, Nigeria MDG Report). Health service delivery has been poor at all levels of government. While the federal government is largely responsible for developing national health policies, it has also been responsible for spearheading various health programs such as immunization and HIV/AIDS response programs. Meanwhile, it is the secondary and primary healthcare facilities that generally lack the doctors, nurses, drugs, buildings and medical equipment.

Education

The education system also experienced a deep crisis for several years and has fallen into a deplorable condition in the last two decades. The adult literacy rate was relatively poor at 57 percent in 1999. A recent Education For All Global Monitoring Report for 2009 notes that Nigeria has the highest number of out-of-school children (over 8 million in 2004-05, 23 percent of Sub-Saharan Africa's total). There is little progress expected given current trends (7.6 million children are still projected to be out of school in 2015). Although net enrollment rates have increased, they are well below the African regional average. Nigeria is perceived not to be on track to achieve the EFA goals given the current situation of educational financing governance, equity and teacher recruitment (ILO 2009). The quality of education has fallen significantly at all levels. This is especially at the tertiary level, which witnessed a phenomenal brain-drain to other parts of the world. The government, to address the decline in the education sector, packaged a set of objectives for the education system, which include the eradication of illiteracy by 2010, and the acquisition of science and technology education and its effective application. The measures designed to achieve the objectives include

- implementing the Universal Basic Education (UBE) scheme,
- encouraging private sector participation in education,
- supporting research efforts in education,
- monitoring and evaluating the entire system of education,
- emphasizing practical skills development, and

- providing an enabling environment for teaching and learning comparable to that of the developed countries.

These measures are intended to reposition the education system to adequately play its role as a fundamental instrument for accelerating national development. So far the measures have not revived the education sector due to a lack of adequate planning and poor implementation of the National Policy on Education (Adebayo 2007).

Available data show that there is a gender gap in access to education. Access in the northern states in particular has remained low for women. As few as 20 percent of them in the North West and North East regions are literate and have attended school. The Girls' Education Project (GEP) was launched in Nigeria and is supported by the U.K. Department for International Development (DFID), and implemented by UNICEF, the Federal Ministry of Education, and states and local government education agencies. It is being implemented in six states (Sokoto, Katsina, Niger, Bauchi, Borno and Jigawa). It is a three-year project that commenced in 2005. Its main goal is to improve the quality of life of girls through a collaborative, intersectoral approach to girls' education, aimed at improving access, retention and learning outcomes for girls in the GEP states. The project promoted increased enrollments of girls in primary and secondary schools in participating local government areas. The second phase of the project commenced in 2008.

Water Supply and Sanitation

In 2007, only 72 percent of urban and 49 percent of rural residents had access to safe drinking water while 48 percent of urban and 30 percent of rural residents had access to adequate sanitation services (Library of Congress 2008). The Federal Ministry of Water Resources in collaboration with State Water Corporations, the National Water Resources Institute, UNICEF, the European Commission, and the World Bank are consulting with key stakeholders to formulate a National Rural Water Supply and Sanitation Program (NRWSSP) in keeping with the objectives of the National Water Supply and Sanitation Policy. To achieve adequate water and sanitation, the government launched the National Water Supply and Sanitation Policy (NWSSP) with the following policy measures:

- rehabilitation and reactivation of the River Basin Development Authorities (RBDAs) and existing urban water supply schemes
- expansion and improvement in rural water-supply systems
- construction and development of downstream facilities for irrigation and potable water supply
- encouragement of private sector participation in water resources development
- establishment of water quality laboratories, and
- hydrological mapping of the country

The NWSSP's objectives, targets and safe water consumption standards have implications for the NRWSSP. The overall goal of the NWSSP is to consolidate, increase and sustain universal access to adequate quantities of affordable and safe water by the year 2015; as well as consolidate, increase and sustain universal access to hygienic sanitation facilities by the year 2020. Among the key objectives of the program are:

1. to promote improved hygiene and sanitation practices by developing and applying appropriate participatory and social marketing methods and techniques that will lead to demand for household and communal sanitary facilities,
2. to support, strengthen and enhance community management resulting in sustainability of water supply and sanitation services,

3. to increase the capacity of local, state and federal government to assist communities in obtaining basic water supply and sanitation services that the communities can then maintain themselves with private sector support,
4. to increase the capacity of local, state and federal governments, NGOs and civil society organizations to deliver water supply, sanitation, and hygiene services to communities experiencing crisis and outbreaks of endemic diseases,
5. to increase the capacity of local, state and federal governments to manage program implementation for communities in an efficient and cost-effective manner,
6. to enhance the capacity of the private sector to supply goods and services for the subsector;
7. to reduce the disease and workload burden so that the poor and disadvantaged, especially women, can lead a more productive and fulfilling life in the rural areas,
8. to support the Nigerian Guinea Worm Eradication Programme through provision of adequate safe water to all villages where the Guinea worm is endemic,
9. to supplement the National Primary Health Care Programme by promoting better health practices and focusing on safe water, good hygiene, diarrhea control, and proper excreta disposal,
10. to supplement the Universal Basic Education Programme by providing water and sanitation facilities to make primary schools and junior secondary schools more hospitable to children, especially girls, and
11. to monitor the performance of the subsector for sound policy and strategy adjustment and development.

The federal government, with the support of the World Bank and DFID, is undergoing a policy reform cycle aimed at overhauling the entire water resources management strategy. The government conducted comprehensive thematic studies and public consultation and has set in place a process for the development of a national water law (ESMAP 2005).

The Nigerian agency charged with overall responsibility for water supply and sanitation is the Federal Ministry of Water Resources. The ministry recently completed a number of projects and plans new ones.. Between 2000 and 2005, the government completed 1519 motorized boreholes and 3552 hand-pump boreholes to address the water needs of 24.5 million people. New ongoing projects include 482 primary hydrological stations, 50 groundwater monitoring boreholes, hydrological mapping for effective water-resource administration, and 42 small and medium-scale dams (African Development Bank 2007).

Public spending on water supply increased substantially from a mere ₦ 7.3 billion in 1999 to ₦ 80 billion in 2006, with priority given to the completion of Gurara Water Project for Abuja and its environs. Huge sums of money were also spent to build dams in various parts of the country. These dams include Owiwi, Ile-Ife, Jada Multipurpose, Kashimbila, and the Galma Multipurpose Dam.

International development agencies are complementing government efforts in water supply and sanitation. The African Development Bank (ADB) is assisting the Federal Ministry of Water Resources to prepare a national Rural Water Supply and Sanitation Programme (as described above), while the World Bank is helping prepare the Small Towns Water Supply and Sanitation Programme. The latter is a comprehensive initiative for improving water supply and sanitation in more than 4000 small Nigerian towns through community ownership and management of water supply and sanitation facilities. The World Bank is also assisting in the National Urban Water Sector Reform Project, aimed at increasing access to pipe-

borne water in urban areas. The project has four main components: system rehabilitation and expansion, public-private partnership, capacity building and project management, policy reform and institutional development.

In all, these strategies have led to some improvement in water supply and sanitation. The proportion of the population with access to potable water rose from 30 percent in 1999 to 65 percent in 2006. A breakdown of the 2006 figure shows that 67 percent has been achieved for state capitals, 60 percent for urban areas, 50 percent for semi-urban areas and 55 percent for rural areas. These figures can be further improved if the following factors are properly addressed:

- lack of proper coordination among agencies that plan and manage water-supply systems
- lack of adequate project preparation, which in turn leads to abandonment and failure
- lack of adequate funding to achieve water-related Millennium Development Goals

Electricity

Power supply in the country has been grossly inadequate. Only 30 percent of the population had access to electricity in 1999, because only 27.3 percent of installed capacity of the eight power stations was actually generated. This problem was further compounded by the overloading of transmission lines as a result of an inadequate transmission network. This in turn results in frequent outages in several areas. It was the federal government's intention to fix these problems, and give Nigerians a regular and uninterrupted electricity supply. To this end, the existing eight power stations were to be rehabilitated and maintained to operate at full capacity of 5,400 mw, while four additional stations were to be constructed. The government also encouraged independent power producers/plants to supply power for domestic and commercial use. However, about 100 million Nigerians remain "in the dark" without access to electricity because the power plants are yet to be completed. Under a "business-as-usual" scenario, the number of Nigerians without access to electricity is likely to increase over time. While estimates of the new connection rate per year—financed by federal and state rural electrification programs—are difficult to confirm, it appears that the new connection rate to the Power Holding Company Nigeria (PHCN) grid system is well under 50,000 connections per year nationally and probably closer to 30,000 per year—rates well below the number of new households created every year.

The National Rural Electrification Programme was started in 1981 with the aim of connecting all the country's local government headquarters and some important towns to the national grid. The program is managed by the Federal Ministry of Power and Steel and implemented by PHCN. Currently about 600 of the 774 local government headquarters in the country have been connected to the national grid. However, as in many other countries, even when a town or village is connected to the grid, local distribution networks may be very slow to develop. This is especially true when, as is frequently the case in Nigeria, government funding for the distribution network is unavailable (ESMAP 2005).

The Rural Electrification Program faces several structural constraints. The country requires over 6000 mw of electricity to meet present demand. Current output is around 3000 mw, much of which is not put to use due to poor distribution infrastructure and power transmission. Second, the much-awaited institutional reforms—setting out a national regulator, unbundling PHCN, and privatizing the new business units—have yet to be fully implemented. Third, the rural electrification program has been driven by political considerations rather than social and economic ones. This has led to unnecessarily high costs and done little to control mismanagement and corruption. Fourth, funding is a constraint, as almost all funding for rural electrification comes from the federal and state

budgets. It is clear that grid extension alone will not provide universal rural electrification coverage cost-effectively within a reasonable timeframe. It is also clear that major barriers remain to market development for off-grid options such as renewable energy technologies.

The Federal Executive Council approved a National Electric Power Policy in 2001, setting out principles and steps to create an enabling regulatory framework, restructure the industry, and attract more investment. It sets the context for improving efficiency, scaling up access to services, and improving environmental management. The rural electrification piece calls for a full menu of rural electrification options including grid and off-grid, thermal, and renewable energy. It seeks to link rural electrification expansion with economic development goals, and encourage the active participation of states, local communities and the private sector. The Electric Power Sector Reform Act is presently before the National Assembly. It provides for the establishment of a Rural Electrification Fund (REF) and a Rural Electrification Agency (REA) to administer the fund. The REF aims to promote, support, and provide rural electrification through public and private sector participation in order to achieve more equitable regional access to electricity. It also aims to maximize the economic, social and environmental benefits of rural electrification subsidies; promote expansion of the grid and development of off-grid electrification; and stimulate innovative approaches to rural electrification. The federal government has commissioned work on the development of a Rural Energy Strategy. The strategy will, among other things, outline principles guiding the development of rural energy and identify specific implementation activities. These will include the creation of the REF, the REA, and a low cost distribution system (ESMAP 2005).

In 2003 the Federal Executive Council approved an energy policy for Nigeria. The policy makes provisions for the coordinated development, use and management of all energy resources. In particular, it allows for rural energy supply with conventional (petroleum products, gas, coal, electricity) and non-conventional and renewable (solar, wind, small-scale hydro, biomass, fuel wood, etc.) alternatives. Several provisions are relevant to in the effort to scale up energy services for rural areas, and these include:

1. developing and harnessing solar, wind, hydropower, and wood biomass energy resources and integrating them into the national energy mix
2. taking particular measures to ensure the use of these energy resources in rural energy supply
3. deemphasizing the use of wood fuel and promoting alternative energy resources and technologies to wood fuel
4. reusing coal in an environmentally friendly manner, especially coal briquettes as an alternative to wood fuel

Communications

The communication infrastructure in Nigeria before 2000 remained a government monopoly, and the cost of providing services was one of the highest in the world, due to inefficiency. In 1999, out of the 400,000 connected telephone lines, only 50 percent were functioning, and teledensity was 4 per 1000 persons, a far cry from the International Telecommunications Union's (ITU) recommended density of 1 per 100 persons. Again, only 100 out of the 774 local government headquarters had telephone services. In addition, the postal system was very poor and mail theft became rampant. In order to meet the challenges of modern communication, the government planned to install an efficient and effective system that would be affordable to many Nigerians. More specifically, the ITU's recommended minimum teledensity of 1 telephone per 100 persons was slated to be accomplished by 2003. The strategy for achieving this was mainly breaking the monopoly of Nigerian Telecommunications Ltd. (NITEL) and Mobile Telecommunications Ltd. (M-TEL). They were

to be subsequently restructured and privatized to enhance their efficiency and performance. In addition, the Nigerian Postal Services Ltd. (NIPOST) was to be restructured and commercialized to enhance efficiency and performance.

The strategy has partly succeeded, and the telecom sector in Nigeria is now fully liberalized. The country has four digital mobile operators, MTN, ZAIN, GIO (owned by Globacom) and Mtel (the mobile telephone arm of NITEL). The government has also awarded national and regional Fixed Wireless licenses. Several of them are in operation, particularly in the biggest cities, although an increasing number of rural towns have access too. Today Nigeria is one of the fastest-growing telecom markets in the world. Four years ago, the number of telephone lines was about 400,000. Today fixed lines and mobile connections are in excess of over four million lines (ESMAP 2005).

Currently, this success is essentially just an urban phenomenon, though. The four digital mobile operators have concentrated their activities in high-density areas. Locations without access are either remote or are relatively poor communities. This has therefore affected some regions more than others. A Nigerian Communication Commission (NCC)/World Bank study has looked at the market potential for telecom services in the country. The study looked at a range of variables including geo-demographic, socio-economic and infrastructure data. It concludes that the entire country is reachable and that a significant market scope exists. The study ranked the states. The most challenging northern states are typically low socioeconomically. They have low revenue potentials, the poorest infrastructure and the highest cost for telecom development. Some challenging southern states exist, but are less difficult to serve. These states usually are small, have the potential to cover costs, and have good chances of returning a profit. So far, digital mobile licensees have been slow to expand into rural areas, despite the fact that the NCC requires them to invest part of their income in setting up rural services. Market assessments suggest that about 16 states will need some form of incentive to attract mobile operators.

Agricultural Infrastructures, Inputs and Extension Services

At the dawn of the 1970s, agriculture's dominance and contribution to the economy began to decline. The indicators in Table 7 below show the state of each subsector as the agriculture sector's performance declined.

Table 7: Selected agricultural sector indicators

Period	Real Agric as % of GDP	Growth of Real Agric. %	Food Import Growth Rate. %	Agric Capital Expd. as % of Total Expd	Bank Credit to Agric. % Growth	Agric Credit as a % of Total Bank Credit	Interest Rate Changes (%)
1960-1965	55.0	1.4	NA	NA	NA	NA	NA
1966-1970	45.4	1.96	NA	NA	NA	NA	NA
1971-1975	29.6	-1.5	32.0	2.0	43.1	0.3	NA
1976-1980	21.8	2.9	37.1	2.9	67.3	2.3	6.0
1981-1985	39.6	4.4	-1.8	12.0	22.0	5.5	7.8
1986-1990	41.2	5.0	37.3	7.4	24.7	11.3	18.9
1991-1995	38.2	2.6	39.1	3.0	44.0	18.2	25.4
1996-2000	39.9	4.1	6.1	2.5	54.0	10.6	23.0
2001-2005	36.8	8.2	20.5	7.5	30.7	5.9	23.0

Source: Calculated based on data obtained from the following sources:

- i) Central Bank of Nigeria; Annual Report and Statement of Account (Various issues).
- ii) National Bureau of Statistics' (FOS) Annual Abstract of Statistics (Various issues).

The output of cash crops such as cocoa, cotton, rubber, groundnuts, and palm produce dwindled consistently over the last three decades, while the production of livestock also fell. There was such a rapid decline in food crop production that Nigeria became a net importer of food. (Obadan and Edo 2004). The years of political instability worsened the situation in three major respects. First, government's ability to extend infrastructure to the rural areas was severely curtailed as many areas of the country became isolated from the center. Second, the decline in infrastructure impaired access to credit, which negatively affected efforts to modernize rural agriculture. But probably the most serious factor was the inability of political leaders at the local government level to mobilize people to develop rural agriculture. The collapse of markets for agricultural products was another important factor.

The availability of agricultural services in Nigeria can be gleaned from the agricultural revival strategies/programs. Most of the strategies were initiated within the framework of the periodic National Economic Development Plans, Structural Adjustment Programs and Rolling Plans. They pertain to areas such as infrastructure, extension services, input supply, credit and marketing. It is noteworthy that the strategies were largely influenced by the agricultural policy objectives and the macroeconomic management framework in existence then.

Infrastructure services covered the areas of finance, storage and marketing, land and manpower development, general rural infrastructure development, and so on for which the government set up several institutions. Some of these include the River Basin Development Authorities, the National Grain and Food Crops Production Company, the National Agricultural Land Development Authority, the Directorate for Food Roads and Rural Infrastructures, and Marketing/Commodity Boards,. There are also the Nigeria Agricultural and Co-Operative Bank, the People's Bank of Nigeria, the Nigerian Agricultural Insurance Company, the Nigeria Export-Import Bank, and the Nigeria Economic Reconstruction Fund. In addition to these, the government set up more specialized tertiary institutions. Among these are the three agricultural universities at Abeokuta, Makurdi and Umudike. These are in addition to collaborative financial and other arrangements with international institutions such as the World Bank, IITA, UNDP, and FAO and so on. Lately also new institutions were created. They include the Tree Crops Development and Marketing Company, Livestock Development and Marketing Company and the Arable Crops Development and Marketing Company. The Trust Fund Model of risk management was adopted by the Central Bank of Nigeria under the present reform program (National Planning Commission 2007).

With regards to agricultural research, a review of major investments and institutional trends in Nigeria's agricultural research system identified 22 government agencies involved in agricultural research (Beintema and Ayoola 2004). The government funds most agricultural research. The private sector funds little because of a lack of incentives. In general, the agricultural research system in Nigeria is characterized by underfunding, uncertainty and limited coordination and planning.

As for inputs and extension services, some of the above institutions provided these services. But the World Bank-assisted Agricultural Development Projects set up in all states also provided these services, especially in food crops, livestock production, and fisheries. As mentioned previously, most of these programs were delivered through Agricultural Development Projects managed by both federal and state governments. A review of the sector showed that the adoption of improved crop varieties has been high while that of other inputs has been modest. The adoption of packages of inputs (improved seeds and crop management practices based on fertilizer usage and crop chemicals) has been disappointing, because most farmers have used incremental approaches (Mogues et al. 2008, 2008a).

Rural women are engaged in a wide range of agricultural activities. Constraints on women's ability to improve their productivity include their legal and cultural status, which influences their access to and control over productive resources; property rights and inheritance laws that favor men; and gender-determined responsibilities such as family care. It is therefore important to improve women's access to agricultural inputs and services. Agricultural extension services have usually focused on increasing productivity of cash crops by providing male farmers with information, training, and access to inputs and services. Extension services were usually staffed by men. The creation of the Women in Agriculture Units in ADPs was to make them gender-inclusive.

The National Economic Empowerment and Development Strategy (NEEDS)

This development strategy, developed in 2004 to guide Nigeria's development in the desired direction, appears to have incorporated the various policies relating to public service delivery. It effectively replaced previous plans, namely the fixed medium-term plans and rolling plans. It identified the country's problems and accordingly prescribed strategies for developing various sectors of the economy such as agriculture, industry, infrastructure, social services, etc. The NEEDS framework was essentially an articulation of the federal government's planned policies, which were to be complemented at the state level by State Economic Empowerment and Development Strategy (SEEDS) and at the local level by Local Economic Empowerment and Development Strategy (LEEDS). The broad goals of NEEDS include reorienting values, reducing poverty, creating wealth, and generating employment.

To gauge whether the country is achieving the goals, the NEEDS document provided targets over the 2003–07 period for various segments of the national economy. The target minimum annual GDP growth rates were 5 percent in 2004, 6 percent in 2005 and 2006 and 7 percent in 2007, based on the assumption that these were the minimum needed to achieve adequate per capita income and improved welfare. The inflation rate, on the other hand, was targeted to be 10 percent in 2004 and less than 10 percent up to 2007. The fiscal deficit/GDP ratio was targeted at no more than 3.2 percent per year. Poverty incidence was expected to decrease by 5 percent per year up to 2007. In the infrastructure subsector, power generation in megawatts was projected to be 4,000 mw in 2004, 5,000 mw in 2005, 7,000 mw in 2006, and 10,000 mw in 2007. Policymakers expected progress in achieving the Millennium Development Goals to be substantial. They expected aggregate investment to increase from ₦2,071.2 billion in 2004 to ₦4,663.7 billion in 2007, with the private sector contributing the lion's share. They also expected, by implication, an increase in employment opportunities.

In broad terms, policymakers expected NEEDS to achieve its goals through several strategies: privatization and deregulation/liberalization of key sectors of the economy; coordinating national and sectoral development policies for agriculture and industry; developing infrastructure, particularly electricity, water supply and transport; strengthening the financial sector for mobilization of savings toward long-term investment; targeting programs that promote private sector growth and development; creating an effective regulatory system; and supporting agriculture in irrigation, mechanization and crop varieties.

Constraints on Public Service Delivery

This section reviews constraints on effective service delivery in Nigeria. It discusses the policy environment and the adequacy of financial resources and other resources for implementation.

Issues / Barriers / Constraints to Expanding Access to Electricity

Policy, Legal and Regulatory Framework

The National Electric Power Policy, the National Energy Policy and the National Electric Power Reform Bill set the framework for developing the power sector to assist in jumpstarting the economy and confronting the country's worsening conditions of poverty. These statutes clearly separate the role of regulator from service provider, create opportunities for increased private sector investments and competition, and provide for special assistance to vulnerable groups such as very poor households and those in rural areas. However, these enabling frameworks are yet to be made operational. Delayed passage of the Power Sector Reform Bill and delayed implementation of the reforms mandated therein have created uncertainties among investors about the government's commitment to liberalize the power sector. This is a significant barrier to private sector entry at all levels of the electricity supply chain.

Barriers to the development of entrepreneurship in rural electricity supplies include uncertainties that loom over the relationship private investors would have with PHCN, particularly for grid-connected projects during this period of prolonged transition. The position of PHCN on several of these grid-tie initiatives is not immediately clear and encouraging. Further issues include the status of mini-grids and procedures for concessions. In Delta State, where the development of investment proposals for rural electrification is more advanced, dissonance between PHCN representatives and potential investors regarding the bounds of legality for private mini-grids underscores this uncertainty.

Current Financial situation in the Power Sector

PHCN's present household tariffs are still below cost, and about half of the revenue is not collected. Illegal connections, lack of a proper customer census and mismanagement are some of the factors contributing to this situation. In the present pre-privatization stage, PHCN's success at revenue collection will influence the viability of private sector investments. If people do not have to pay their PHCN bills, they will not expect to pay for electricity supplied from another provider. An improvement in the overall performance of PHCN revenue cycle management will boost independent power supply businesses.

Access to Finance

Access to finance constitutes a significant challenge to the development of electricity businesses. There is a shortage of funds for long-term financing. Currently, domestic interest rates are in excess of 20 percent. Moreover, several factors combine to make Nigeria unattractive to international finance. High levels of corruption, political uncertainty, and crime are among these factors. Investors, international and domestic, are also wary of policy inconsistency and the government's commitment to sustain reforms.

In the present circumstances, the emergence of the Small and Medium Enterprises Investment Scheme (SMEIS)—an equity scheme requiring all banks to set aside 10 percent of their profits to support SMEs—represents a window of opportunity. However, bureaucratic bottlenecks, poor business development capacity among potential energy entrepreneurs, and commercial banks' reluctance to commit these funds limited the scope of its performance.

Governance and Business Environment

Corruption, bureaucratic bottlenecks, and crime increase the cost of doing business. It is therefore important to have an effective and transparent regulator that facilitates rather than constrains investments in electricity services. Another area where good governance will be particularly important is in procurement, because several components in rural electrification are imported into the country with bribery adding to the costs. Curbing the costs of bribes would also contribute to the smooth running of rural electrification businesses. Another problem is vandalization of PHCN equipment, which has become endemic in many parts of the country. Beyond the financial costs, it reduces the reliability of services. It is uncertain how much this phenomenon is theft or community protest against PHCN's poor performance.

Local Capacity to Deliver Rural Electrification

Local governments are expected to provide concrete poles, wooden cross-arms, stay blocks and similar parts for rural electrification projects. However, many of the costly components, such as conductors, insulators, cables, transformers, and others, are imported. Nigeria has tried in the past to develop manufacturing capacity for several of these imported components. Nigeria has a vibrant electricity sales and service industry, ranging from contractors and equipment vendors to consulting engineers, and others. Rural electrification has therefore in most cases been carried out by local contractors. However, capacity use within these companies is low, as job orders are constrained by government budgets.

Issues / Barriers / Constraints to Expanding Access to Potable Water

Delay in Implementing Agreed Legal and Regulatory Framework

The regulatory framework for the water sector is diffused and weak, and the roles of the various tiers of government are unclear. Government agencies continue to see their role as service providers and as regulators. The new WRMS and the NWSSP envisage the creation of a National Water Commission—an independent regulator for water supply and water resources management in the country. Despite the government's acceptance of the need for an independent regulator, it has yet to create the agency. The central government also expected the states to develop regulatory agencies to facilitate the achievement of sector objectives. So far, though, no state has an independent water regulator. Inadequate regulatory guidelines ensuring a level playing field for various categories of investors deter investment. Moreover, the activities of all tiers of government in the water supply significantly overlap and are poorly coordinated.

Pricing and Financing of Water

The conception of water as a social good—free from nature and freely delivered by the government—may have created a basis for poor cost recovery. Inadequate revenue collection and a low level of accountability have undercut state efforts to rapidly scale up access to water supply. The water-as-a-social-good conception has also provided a disincentive to investments in standalone water supply systems from boreholes. For states that have achieved some level of success in blocking the financial hemorrhage of unaccounted-for-water, the challenge will be to find financial vehicles to assist communities and private investors in new distribution concessions and stand-alone systems. Properly designed subsidies, equity, and loans are some of the vehicles that may develop financial support.

Inadequate Power Supply

UNICEF, in partnership with state governments, has established a Rural Water Supply and Sanitation Agency (RUWASA) all over the country. Central to the strategy of RUWASA is the use of hand pumps— muscle power in pumping water. This strategy is practical for many dispersed communities where the hydrological situation permits its use. However, electricity is required for modern water supply schemes that use water from deeper aquifers and serve more people. Power supply from PHCN, where such possibilities exist, is unreliable. Consequently, all water works in Nigeria are planned with diesel generators as the main source of power supply. Depending on the size of the plant, the cost of diesel and maintenance of the generators constitute 30 to 40 percent of the total costs. This makes the cost of running a modern water-supply business greatly dependent on a cost-effective and reliable power supply.

Regulatory Impact Restricts Enterprise Size

The proportion of water supplied by individuals and companies represents a significant share of the total national output. However, for several regulatory reasons, there are no major water corporations. This has restricted water business to small scale enterprises and the informal sector.

Local Capacity to Deliver Rural Water Supply

To a large extent, the competence, capital and technology to extract, treat, and transport water exist in Nigeria. Several components are imported, including power equipment, rigs, pumps and some qualities of steel pipe. The service network for water supply is relatively well-established nationwide. Similarly, there are several procurement, construction, and engineering consulting firms with strong presence in specific regions of the country. Due to the absence of major water utility firms, ownership and management experiences are limited to small scale firms and the informal water supply sector. While water engineering and procurement is big business in Nigeria, there is little domestic experience in running modern water and waste water utilities.

Issues / Barriers / Constraints to Expanding Access to Telecommunications Services

Legal and Regulatory Issues

The National Telecommunications Policy empowers the NCC to ensure that licensees provide universal access to telecom services nationwide. It provides enabling mechanisms, including the Universal Access Fund (UAF) to facilitate this process. Already, the operators are under pressure to improve the quality of service and bring down prices, which rank as some of the highest in the world. Meeting these expectations has proved difficult. Key regulatory barriers include the design of incentive structures to promote remote/rural access. The national regulator's capacity to enforce regulatory compliance without compromising the integrity of the telecom market is another challenging issue.

Financing

According to an NCC/World Bank study, 22 states, mostly in the north, will require some financial assistance to make them profitable for digital mobile coverage. Meanwhile the regional fixed wireless licenses are yet to be fully launched in most parts of the country due to financing requirements. Access to finance seems to be the pivotal issue that must be addressed to realize a rapid scale-up.

Inadequate Power Supply

A reliable and cost-effective power supply is necessary for the rapid expansion of telecom coverage. Due to the unreliability of electricity supply from PHCN, all major digital operators have had to power their base stations with diesel generators. This has added to the cost of doing business, and has reduced the speed of expanding the networks.

With respect to rural service delivery, Khemani (2001) documented that in Nigeria local governments are characterized by a weak capacity to implement their expenditure assignments, since many of them were created out of political exigencies and are usually too small to be economically viable. He further documented that local governments are responsible for rural water supplies and sanitation facilities in their areas, however only a few actually have the resources and skills to address these problems. Furthermore, Khemani (2004) documented that in a survey of 30 local governments in Kogi and Lagos states respectively, the problem of service delivery in health and education by local government centered on non-payment of salaries and over-dependence of local governments on federal government transfers. This has undermined local accountability and created perverse incentives at the local level to misallocate public resources (Olowu and Erero 1995; Ekpo and Ndebbio 1998; World Bank 2002). Local governments in Nigeria claimed that “zero allocations” prevented most local authorities from carrying out any of their responsibilities for service delivery (World Bank 2003).

Issues/ Barriers/ Constraints to Delivery of Agricultural Services and Inputs

Finance

Inadequate funding has been identified as a constraint on the delivery of agricultural services. For example, funding has been a major problem in agricultural research in Nigeria (Beintenia and Ayoola 2004). The review of Nigeria’s public expenditure on agriculture (Mogues et al. 2008), showed that public expenditure as a proportion of GDP has varied over the years. Less than 2percent of the federal budget was allocated to agriculture between 200105, contrasting with the sector’s importance in the economy. This allocation falls below the 10 percent goal set by the African Union in the 2003 Maputo agreement. Furthermore, spending was concentrated in just a few areas. The following three categories account for 81 percent of the total expenditures: fertilizer procurement and distribution (43percent); the food security component of the National Special Program for Food Security (22 percent); and the buyer-of-last-resort grain purchase (16 percent). Budgetary execution (proportion of budget executed) was also poor. The study concluded that improved quality of spending is as important as increased expenditure in terms of impacts on service delivery. That is, there is a need to improve the efficiency of programs and inputs in order to deliver greater benefits.

Administrative/Legal Issues

The review of public expenditure in agriculture showed that agricultural spending increased with decentralization. That is, the expenditure share is higher at the state level than at the federal level, and higher at the local government level than at the state level. There is a need to clarify the roles of the different levels of government in agricultural services delivery. Nigeria faces the same challenges as other countries that have decentralized federal systems, with respect to defining the roles and responsibilities of each tier of government (Mogues et al. 2008, 2008a). The new Agricultural Policy has tried to address this problem by specifying the areas where each level of government should take the lead, but there are still vague areas especially with respect to implementation details (Mogues et al. 2008, 2008a).

Access To, Use Of, and Satisfaction with Economic and Social Rural Services

What Are Rural Services?

Rural services could be defined in terms of the availability of and access to markets, health care, roads, credit facilities, agricultural infrastructure, education, water, electricity, and other rural services infrastructure. The availability of and access to these services tend to contribute to the productivity of rural citizens (Budlender and Dube 1998). Such access is regarded by the poor as a major way to alleviate poverty (Kunfaa et al. 2002; Kadzandira et al. 2002; Okunmadewa et al. 2002). Different stages of rural development require different types of rural service infrastructure (Abedian 2002). However, what is outstanding is the extent to which the infrastructure benefits trickle down to individuals to remove them from poverty. The flow of these benefits depends on the services' accessibility to beneficiaries.

Rural services projects may help to alleviate poverty. Two effects can be expected: first, a significant reduction in the transaction costs to farmers and rural traders, and second, improvements in the health, education, and welfare of the poor (ADB 1999). Road improvements can ease the transport burden on the rural poor. For example, new or rehabilitated roads can allow vehicles to reach the village level, allowing the transportation of farm inputs into villages and farm outputs from the villages directly to market centers (ADB 1999). The farm incomes generated by this interaction of villages with market centers are known to have led to investment in education, which in turn raises rural incomes (Reardon 2001).

Rural services, including economic and social services, are a necessary foundation for the growth and development of any country. Transport, communication, education, health, water supply and other services are essential for sustainable and integrated economic development. Rural services enhance living standards and, by extension, motivate the productive capacity of the people. The rural areas in Nigeria, however, remain characterized by inadequate and poor infrastructure.

Access To and Use of Rural Services

Table 8 below provides the most recent information on access to basic services; in particular it shows the recent data on access to water, sanitation, health, and communication facilities in the rural areas from the National Bureau of Statistics (2006).

Table 8: Rural access to water, sanitation, health and communication facilities (% of population with access)

Facility	National	North- East Zone	North -West Zone	North-Central Zone	South-East Zone	South-West Zone	South - South Zone
Access to Water (All Sources)	80.9	88.5	93.5	81.0	64.4	94.3	79.2
Access to Safe Water	40.0	30.7	50.6	48.9	40.8	73.5	45.9
Access to Water (All Year Round)	42.9	37.7	38.6	31.5	54.3	42.6	56.7
Access to Treated Water	9.7	4.6	7.5	14.1	11.4	20.4	5.8
Safe Sanitation	47.6	45.4	61.6	46.6	69.5	62.1	55.0
Improved Waste Disposal	4.6	6.2	10.7	8.8	9.0	36.0	13.2
Cell phone Ownership	15.2	8.8	12.5	21.9	32.9	40.0	34.3
Access to Health Facilities	47.8	48.4	55.3	61.1	37.1	73.1	45.9
Satisfaction with Access to Health Facilities	62.7	62.6	62.6	67.9	64.9	81.6	57.9

Source: National Bureau of Statistics 2006a :Core Welfare Indicator Questionnaire (CWIQ) Survey.

Other studies have generally supported the conclusion that there is discriminatory access to services by rural dwellers.

Transportation

A deliberate effort to deliver on all transportation modes in Nigeria including road, railway, air, inland and sea water ways and pipelines has been observed. In particular, roads carry the bulk of the country's produce and passenger traffic and are the fastest-growing mode of transportation. By 1959 there were about 7,646 kilometers of tarred roads. By 1994 it was over 27,000 kilometers with a concentration in urban areas while rural roads largely remain earth roads. The country has witnessed a phenomenal growth in the number and network of the roads since 1951 with a tilt in favor of the southern part of the country. In spite of this, the road network is still inadequate, with a road density of 34.40 kilometers per 1,000 kilometers². Poor interconnections and poor maintenance have rendered the road system chaotic, leading to high user cost, long traveling time, high accident rate and damages to goods. All of these make marketing costs in Nigeria to be among the highest in the world. Long distances, difficult terrain and climatic conditions are some of the identified natural factors that pose special problems to the country's transport system. This is in addition to problems of constant deterioration due to heavy traffic, poor engineering quality, decline in the stock and quality of motor vehicles, poor maintenance, and poor coordination between roads and other transportation modes, among others.

Furthermore, very large interregional and interstate differences in the extent of transport infrastructure have been observed between states in Nigeria. The total length of available roads increased slightly by 1.20 percent in 2000–2002 and then remained constant from 2002–2004. Principal and paved roads recorded 0 percent growth rate during the period 2002–2004. The total length of railway lines has not grown for the period 1999–2004, while number of locomotion, carriages and wagons for the same period has remained constant. Maritime transport has witnessed a 19.24 percent growth rate in the number of vehicle tankers during the same period (see NBS 2005).

The railway system dates back to the 1930s, and has a longer and more robust history than roads. It was developed to move produce from the hinterland to the coast. The system is served by a rail network of about 3,523 kilometers of single track on two main lines: Western and Eastern. Shortly after independence, there was an effort to expand this network but it was not sustained. Soon afterwards the sector's fortunes declined, and it has since been

running at a deficit. To this day, the railway system is unable to provide efficient and reliable services, while stations lack basic facilities for passengers' comfort. The equipment is inefficient and defective, and operations are uneconomic.

In spite of the availability of rivers and creeks, inland waterways are underdeveloped. At the moment, there are only 15 ferry routes in the country. The fleet-carrying capacity has also declined from 600,000 metric tons per year in the 1950s to 80,000 in the 1970s. There is renewed effort to revive its fortune (Ukpong 1979; Anyanwu et al. 1997; Central Bank of Nigeria 1997).

Rural roads are in a deplorable state. Some parts of the country are almost entirely cut off, and in the rural areas many villages are isolated without link roads to the rest of the country. This is in spite of the fact that agencies such as the Directorate of Roads and Rural Infrastructures, the Agricultural Development Program, and the Petroleum (Special) Trust Fund were set up as intervention agencies in this regard. Moreover, the different transportation modes are not properly linked. A network of roads would link urban and rural areas throughout the country. But while most roads in urban centers are fit for cars, many in the rural areas, especially the feeder roads, are not. The rural roads are flooded or waterlogged, especially during the rainy season. This hinders the evacuation of farm produce and hence reduces rural productivity, mobility and incomes. On a national basis, the public bus system is the dominant mode of transportation for households. The other modes in order of importance are trekking, bicycling, motorcycling and canoeing. Trekking is the dominant mode in the rural areas. Its predominance as a mode of transportation among rural households is dictated by their poor income and the poor roads. An improvement of the rural roads will enhance rural bus transport, and hence improve rural welfare (Majinyawa and Adetunji 2005; Obadan et al. 2006).

Communications

The communication sector (various means of sending and receiving messages) lagged behind other sectors until recently. The demand for telephone services, for example, was far above the supply. There have been unsuccessful attempts to increase supply. In the 1970s, a 172 percent increase in the number of exchange lines did not improve the situation. Rural telephony was poor and/or non-existent. By 1999, only 100 local government headquarters had telephone services out of the 774 local government areas in existence. Things have changed very significantly, however, with the introduction of Global System of Mobile (GSM) telecommunication. Several rural communities now have access to telephone service. However, some still remain cut-off. In addition, the cost of the service is among the highest in the world. Regarding television, radio, newspapers, and so on, federal, state and even private individuals currently operate services as a way to reach out to the populace (Anyanwu et al. 1997). In terms of mail delivery, while traffic is vibrant, service and accessibility are poor, especially for rural dwellers. There has been a tremendous effort to boost this service, with an increase in the number of post offices, sub-post offices and postal agencies. But the country still has a per capita coverage of 24,995 of the population against the Universal Postal Union's recommendation of 6,000. Mail theft, long delays and irregularities are common and discourage people. However, the emergence of private courier services has ameliorated the problem. (Anyanwu et al. 1997; Obadan et al. 2006).

Education

Education is a crucial tool for human capital development and, by implication, economic growth and poverty reduction. The state of education in Nigeria is poor, according to NEEDS (National Planning Commission 2004). The national literacy rate is low, and there are acute shortages of infrastructure and facilities at all levels. However, there are indications that

access to schooling in the country has greatly improved in recent years, which makes sense given the rapid growth in the number of educational institutions. This growth is due mainly to the involvement of private sector players in the provision of educational services. The improvement has, however, benefited urban residents because of the concentration of private educational institutions in cities. The rural areas still depend largely on government provision of educational services and facilities. Educational facilities are therefore still far from adequate, and distance remains one barrier to enrollment in schools. Children, especially in the rural areas, have to walk long distances to get to school, as the incidence of poverty in the countryside makes it impossible for children to pay for public transport.. Access to schools in the rural areas is further hampered by the fact that classrooms, where available, are dilapidated. Gender and regional disparities also characterize access to schooling in Nigeria. The rural areas of the north offer less access to education when compared with the south, while girls have less access than boys. This is because many parents favor don't want their daughters trekking long distances to school.. Cultural and religious practices also serve to impede access to educational facilities and services largely to the detriment of girls (Obadan et al. 2006).

The costs of education have also risen over time so that the burden of direct and indirect costs weighs heavily on the average Nigerian household. Economic reform allows for private sector provision of educational services, but private schools often charge high fees. Poorer households resort to the easy option of withdrawing their children from school. A considerable proportion of Nigerian households spend almost all their income on food, with almost nothing left for education and other social services (Obadan et al. 2006).

Health Services

A nation's health care system is an indicator of its citizens' well-being. The health care sector in Nigeria enjoys considerable government attention and in particular the earnings of the 1970s significantly aided the sector's expansion. Nevertheless, health care services in the country have been poor and are often characterized by inefficiency, low and deteriorating quality and waste. This is in addition to the fact that government spending on health is very low vis-à-vis the recommendation of the World Health Organization (WHO). Although Nigeria is making reasonable progress in increasing its citizens' access to health care, the social indicators show that the country is still one of the world's poorest when assessed on standard health indicators (The World Bank 1996; Central Bank of Nigeria 1999; Obadan et al. 2006).

The provision of health facilities is a joint responsibility of the federal, state and local governments as well as religious organizations, nongovernmental organizations (NGOs), and community based organizations (CBOs). The provision of this important service is, however, chaotic. Medical personnel are in short supply. In the immediate post-independence period, the ratio of doctors to the population was about 1:32,000 on the average. In the rural areas it was about 1:120,000. During the second national development plan substantial allocation was made to health so that there was significant improvement in the doctor/population ratio to about 1:22,000. By the end of 1971, the ratio of hospital beds to population was 1:2,000. Inefficient management of these scanty resources is a major bane of the country's health services. The health sector's contribution to GDP has witnessed fluctuating fortunes (Central Bank of Nigeria 2000; Okojie et al. 2006).

Even with the inadequacy of health services and facilities, their rate of use is poor and far from encouraging. It also varies among income groups, regions, and gender. In particular, the rate of use of health services, especially the formal ones, is generally poor for all Nigerian income groups.. There are a number of reasons for this. They include widespread poverty among households, the high cost of medical services, gender discrimination, and

access and opportunity costs. Among the poor, both urban and rural, the opportunity cost of time spent away from economic activity is a critical determinant of health care use. Also the availability of other health-related amenities, such as potable water and waste/excreta disposal, is inadequate. Nearly 50 percent of rural dwellers have no access to adequate excreta disposal facilities. The riverine areas are especially lacking in adequate waste facilities. The pattern of refuse disposal is also similar (Obadan et al. 2006).

The limited access the poor have to health care services largely explains why many people in the rural areas patronize traditional medical practitioners and birth attendants. Although the provision of health care service in the country involves both the public and private sectors, with profit motive for the latter, the country is under-covered, and regional disparities are prominent. Accessibility favors the urban dwellers over the rural populace. It also favors the more affluent areas of the south, where there are many privately-owned health facilities; accounting for a significant proportion of health care services (Obadan et al. 2006).

Electricity

The generation and consumption of power in Nigeria dates back to 1896. That's when the first power plant was installed at Marina Lagos to supply electricity for residential use and light up the streets around government quarters. The number of generation facilities has since expanded considerably with the construction of hydro and thermal plants in several locations. In 1950, the government created the Electricity Corporation of Nigeria to take over the activities of the Nigeria Government Undertaking. By 1962 the government had set up the Niger Dam Authority to develop the hydroelectric potential of the River Niger. In 1972, the two were merged as the National Electric Power Authority, which has since been renamed and reorganized as the Power Holding Company of Nigeria Ltd. (PHCN). Nigeria experienced phenomenal growth in generation capacity in the immediate post-independence period. Unfortunately this was not sustained, and with disastrous consequences. Today, while almost all urban areas have access to electricity, this cannot be said of rural areas. Even the introduction of a rural electrification program has not made power available to rural residents. The installed generation capacity is inadequate and even collapsing due to lack of maintenance. Wood remains a dominant source of cooking fuel among Nigerian households no matter the status, although it is more prevalent among the poorest households than the richest (Central Bank of Nigeria 1997).

Availability and access to energy in Nigeria remain problematic. The total installed generating capacity from the eight power stations is 5,876 megawatts, but only 1,600 megawatts—representing 27.3 percent of installed capacity—are actually generated. Unfortunately, the government's rural electrification program was executed without adequate provision for transmission lines. This has led to very low electricity voltage and uneven distribution in the rural areas. The result is that by the year 2001, only 36 percent of the population had access to electricity and the majority for only 6 hours a day (World Bank 2005).

Access to electricity is measured as the percentage of villages with such access. Nigeria is the lowest in West Africa, with most districts in single-digit values. Rural Nigerians' extremely low access to electricity is due largely to the epileptic power generation and supply by the PHCN. Only 2.2 percent (on average of all 36 states including FCT) of all villages have rural electricity connections in Nigeria. Based on the recent available statistics, the states with the highest rural electrification are Rivers, Bauchi, Cross Rivers and Enugu. These represent 14.5, 12.9, 11.6 and 10.9 percent respectively (FRN 2006). For the last two decades, access to electricity has posed a great challenge for the future development of rural areas in Nigeria. The federal government plans to increase the rate of rural household

electricity access to 20 percent by 2015. These rates are among the lowest in the world, considerably lower than those achieved in India and China.

Water and Sanitation

Nigeria has about 267.3 billion cubic meters of surface water and 52 billion cubic meters of underground water annually at its disposal. This water, if properly harnessed, can meet the agricultural and water requirements of rural dwellers in particular. In spite of this, water supply problems remain endemic in the country, primarily because it fails to recognize water's importance. There are no data on water use in agriculture, industry, commerce, and so on. The demand for water in the urban areas has not been studied with a view to projecting future demand. Shortly after independence, an effort was made to supply water in the urban and rural areas. For example, in 1976, the government, with help from the World Bank, launched the Integrated Agricultural Development Project to make irrigation facilities available to agriculture. The ADP was also responsible for providing earth dams, boreholes and tube wells, and wash bores. Between 1991 and 1995, the ADP put in place a total of 147 of these facilities, but it did not sustain the effort. The result was a collapse of the public water supply system to the extent that private borehole operators now supply much of the water in both rural and urban areas. The government set up the River Basin Development Authorities and the Directorate of Roads and Rural Infrastructures to harness the country's water resources, among other objectives, and provide other facilities in rural areas. What these agencies provided was inadequate, however. Rural areas still, for example, depend on streams, rivers, and rainfall for water supply. In the area of irrigation, the capacity of dams is below 30 percent, as facilities in most dams remain in a poor state. Large reservoirs of water lie idle in the rural areas due to lack of downstream infrastructure for irrigation.

Access to improved water sources means not only water proximity but quality. Water supplies are generally classified as safe or unsafe. Households with access to safe drinking water are those that use any pipe-borne water, untreated pipe-borne water, boreholes or protected wells. While the dams are underused for water supply and irrigation, they have increased the vulnerability of some river communities to flood. (Anyanwu et al. 1997; Obadan et al. 2006; Okoye and Achakpa 2007).

The sanitary system in Nigeria is poor. Only about 16 percent of the richest 40 percent of households have access to the best toilet facilities, especially the flush categories, as compared with only 6 percent among the poorest 40 percent of households. In terms of the disposal of refuse, there are disparities according to the status of the households. The richest more often use government refuse bins while the poorest use private refuse collectors, disposal within the compound and other methods. This implies that the poorest households, the majority of which are rural, are likely to be worse off in terms of environmental health hazards.

Microfinance and the Nigerian Rural Economy

Microfinance is a major facilitator in financing rural economic activities that are intertwined with agriculture. Microfinance is the provision of financial services mainly to the economically active poor and low-income households. These services include credit, savings, micro-leasing, microinsurance and payments transfer to enable users to engage in income-generating activities. A national microfinance policy, launched on December 15, 2005, stipulated two categories of microfinance banks: those licensed to operate as unit banks within a local government area, with a minimum ~~N~~20 million capital requirement, and those licensed to operate statewide, with a minimum ~~N~~1 billion capital requirement. Community banks operating prior to the start of the microfinance policy and nongovernmental organizations or microfinance institutions were expected to transform to microfinance banks.

Attempts at targeting the poor (especially women) with microcredit by formal banking institutions in Nigeria have been relatively unsuccessful. This is because the active poor, who include women, cannot meet the requirements of conventional financial institutions in securing needed credit for their small-scale rural economic activities. The Agricultural Development Programs (ADPs), National Directorate of Employment (NDE), Better Life for Rural Dwellers (later named Family Support Programme), and Directorate for Food, Roads, and Rural Infrastructure (DFRRI) had the provision of microcredit to the active poor as a major objective. The Rural Banking Scheme (1977-1990), the People's Bank (1987-1990), the Community Bank (1990-2005) and the Central Bank of Nigeria's Agricultural Credit Guarantee Scheme of 1977 were all designed to provide microcredit to the needy. The urban well-to-do hijacked these programs to the detriment of the active poor, who reside mostly in rural communities. However, women benefited from the credit schemes of women-targeted programs such as the Better Life for Rural Dwellers and the Family Support Programme, and to some extent from the Peoples' Bank (Okojie 2007).

Microfinance, as currently structured in Nigeria, is expected to help create opportunities for Nigerians with the skills and creativity to make their livings. The notion is that if these people use available facilities through the microfinance scheme, to engage in activities capable of raising their incomes to sustainable levels, this will consistently keep them well above the poverty level. Some of the rural cottage industries identified as possible beneficiaries of microfinance are cloth weaving, retail outlets for consumer goods, rural transportation through the procurement of motor vehicles, and cassava processing and other agro-allied activities. Moreover, microfinance could assist the small-scale farmer to procure high yield seedlings, fertilizer, and other necessary farming requirements, which could, in turn, enhance agricultural output.

Omorodion (2007) carried out a study on rural women's experiences with microcredit schemes among Esan women in Edo state. The study examined the perceptions and experiences of Nigerian women who participated in Better Life for Women, a poverty alleviation program. Between January and June 1994, in-depth interviews were conducted with twenty members of two microcredit groups based in Ekpoma and Ubiaja. The data showed that the distance between their home and the financial institutions and spouses' control over their income hindered regular loan repayments. So did the use of force and threat of prosecution by the government and financial institutions. The findings are indications that cultural practices and expectations negatively affect poverty alleviation programs.

Access to Agricultural Inputs and Extension Services

Farmers have been slow to adopt agricultural inputs. As shown on Table 9, on the use of agricultural and other inputs at the national level, only about four out of every ten households (35.6 percent) used some agricultural inputs. Of these households, 82.1 percent used fertilizer, 19.1 percent used insecticides, 13.4 percent used improved seedlings, while 0.7 percent used fingerlings. By area of residence only 16.1 percent of urban households compared with 45.6 percent of rural households used some inputs. Fertilizer remains the key input used in both rural and urban households. Except for the South West and South-South, all zones showed high fertilizer use with rates above the national average. Kano State had the highest use of fertilizer (96.4 percent) in the North West zones, followed by Samara State (96.3 percent).

On the main source of agricultural inputs, Table 10 shows that a majority of households that used agricultural inputs got them from the open market (82.8 percent), while an insignificant 0.1 and 0.8 percent got them from a donor agency and a cooperative, respectively. The open market was more of a source in rural areas (84.2 percent) than in urban areas (75.1

percent). All northern and southern zones reported that their main source of agricultural inputs was the open market. All the states in each zone showed a similar pattern.

On the issue of land ownership, Table 11 shows the proportion of households by area (in hectares) of land owned. About four in every ten households (36.4 percent) did not own any land. The urban-rural breakdown showed that 22.9 percent of households in rural areas and 62.8 percent of households in urban areas did not own land. All southern zones recorded having a higher estimate of lack of land ownership with South West the highest (63.6 percent) in the country. The table also shows that land sizes are small with about 33.3 percent of households owning less than a hectare of land, followed by 14.2 percent owning between 2 and 3 hectares of land. Rural households owned larger land sizes with 11.7 percent owning over 6 hectares of land. On the issue of ownership of cattle, Table 12 shows that, generally, the proportion of household members without cattle was high (84.6 percent). Disaggregation by rural-urban, zones, household size, socio-economic group, and gender followed a similar pattern. Distribution by number of cattle owned revealed that ownership of between 2 and 10 cattle was predominant (11.0 percent), while 50 and above accounted for the lowest rate (0.6 percent).

Table 9: Percentage of households using agricultural and other inputs

	Fertilizer	Improved seedling	Fingerlings	Hooks and Nets	Insecticides	Other	National
Total	82.1	13.4	0.7	2.3	19.1	5.3	35.6
Sector							
Rural	83.7	13.1	0.6	2.5	19.0	5.6	45.6
Rural Poor	76.2	11.7	0.8	3.8	16.9	6.6	37.8
Urban	73.0	14.9	0.7	0.9	19.3	3.9	16.1
Urban Poor	72.1	13.5	0.2	1.2	15.3	3.5	24.1
North East Zone	86.3	10.9	1.0	1.0	23.7	3.9	41.7
Adamawa	84.7	29.6	5.2	1.9	37.3	1.5	40.6
Bauchi	95.1	2.2	0.2	0.0	10.8	5.4	52.9
Borno	86.9	5.5	0.2	0.3	37.8	0.8	31.5
Gombe	89.9	14.5	0.3	0.4	14.1	1.0	70.6
Taraba	80.0	16.8	0.0	5.5	30.9	0.0	28.9
Yobe	54.9	1.5	0.0	1.4	18.4	22.1	32.0
North West Zone	91.3	13.9	0.6	0.7	22.9	8.0	70.5
Jigawa	80.5	8.5	2.7	1.4	13.6	18.1	62.5
Kaduna	93.5	13.2	0.0	0.6	7.1	1.8	65.3
Kano	96.4	32.6	0.9	0.6	35.6	0.3	62.0
Katsina	95.3	12.4	0.1	0.2	40.7	8.5	83.9
Kebbi	85.5	8.6	0.6	1.6	21.9	17.1	68.2
Sokoto	79.6	2.5	0.3	0.8	12.5	22.3	72.7
Zamfara	96.3	1.7	0.3	0.0	6.1	0.1	86.5
North Central Zone	85.0	6.2	0.4	2.0	12.5	3.6	37.8
Benue	97.6	1.4	0.4	1.2	4.8	0.0	48.1
Kogi	43.7	3.1	1.4	10.2	42.5	8.4	22.8
Kwara	57.6	14.5	0.1	1.6	8.8	0.0	17.3
Nasarawa	95.1	4.7	0.1	0.6	2.6	0.7	48.6
Niger	89.1	8.6	0.0	1.2	23.1	4.5	45.2
Plateau	89.9	9.1	0.3	0.1	1.0	7.3	49.3
FCT	92.5	18.1	0.1	2.5	24.3	0.2	20.3
South East Zone	87.4	20.0	0.3	0.2	0.7	2.7	37.9
Abia	97.9	10.0	0.2	0.0	0.9	1.1	36.9
Anambra	77.0	36.8	0.6	0.4	0.8	4.6	43.2
Ebonyi	96.3	1.5	0.0	1.1	0.5	1.3	33.8
Enugu	75.1	30.1	0.0	0.1	0.5	5.0	29.4
Imo	96.2	6.7	0.1	0.0	0.4	0.9	40.6
South West Zone	42.4	21.9	1.6	4.3	42.6	3.3	13.8
Ekiti	19.1	8.5	0.4	0.3	69.5	0.0	15.6
Lagos	29.1	4.5	2.4	10.3	9.3	2.0	1.9
Ogun	49.6	30.7	1.1	1.3	23.3	7.8	9.2
Ondo	24.3	4.6	2.3	12.2	66.7	0.0	27.4
Osun	49.6	23.3	1.9	0.3	50.8	8.9	27.7
Oyo	63.2	44.3	0.8	0.7	11.2	0.7	17.1
South-South Zone	47.9	4.8	0.3	19.1	5.0	3.9	13.0
Akwa Ibom	83.5	7.1	0.3	3.1	0.2	0.6	15.1

Bayelsa	15.9	8.9	1.2	64.4	6.4	7.6	24.5
Cross River	57.2	8.3	0.3	3.7	23.8	13.8	11.1
Delta	18.9	3.3	0.3	17.0	1.6	0.6	16.8
Edo	56.8	3.6	0.0	1.6	9.6	8.3	5.7
Rivers	65.2	0.3	0.3	24.7	0.4	1.4	11.8

Source: National Bureau of Statistics (NBS) 2006a, Core Welfare Indicator Questionnaire (CWIQ) Survey

Table 10: Percentage of households using agricultural inputs by the main source of the inputs

	Open Market	Government	Donor Agency	Cooperatives	Other	Total
National	82.8	7.1	0.1	0.8	9.3	100
Sector						
Rural	84.2	7.0	0.1	0.8	7.9	100
Rural Poor	83.5	4.2	0.1	0.3	11.9	100
Urban	75.1	7.4	0.1	0.5	16.8	100
Urban Poor	75.6	5.0	0.0	0.1	19.3	100
North East Zone	89.0	2.5	0.1	0.0	8.4	100
Adamawa	92.0	1.7	0.0	0.0	6.3	100
Bauchi	88.5	3.5	0.0	0.0	8.0	100
Borno	92.5	2.3	0.0	0.0	5.2	100
Gombe	94.8	2.2	0.0	0.0	2.9	100
Taraba	90.2	1.5	0.0	0.3	8.0	100
Yobe	60.7	2.3	1.0	0.0	36.0	100
North West Zone	79.6	11.3	0.0	1.2	7.9	100
Jigawa	77.2	4.2	0.0	0.0	18.6	100
Kaduna	89.1	3.6	0.1	0.2	7.1	100
Kano	92.6	4.5	0.1	0.5	2.3	100
Katsina	87.9	8.0	0.0	0.3	3.8	100
Kebbi	81.0	6.2	0.0	0.1	12.6	100
Sokoto	72.8	7.7	0.0	0.1	19.4	100
Zamfara	32.6	56.0	0.0	8.6	2.8	100
North Central Zone	88.3	4.4	0.0	0.3	6.9	100
Benue	93.3	4.4	0.0	0.3	2.0	100
Kogi	84.3	5.0	0.0	1.5	9.2	100
Kwara	65.6	6.5	0.1	0.9	26.9	100
Nasarawa	91.7	4.0	0.0	0.0	4.3	100
Niger	85.9	7.1	0.2	0.1	6.7	100
Plateau	91.6	0.9	0.0	0.0	7.5	100
FCT	82.9	9.5	0.0	0.0	7.6	100
South East Zone	91.7	1.3	0.0	0.1	6.9	100
Abia	96.9	1.3	0.0	0.1	1.7	100
Anambra	87.5	0.2	0.0	0.0	12.3	100
Ebonyi	91.1	3.8	0.0	0.3	4.8	100
Enugu	90.0	2.5	0.0	0.0	7.5	100
Imo	93.7	1.2	0.0	0.3	4.8	100
South West Zone	79.0	7.7	0.3	1.8	11.2	100
Ekiti	81.8	2.9	1.2	5.8	8.2	100
Lagos	36.6	1.1	0.5	0.0	61.9	100
Ogun	68.0	13.4	0.8	0.0	17.7	100
Ondo	90.3	2.7	0.0	2.4	4.7	100
Osun	79.2	12.2	0.2	1.9	6.4	100
Oyo	77.0	9.2	0.2	0.7	13.0	100
South-South Zone	62.1	6.7	0.8	1.0	29.4	100
Akwa Ibom	61.7	24.3	0.2	1.8	12.0	100
Bayelsa	69.8	2.8	0.9	2.3	24.2	100
Cross River	66.0	12.8	2.7	0.8	17.7	100
Delta	34.1	0.8	0.1	0.4	64.6	100
Edo	71.6	0.3	0.0	2.0	26.1	100
Rivers	89.5	0.0	1.2	0.2	9.2	100

Source: National Bureau of Statistics (NBS) 2006a, Core Welfare Indicator Questionnaire (CWIQ) Survey

Table 13 shows the gender of the heads of households using agricultural inputs and the percentage using certain inputs; the percentage of households using agricultural inputs by the main source of the inputs; the percent distribution by the area (in hectares) of land owned by the household; and the percent distribution by the number of cattle owned by the household. The table shows that gender does play a role in fertilizer usage, as nearly 1.5 times more male heads of household (83.2 percent) than female heads (66.9 percent) used fertilizer. It also shows that there are minimal differences in source of inputs by gender of household heads: male heads (82.9 percent) and female heads (81.4 percent) both sourced their inputs of fertilizer from the open market. The table shows land ownership is heavily gender-biased, with more female heads of household without land and less than 3 percent owning over six hectares. With respect to ownership of cattle, the table reveals that close to 100 percent of female heads of household did not own any cattle when compared with about 80 percent for male heads of household. Table 14 shows that there is a gender bias by type of income-generating activity in crop farming and fishing. More males engaged in both sectors than females. Table 14 recorded 62.7 and 68.8 percent for males and 37.3 and 31.2 percent for females for both crop farming and fishing respectively.

Table 11: Percent distribution by the area (in hectare) of land owned by the households

	None	< 1ha	1-1-99	2-3-99	4-5-99	6+ha	Total
National	38.4	25.1	7.3	14.2	8.9	9.9	100
Sector							
Rural	22.9	29.1	9.0	18.2	9.1	11.7	100
Rural Poor	23.5	25.2	10.2	19.9	9.2	12.0	100
Urban	62.8	20.3	4.1	6.5	2.6	3.8	100
Urban Poor	56.7	19.7	5.6	9.4	3.7	4.9	100
Zone							
North East Zone	17.8	14.2	13.4	29.5	12.4	12.8	100
North West Zone	17.8	21.3	8.5	23.8	13.4	15.2	100
North Central Zone	30.8	21.5	8.8	16.1	8.1	14.8	100
South East Zone	30.1	53.1	6.8	6.2	1.2	2.6	100
South West Zone	63.6	18.5	4.0	6.6	3.5	5.7	100
South-South Zone	45.7	37.8	5.1	6.0	2.5	2.9	100

Source: National Bureau of Statistics (NBS) 2006a, Core Welfare Indicator Questionnaire (CWIQ) Survey

Table 12: Percent distribution by the number of cattle owned by the households

	None	1	2-10	11-20	21-50	50+	Total
National	84.8	1.7	11.0	1.3	0.9	0.5	100.0
Sector							
Rural	78.9	2.3	15.2	1.8	1.3	0.6	100.0
Rural Poor	82.9	1.9	11.3	1.7	1.5	0.7	100.0
Urban	95.7	0.6	2.9	0.3	0.2	0.4	100.0
Urban Poor	95.4	0.7	3.0	0.4	0.1	0.4	100.0
Zone							
North East Zone	65.0	1.9	24.4	4.1	3.3	1.3	100.0
North West Zone	57.9	5.8	30.9	2.8	1.8	0.8	100.0
North Central Zone	91.6	0.9	5.7	0.7	0.6	0.5	100.0
South East Zone	97.7	0.3	1.6	0.0	0.1	0.2	100.0
South West Zone	97.4	0.2	1.6	0.3	0.1	0.4	100.0
South South Zone	98.9	0.1	0.7	0.0	0.0	0.3	100.0

Source: National Bureau of Statistics (NBS) 2006a, Core Welfare Indicator Questionnaire (CWIQ) Survey

Table 13: Gender of household heads, use of agricultural inputs and land ownership

Gender of Heads of Households and Percentage Using Agricultural Inputs and other Inputs							
	Fertilizer	Improved Seeding	Fingerlings	Hooks and Nets	Insecticides	Other	National
Male	83.2	13.2	0.7	2.1	19.8	5.5	38.7
Female	66.9	15.9	0.5	4.9	9.7	9.7	16.6
Gender of Heads of Households and Percentage Using Agricultural Inputs by Main Source of Inputs							
	Open Market	Government	Donor Agency	Cooperatives	Other	Total	
Male	82.9	7.3	0.1	0.8	8.9	100.0	
Female	81.4	3.3	0.0	0.5	14.8	100.0	
Gender of Heads of Households and Percent Distribution by Area (in hectare) of Land Owned							
	None	< 1ha	1-1-99	2-3-99	4-5-99	6+ha	Total
Male	33.3	25.6	7.7	15.7	10.1	10.1	100.0
Female	54.8	29.3	5.0	5.8	2.2	2.9	100.0
Gender of Heads of Households and Percent Distribution by the Number of Cattle Owned							
	None	1	2-10	11-20	21-50	50+	Total
Male	82.4	1.9	12.5	1.4	1.0	0.8	100.0
Female	57.5	0.3	1.8	0.1	0.0	0.3	100.0

Source: National Bureau of Statistics (NBS),2006a, Core Welfare Indicator Questionnaire (CWIQ) Survey

Table 15, which presents access to agricultural facilities by gender and age, shows that the younger age groups had greater access to many of the agricultural facilities than the older ones. A distribution by gender across various age groups shows that access to agricultural facilities was higher in all the age groups for the males than for females. However, one distinct feature is that males aged 60 and above reported a higher access to agricultural inputs (73.5 percent for land, 81.2 percent for agricultural inputs, 87.5 percent for agricultural extension service and 87.2 percent for storage facility) compared with females of the same age group (26.5 percent for land, 18.8 percent for agricultural inputs, 12.5 percent for agricultural extension service and 12.8 percent for storage facility). Access to agricultural facilities shows a very large divergence by gender where nearly five times as many males as females had access to agricultural extension services in the 45 to 59 age group and above, while females in the 15 to 29 age group seemed to have the greatest access to agricultural facilities among females.

Table 14: Percent distribution of income generation from agricultural crop farming and fishing by gender and age

	5-14 yrs	15-29 yrs	30-44 yrs	45-59 yrs	60+ yrs	Total
Crop Farming						
Male	61.0	58.6	61.4	63.7	73.2	62.7
Female	39.0	41.4	38.6	36.3	26.8	37.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Fishing						
Male	64.5	66.6	67.1	70.6	76.9	68.8
Female	35.5	33.4	32.9	29.4	23.1	31.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: National Bureau of Statistics (NBS) 2006a, Core Welfare Indicator Questionnaire (CWIQ) Survey

Table 15: Access to agricultural facilities by gender and age

	15-29 yrs	30-44 yrs	45-59 yrs	60+ yrs	Total
Farm Land					
Males	56.6	63.4	66.6	73.5	64.1
Female	43.4	36.6	33.4	26.5	35.9
Total	100.0	100.0	100.0	100.0	100.0
Agricultural Inputs					
Males	64.6	73.8	74.0	81.2	73.3
Female	35.4	26.2	26.0	18.8	26.7
Total	100.0	100.0	100.0	100.0	100.0
Agricultural Extension Service					
Males	65.6	72.9	84.4	87.5	77.2
Female	34.4	27.1	15.6	12.5	22.8
Total	100.0	100.0	100.0	100.0	100.0
Storage Facility					26.0
Males	59.2	72.7	79.6	87.2	
Female	40.8	27.3	20.4	12.8	74.0
Total	100.0	100.0	100.0	100.0	100.0

Source: National Bureau of Statistics (NBS) 2006a, Core Welfare Indicator Questionnaire (CWIQ) Survey

Determinants of Access to and Use of Public Services

Understanding the public's satisfaction with economic and social services is of overriding importance to policy makers. So does understanding the extent to which people use these services and the ease or difficulty of using them. These indicators constitute the fundamental basis upon which national governments and donor agencies strive to make services available to the target users. A few studies that examine access to and use of social and rural services are in the literature. Some are qualitative in nature, relying on focus group discussions and Participatory Poverty Assessment frameworks to obtain insights. A few others are quantitative and empirical.

One of the most insightful quantitative studies is by Mbanefoh, Soyibo and Anyanwu (1998). They conducted an "econometric investigation of women's demand for health care services in Nigeria." They used data on health, the demand for health services and on socioeconomic characteristics from a household survey they conducted in 1990-91. The survey covered six states: Anambra, Borno, Cross River, Ogun, Plateau and Sokoto. Specifically, the survey was "designed to identify both the patterns and determinants of public and private health service utilization by individuals." In addition, it sought to ascertain factors that influence "individuals' access to health care facilities and their health care-seeking practices." Using multinomial logit estimation techniques, they obtained empirical results showing that the price of health care services, household income, travel time, age, and waiting time significantly affect the demand and access of women to health care facilities. This was true within all four administrative health zones in the study.

Focus group discussion results and Participatory Poverty Assessment findings largely suggest that access to and use of health services are largely influenced by the services' proximity to urban centers. Equally significant is the quality of the roads that link the rural community to the nearest urban center and to other communities. The findings indicate that a strong correlation exists between the quality of road infrastructure and rural dwellers' access to health and educational facilities (World Bank 1996a). A World Bank (1996a) study found that in rural communities that could be accessed by a paved road, more than 80 percent of the population had access to health services, a health clinic or a health worker. In rural communities without paved roads, nearly 68 percent of the population lacked access to any formal health services.

In addition to the foregoing, results of Participatory Poverty Assessment studies on use of health services show that “in communities that are inaccessible during the rainy season, about 75 percent of pregnant women did not receive tetanus toxoid [vaccine] during pregnancy.” This is remarkably higher than the 40 percent of pregnant women in rural communities that had access to health services and did not receive tetanus toxoid. Forty percent of the children in these communities with access were born in a health facility, a marked contrast to the 11 percent in the areas that lacked such access during the rainy season.

In a study of “Health Policy and Performance” in Nigeria’s Fourth Republic, Aregbeyen (2004) points out that the good intentions of the various health policies notwithstanding, health care delivery is beset by numerous operational problems that combine to inhibit the attainment of the policies’ set target and goals. He attributes this to the state of the nation’s economy, which he considers a critical factor in the failure to achieve policy objectives. According to Aregbeyen, “improvements or otherwise in the health indicators of a population can, in a way, be used to reasonably examine access to health facilities and hence to assess the effectiveness of health sector policies and actions.” In particular he notes that policies that ensure widespread access to health care help to ensure that it is delivered promptly and equitably. In his view, one of the challenges in the health sector lies in the inadequacy of coverage. This results in a situation where “less than 70 percent of the Nigerian population has access to modern health services compared with an average of 80 percent in developing countries with access to such facilities. Overall, he noted that Nigerians’ limited access to health care on the government’s inability to adequately subsidize it.

Ndiyo (2005) examined educational services, and the factors that determine access to them in selected states in southeastern Nigeria. He also examined how much these services were used. He observes that several factors impinge on access and use, the most significant of which are the cost of acquiring education, the distance to school, and the opportunity cost of attending school. His findings show that enrollment costs constitute a significant constraint to use in the rural areas. In addition, even when access is not a problem, the more immediate returns a young person can reap from serving as an apprentice and learning a trade constitute a significant negative factor on the use of educational services. In his view, this largely explains the high dropout rates of boys from secondary schools in southeastern Nigeria.

Awopegba and Adedeji (2004) in a study of the “Trend and Development in Education Policy in Nigeria” note that the country’s educational policies are geared towards resolving issues relating to the structure, equity, availability, management, quality, relevance, finance, and efficiency of the educational system (see also Babalola 2000). They point out that access to education in Nigeria is hampered by several factors, the most prominent of which is cost. The entry of private education providers and the increasing withdrawal of public funding from education funding have further served to raise the cost of education. Proponents argue that the increased costs of acquiring education serve to constrain access to education (Awopegba and Orubu 2003). This is despite the fact that the goals of Universal Basic Education (UBE) include “universalizing access to basic education, engendering a conducive learning environment and eradicating illiteracy in Nigeria within the shortest possible time”.

Okafor et al. (1998) examined the Structural Adjustment Programme (SAP) as it affected access to essential social services, using health care in selected states as a case study. One of their major findings was that the rising cost of health care as well as the high cost of living engendered by the SAP adversely and significantly affected health-seeking behavior. They pointed out that in spite of a generally positive disposition to biomedical facilities among Nigerian consumers; the high cost of health care is generally driving many of them to

alternative forms of medication, including self-medication. The results the authors obtained from focus group discussions in their study indicate that users of health care delivery services consider the cost of accessing them to be high. Specifically, 91 percent of the respondents opined that “the cost of health care delivery services was neither moderate nor low.” Fifty-two percent of them actually considered it to be high. This inhibited Nigerians’ use of hospital services. In fact, 57.8 percent of the respondents admitted a reduction in their use of health care services as a result of increased cost occasioned by the SAP. Responses obtained from the Okafor survey indicate that the cutback in the use of health care services stemmed not from a dislike of biomedical services as 84 percent of respondents expressed preference for it. The reduction in use was slightly more pronounced among the rural dwellers, with a reported incidence of 50.8 percent compared with 49.2 percent of urban dwellers.

Infrastructure constitutes an important foundation for growth and development in any economy. The rural areas of Nigeria are characterized by inadequate and poor social infrastructure, partly accounting for the increasing cost of economic activities. Infrastructure is particularly poor in transportation, telecommunication, water supply, electricity supply, and other areas, which imposes heavy costs on agricultural production. The reasons for inadequate investment in rural infrastructure are policy-related: insufficient budgetary appropriation, fraudulent diversion of budgetary funds, and inefficiencies resulting from corrupt mismanagement. (Obadan et al. 2006).

With respect to agricultural services, available data show that the following categories of farmers were more likely to have access to agricultural inputs—male farmers; communities that have had agricultural service projects within the last five years; households from the North West, North Central and South East zones. Female and illiterate farmers were less likely to have access to agricultural inputs (Akramov and Okojie 2008).

The Impacts of Access to Rural Services on Agricultural Productivity and Development Outcomes

The Impacts of Access to Rural Services

Rural infrastructure can be seen as the complex of physical structures or networks within which social and economic activities are carried out. These structures are not ends in themselves but means to achieving the broader goals of poverty reduction and economic growth. Rural infrastructure contributes to these goals by providing essential services such as water and sanitation; energy for cooking, heat and light and employment-generating commercial activities; transportation of goods and people; and the transmission and communication of knowledge and information (Fishbein 2001).

Rural infrastructure plays a critical role in poverty reduction, economic growth and empowerment for the African rural poor. Experience has shown, however, that it is not enough to simply meet demand for services by constructing a road, installing a water pump, or planting trees for fuel wood. More often than not, the quality and level of these services steadily diminishes. As a result, practitioners are now asking whether countries and rural communities should provide not only physical infrastructure, but also ensure that services are continuously provided on a sustainable basis at appropriate levels of quality and affordability (Fishbein 2001).

Access to services provides stability and improved quality of life in rural places, which in return provides a strong basis for maintaining communities. Rural and small town services are especially critical to local sustainability during times of economic and social restructuring (Furuseth 1998; Gill and Everitt 1993). During economic downturns, services can close, resulting in uncertainty and an inability to cope with increased demands. In addition, many rural services such as post offices and schools act as multi-functional centers and focal points for community activity. Such services can also provide opportunities for building relationships, partnerships, and trust that can lead to new partnerships and new rural service delivery options. If such services did not exist, residents would be more likely to leave their communities to access services in other places. This can result in further emigration and instability for rural and small town places and in some cases can lead to the closure of these places (Desjardins et al. 2002).

In India, studies have shown that provision of rural services, such as infrastructure investment, is integral to the process of development, particularly to improving agricultural production. Among the more tangible benefits is increased accessibility to these services (Wanmali and Islam 1997). According to them, the absence of some of this infrastructure can lead to unsound agricultural planning, e.g. an inability by government agencies to collect, store and analyze data on soil and vegetation before planning agricultural development activities.

Efforts to measure local government service delivery “outcomes” in terms of reduced poverty or improvements in other social indicators are inconclusive and fraught with methodological problems. Data problems also pose serious constraints to knowing the effects of service delivery by local authorities. Also, there are risks involved in allowing local governments to deliver services, due in part to the inadequate technical capabilities of their staffs (Robinson 2003).

Developing countries across the globe face a myriad of problems ranging from poor governance to poor program implementation. The effect is manifested in rising levels of poverty and food insecurity, a deplorable state of infrastructural facilities, and a generally poor delivery system. Worse still, policymakers do not take into consideration the end users

of projects, especially at the planning and implementation stage. The outcome is that completed projects are not based on the needs of the people concerned but primarily on the basis of the political and personal inclination of the administration (Oluwatayo 2006).

According to Oates (1972); Manin, Przeworski and Stokes (1999) as cited in Kauneckia and Anderson (2006), there is a long theoretical literature on the advantages of local government service delivery. One benefit is better information revelation, as citizen preferences are easier to perceive at the local level. Another is improved accountability, since it is easier to link the performance of local services to local political representatives. In a study of lessons learned on decentralization, Blaser, Besdzek and Byrne (2003) opined that the failure to match grants allocations with actual service delivery and expenditure requirements at the subnational level results in “unfunded” mandates. These require that subnational governments prioritize expenditure and may encourage them to neglect expenditure on important public services. Over two-thirds of Nigeria’s population lives in the rural areas. Increasingly, poverty in the country is wearing a rural face. From 28.3 percent in 1980, poverty among the rural population grew to 51.4 percent in 1985 and even rose to 69.8 percent in 1996. Poor rural dwellers experience insecurity and a lack of opportunity to generate income and benefit from markets.

Important infrastructure services like water, energy, and telecommunications come at relatively high costs in rural communities. Essential expenditures on water and energy often represent a large proportion of the disposable income of rural households. About 77 percent of rural households rated access to adequate and safe water as the most critical element in escaping poverty, while 53 percent rated access to electricity as the second most critical element. (ESMAP 2005).

Rural Services, Agricultural Productivity and Development Outcomes

This section presents a summarized review of available literature on the impact of access to rural services on agricultural productivity, poverty, inequality, and food security in Nigeria. Inadequate rural service is the most crucial development challenge for Africa (African Development Bank (ADB 1999).

Rural Markets

The principal function of a market is to facilitate exchange among economic agents, and in so doing, enhance specialization and efficiency. Indeed, specialization and efficiency are limited by the scope of the market. Thus, imperfect or incomplete markets are a constraint on rural enterprise, employment, and production. For example, in Nigeria, as elsewhere, the livelihoods of rural people are greatly affected by the opportunities available to participate in factor and product markets. In particular, the extent to which rural households can participate in labor and credit markets is a major determinant of poverty rates among households. Rural poverty increases with distance to markets (see Greer and Thorbecke 1986). Access to goods markets, for instance, allows households to buy and sell food as necessary. Participation in food markets can help people avoid hunger and famine. It can also motivate households to use available land optimally, e.g., by engaging in production for markets, instead of producing just the amount of food the household needs. Furthermore, participation in markets, especially credit markets, smoothes consumption because it enables households to borrow when their own internal resources are insufficient to meet their basic needs.

Policies designed to improve markets for non-labor farm inputs, such as fertilizers, insecticides, herbicides, veterinarian services, purchased seed, and modern farm implements, would not only increase agricultural incomes for farmers. They would also provide opportunities for landless workers to increase their labor incomes. Moreover,

improvements in markets for non-farm inputs would increase non-farm output and employment. A substantial portion of rural-urban migration is motivated by opportunities for non-farm employment in urban areas (Harris and Todaro 1970).

Rural labor markets are critically important in providing a livelihood for poor people. It is well established in the literature that the principal asset of the poor is their own labor (World Bank 1990, 2000). Improving rural labor markets would raise rural employment opportunities and incomes. The difficulty here is in identifying the types of markets to be improved. In the case of the informal labor market, examples of labor in small-scale farming include workers in the small-scale farm sector, owners of small-scale farms, and share croppers. Categories of non-agricultural labor in non-factory settings include full and part-time self-employed workers, part-time wage workers with self-employment, and landless full-time wage workers. Porter (1988) focused on the spatial behavior of participants in the rural periodic markets of Moslem Borno in northeast Nigeria. He focused particularly on the role and mobility patterns of female marketers, who are not generally in seclusion, and made comparisons with neighboring Hausaland. Porter emphasized the importance of the cultural context in which market systems operate. Porter also considered recent changes in the market system, particularly those associated with road improvements. These improvements have implications for traders, especially women traders, based in more remote villages. In view of the crucial role which the periodic market system plays in maintaining the economic and social vitality of the rural areas, Porter suggests developments that might affect the system should be planned with care.

Rural Roads and Water

Physical infrastructure is scarce in Sub-Saharan Africa (SSA), particularly road networks within rural areas (including farm-to-market roads), and between rural and urban areas. There is also tremendous under-investment in irrigation projects. The quantity and quality of roads play a crucial role in facilitating trade at all levels (intraregional, interregional, and international). This network is tremendously underdeveloped in SSA, particularly in Nigeria, and is a major cause of 1) the very high transportation costs that prevail; 2i) the high price spreads between initial agricultural producer prices and ultimate consumer prices; 3) segmented agricultural product markets; and 4) very limited market orientation on the part of the small Nigerian farmers who produce largely for subsistence with low marketable surpluses.

Tarmac (or tarred) roads are generally well-maintained and sealed by tar. These roads feed into cities from different border posts and towns. Murram roads are gravel roads (small stones mixed with sand) with varying degrees of maintenance dependent on seasons and traffic. Feeder (or dirt) roads link communities to commercial and socioeconomic centers or connect them to the classified road network. The roads are therefore very important for the livelihood of rural communities since they facilitate the marketing of agricultural produce and the delivery of farm inputs and social and administrative services. Most Nigerian roads can be used by motorized vehicles but some roads are passable only during the dry period.

Policymakers presume that developing rural transport and water infrastructure will especially benefit women because they have the biggest transport burden in Nigeria. Nigerian rural women work an average of 30 hours a week compared with 14 hours for men; the women also produce more food and provide 30 percent of agricultural labor (NBS 2005a). Rural Nigerians have identified road improvements as a key priority in improving their lives. Many participatory surveys reveal the crucial importance that those most affected by the lack of roads attach to this item.

The CWIQ survey showed that only 39.6percent of rural citizens had access to safe water (NBS 2006). Government investment in rural water infrastructure is important not just for safe access, but also for economic growth and poverty reduction. A study of micro and small enterprises (MSEs) in Uganda showed, however, that the economic benefits to MSEs of water supply improvements might be limited unless they are carefully planned. (Davis et al., 2001). Businesses in two communities where Davis (2001) and his colleagues conducted research preferred a system of public kiosks to private connections. Small retail operations that sell food or dry goods have very little need for large quantities of water. These findings imply that piped water services with private connections may be more appropriate for Uganda's residential areas, whereas piped services to central business districts will probably require more public taps than are commonly envisioned. These findings show the importance of providing a range of technological options when planning a new water supply system, and importantly, for obtaining reliable information on the preferences of different consumer groups.

Addo (1988) investigated the procurement, distribution and transportation costs of fuel wood around Ibadan, Ogbomosho and Ile-Ife, urban centers in Nigeria's Oyo State. These centers are surrounded by a wood-producing belt. Procurement of the wood is a supplementary activity, carried out primarily by illiterate women between 30–50 years old. The women carry the wood on their heads from farms to nearby roads. Trucks then transport it to urban centers. Transportation costs per kilometer were lower for faraway than for nearby places, Addo found. He also found that transportation rates did not differ for bitumen and gravel surfaced roads. Whereas transportation costs constitute about 50 percent of the original cost of fuel wood, they constitute about 25 percent of the retail price in the urban centers. Addo concluded that shipping the wood in less bulky forms—so that it is easier to handle—may reduce these high transport costs.

Barth (1986) studied gender and rural road services, and concluded that transportation is one of the most crucial problems in the labor-intensive subsistence farming systems of Sub-Saharan Africa. Women, as the primary food producers, supply the bulk of labor required both for farm work, such as growing food and cash crops, and domestic work (see Table 5). Most female activities in subsistence agriculture are tied to on-farm transport: Women carry water, wood and harvested crops. The burden of the transport work women perform is reflected in the distances they cover and the loads they carry. Providing these women with labor-saving and time-saving transport and improved farm and household equipment is therefore essential in order to raise the effectiveness and efficiency of food production. These improvements will sustain themselves if women's access to financial resources and hence their access to the cash economy are guaranteed.

Women depend more heavily on public transport services and walking than men because they are less able to afford cars. Women and men also have different transport requirements because of gender division of labor (Budlender et al. n.d.; UN-HABITAT 2001). Women often require transport at off-peak hours and to different destinations than men—the market, shopping center, health center, or the children's school. There are also cultural and religious factors in women's use of public transport. In many Nigerian cities and especially in rural areas, public transport is often irregular and vehicles are dilapidated. They are also overcrowded and sometimes dangerous. This hinders women from carrying out their domestic and economic activities. World Bank studies show that engendering public transport is often critical to urban women because of its impact on their access to work and employment, their safety, and their time allocation to domestic work (World Bank 2000). In rural areas, poor transport services make it difficult to evacuate farm produce from farms and to transport it to markets. Women need programs that improve access to transport, provide more frequent service, and pay attention to public safety (UN-HABITAT 2001).

Table 16: Women's share of the workload in rural areas

Workload	Tasks	percent of load borne by women
Household Tasks	Fetching and Carrying Water	90
	Cooking/preparing meals	90
	Domestic Stocking	50
Farming Tasks	Clearing Fields	5
	Turning Soils	30
	Planting	50
	Hoeing and Weeding	70
	Harvesting	60
	Transporting	80
	Storing	80
	Processing	90
	Marketing	40
Parental Tasks	Child Rearing	95
	Payment of School Fees	50
	Home Education	75

Source: UNDP, Nigeria Human Development Report 1996

Although women make important contributions in the agricultural sector, they lack access to land for farming, and they have limited access to agricultural inputs, such as improved seedlings, agricultural extension services, credit, and improved technology. Most of their farming and processing activities are performed using manual labor. This makes farming and food processing very arduous. It also contributes to low output and high wastage (Okojie 1998, 2002, 2004, 2007).

Rural Services and Agricultural Productivity

A few studies have found a link between access to rural services and growth in agriculture. Clearly, the link works both ways. However, there is some empirical analysis that supports the idea that access to rural services would stimulate growth in farm and non-farm income as well as employment (ADB 1999; Reardon 2001). The dominant view in the literature is that growth in agriculture and growth in rural non-agriculture complement and reinforce each other in raising the incomes of the rural people (Reardon et al. 2001; Barrett et al. 2001). However, the extent of complementarities and synergies between the sectors depends on the nature and density of rural infrastructure and the strengths of rural-urban links.

Agriculture is a cornerstone of rural economies (DBSA 2000). It has been generally argued that for agriculture to achieve its potential there is a need for investment in rural services. Some studies referred to in Wanmali and Islam (1997) have shown that improved and better access to rural services enhances farm productivity, with a subsequent contribution to overall development. The DBSA (1998) confirmed the positive association between rural service infrastructure and the society's level of development. The choice of agriculture and the rural non-farm sector as engines of rural development and overall economic growth calls for a complete reorientation of development priorities in the continent. Policy makers would need to abandon established patterns of national resource allocation and develop mechanisms for greater participation of the populace in national economies.

As already noted, rural development can occur only in the context of an expanding national economy. Sound macroeconomic policies are therefore an important precondition for rural development. However, these are not sufficient to ensure dynamism in agriculture and in the rural non-farm economy. In addition, investments are needed in rural education, health and sanitation facilities; in irrigation and extension facilities; in, market centers and social networks and safety nets). In short, the interrelated factors mentioned above, together with technological constraints and discriminatory policies against agriculture, go a long way toward explaining the essentially stagnant production picture in Nigeria over the last three decades or so.

To understand the sources of growth, it is important to distinguish between production and productivity. Production is the same as output. It is physical produce and can be reported in units of volume or weight. For instance, cereal production would be reported in metric tons. Productivity is not physical produce; it is a number. Productivity is defined as output per unit of input, where "input" can be land, labor and/or capital, and "output" is agricultural produce. The importance of productivity, however defined, is that it gives a measure of efficiency. It tells us in one figure how much input was used to produce a unit of output. For instance, the labor productivity of paddy rice in 1998 in India is a number that tells us the amount of paddy rice that one Indian agricultural worker produced in 1998, on average. The unit of labor productivity is kilograms per worker. It is important to specify what output (or outputs) and what input (or inputs) are actually used to calculate productivity. Development of rural infrastructure is key to rural social and economic life.

Solving the problem of low agricultural productivity in Nigeria requires taking into account a large constellation of factors, including the roles of technological development and knowledge transfer, land tenure systems, agroclimatic conditions, and informal institutional constraints, such as those imposed by cultural norms. We find that income diversification, wealth, earnings and consumption are positively correlated. However, increasing livelihood diversification may not reduce rural poverty. The asset-poor households tend to engage in low-return activities that ensure food security without increasing incomes. In some instances, diversification is a strategy for coping with poverty rather than a mechanism for escaping from it. Getting the poor to reduce diversification of their livelihood strategies may be a way of releasing them from poverty traps.

Available statistics show that 86 percent of households participate in agriculture in the rural areas compared with only 14 percent in the urban areas (NBS 2005). On a zonal basis, most of the households participating in the sector were in the North East (30 percent), while the South West had the least participation of 9 percent. This implies that the northern states were more engaged in agriculture than their southern counterparts. On a disaggregated state level, northern states have the highest participation, such as Benue (47 percent), Jigawa (38 percent), Borno (35 percent), and Yobe (34 percent), while southern states such as Lagos (7.9 percent), Osun (7.9 percent), Kwara (8.3 percent) and Ogun (9.9 percent) have the lowest participation. By gender, the males participate more than the females: 36.06 percent of males engaged in agriculture and forestry, compared with 20 percent of females. About 54 percent of all those who participate in the sector have no education (NBS 2005).

Impact of Rural Services on Poverty in Nigeria

Inadequate rural services and infrastructure are major barriers to rural poverty reduction because they impede market integration, even within the rural economy, limiting opportunities for wage employment and trade in essential commodities. Rural populations tend to define poverty in terms of their lack of access to roads, education, and health centers, rather than just services. Field studies of mobility among women and men in rural settlements in Africa with poor road access illustrate the frustrations and costs of living off-road (Porter, 2002). It is particularly important to note that for women, financial, time, and—in some cases—cultural constraints on mobility are highly restrictive for commerce and trade. Nigeria is no exception to this phenomenon. Four types of infrastructure have especially far-reaching implications for development in general and agricultural production in particular, namely (1) schools, (2) medical care, (3) markets, and (4) credit facilities. The plight of the rural poor emphasizes the need for access to health care in emergencies, but health facilities are usually hard to find in remote locations. Moreover, the poor in remote areas are often the most in need of medical assistance, since water and sanitation facilities are frequently inadequate and poverty levels are above regional averages.

Infrastructure projects in rural areas will contribute to pro-poor growth. Two effects can be expected: One, a significant reduction in the transaction costs to farmers and rural traders and two, improvements in health, education and welfare for the poor (ADB 1999). Road improvements can ease the transport burden on the rural poor. For example, new or rehabilitated roads can allow vehicles to reach villages, allowing the transportation of farm inputs into villages and farm outputs from the villages to market centers directly (ADB 1999). The farm incomes generated by this interaction of villages with market center are known to have led to investment in education, which in turn raises incomes from migration. (Reardon 2001).

The recent poverty assessment in Nigeria showed that poverty is a rural phenomenon in which agricultural activities are most predominant. The poor participate more in agriculture than non- agriculture. For many households in Nigeria, especially in the rural areas, agriculture is the main activity, and previous and current analyses of poverty have shown that poverty is disproportionately concentrated among households whose primary livelihood lies in agricultural activities. Based on the relative poverty incidence by occupation of household heads, conducted by the National Consumer Survey in 1985, 1992, 1996 and 2004, agricultural and forestry maintained the highest poverty rate with 53.5, 47.9, 71.0 and 67.0 percent respectively.

Using a relative poverty measure, it was found that the proportion of people living below the national poverty line (two-thirds of the average annual expenditure or ₦ 23,733) declined from 69.3 percent in 1996 to 63.3 percent in 2004 in rural areas and from 58.2 percent in 1996 to 43.3 percent in 2004 in urban centers. The rural areas have poverty incidence above the national rate.

Using the relative poverty measure on poverty trends by state, the highest incidence is found in Jigawa, Kebbi, Kogi, Bauchi, Yobe and Kwara States, while the states with the lowest incidence include Oyo, Osun, Imo, Bayelsa, Abia, and Ogun. For example, the incidence of poverty in Jigawa State was 71 percent in 1996 and 95 percent in 2004. Kogi State had a poverty incidence of 75.5 percent in 1996 and 88.6 percent in 2004. In 2004, Kwara State had a poverty incidence of 85.6 percent. Yobe State had 83.3 percent and Zamfara State had 80.93 (NBS 2005).

Using the \$1.00 per day measure of poverty, the North East Zone recorded the highest poverty incidence with 64.8 percent, followed by Northwest zone with 61.2 percent. The South East Zone recorded the lowest poverty rate with 31.2 percent followed by South West Zone with 40.2 percent. The northern zones clearly have a poverty incidence above the national rate.

Using the food energy intake measure, the findings of the survey showed that the North East Zone had the highest poverty incidence with 67.3 percent followed by the North West Zone with 63.9 percent. The South East Zone had the lowest poverty rate with 34.2 percent followed by the South West Zone with 43 percent. The poverty rate for the southern Zones fell below the national rate. The northern Zones clearly have poverty above the national rate.

Using the \$1.00 per day measure, the poverty incidence by sector shows that the rural areas have 60.6 percent, while the subjective poverty measure gave a poverty figure of 79.2 percent for the rural areas. These figures are above the national poverty rate for both the \$1.00 per day and the subjective poverty measure of 51.6 and 75.7 percent, respectively. The Gini coefficient, used as a measure of inequality, is .52 for rural areas.

Roads are crucial for effective rural transport, but the mountainous, topography and rivers in many parts of Nigeria hinders their development. The poorest communities are often the

most isolated ones. The roads program, which was part of the government's rural infrastructure development scheme of the poverty eradication program, had some impact at the interstates level. Government effort was on classified roads, 50 percent of which are now in fair to good condition. Since 1999, the Ministry of Works focused on rehabilitation, maintenance, and selective upgrading of existing roads (FRN 2005). The impact of this work was not felt uniformly in rural areas.

Available literature on the causal relationship between access to financial services (microfinance) and its impact on poverty is mostly observational from a few case studies. In trying to study the impact of a microfinance program on a group of participants (the treatment group) in comparison with a group of non-participants (the control group), researchers have had to contend with two estimation problems of selection bias and endogeneity. These two empirical problems result in either overestimation or underestimation of the effects of participating in a microfinance institution on poverty. The multidimensional aspect of poverty, the bewildering ambiguity in which the term "poverty" is used, and the many different indicators proposed to monitor poverty further complicate the measurement of any effects policy has on poverty alleviation. Depending on whether the effects are analyzed in relation to income poverty or human development, sustainable livelihood or social inclusion, or current consumption or future security, different conclusions are likely to arise, some conflicting.

Rural Services and Food Security

According to estimates by the UN Food and Agricultural Organization (FAO), almost 200 million Africans were undernourished at the dawn of the millennium, compared with 133 million 20 years earlier. The rate of increase in undernourishment in Africa vastly exceeds that of other regions of the South. Within Africa, there are regional differences, with Sub-Saharan Africa hardest hit. Here, about 33 percent of the population is undernourished, compared with about 6 percent in North Africa and 15 percent in Asia, according to the FAO (2003). More than 60 percent of the undernourished in Sub-Saharan Africa are in Eastern Africa.

The major challenge to food security in Africa is the underdeveloped and underperforming agricultural sector, with its low fertility soils and minimal use of external farm inputs, as well as other obstacles. These include reduced access to markets and subsidized food production in the north. The UN Hunger Task Force stated that at the start of the 21st century, Sub-Saharan Africa is witnessing the largest and fastest increase in food insecurity worldwide, with undernourishment rates over 40 percent—the highest in the world. Food security is considered a human right. Yet, in Africa south of the Sahara, food insecurity is more prevalent than ever, with a more volatile environment, more undernourished people and heavier dependency on food aid. However, the root cause is just as much persistent poverty as poor productivity (Akinsanmi and Werner 2005). Food security consists of three aspects: food availability, food access and food adequacy. The first pertains to the supply of food, the second relates to the demand for food, while the last refers to whether food is sufficient in quality as well as quantity. A majority of small-scale food producers also purchase food. For the rural poor, food security therefore depends as much on employment and income as the production of food.

The results of the 2003/2004 National Consumer Survey (NCS) and National Living Standard Survey of Nigeria (NLSS) on food energy intake revealed that the national incidence of poverty using food consumption limited to 2900 calories per day was 36.6 percent. When disaggregated by sector the result was 26.6 percent and 44.1 percent for urban and rural areas respectively.

Food insecurity is no longer simply seen as a failure to produce sufficient food at the national level, but as a failure of livelihoods to guarantee access to sufficient food at the household level—seen in complex links between the individual, the household, the community, the nation and the international community. Food insecurity may also occur when food is available if the poor cannot afford to buy it. Most peasants purchase part of their food consumption. The Rome Declarations of 1982, 1989 and 1992 made the connection between food insecurity and poverty clear, as well as the impact of the political environment: “Poverty is a major cause of food insecurity and sustainable progress in poverty eradication is critical to improve access to food. Conflict, terrorism, corruption and environmental degradation also contribute significantly to food insecurity.”

“The root cause of food insecurity in developing countries,” argues Angela Mwaniki of Cornell University, “is the inability of people to gain access to food due to poverty.” When a large proportion of the population in Africa south of the Sahara lives in poverty, they also live with food insecurity. Despite increased agricultural output over the last decades, population increase has been higher, and so poverty grows. Hence, food security in Africa has worsened since the early 1970s, and the malnourished population has remained at about one-third of the population in Sub-Saharan Africa. Smallholder farmers constitute half the poor, and produce over 90 percent of the continent’s food supply. Therefore, Mwaniki states, “because over 70 percent of the poor live in rural areas where the largest proportion of the food insecure also live, it is evident that we cannot significantly and sustainably reduce food insecurity without transforming the living conditions in these areas.”

An overall increase in food production—through improved agricultural productivity—is paramount in reducing food insecurity in Africa. Proponents of an African Green Revolution argue in favor of the application of biotechnology, including genetic engineering. There are objections to aspects of biotechnology, and particularly to genetic modification—which critics claim has not been proven to outweigh potential risks to the environment and human and animal health. Another aspect is the danger for African countries and farmers of becoming increasingly dependent on multinational commercial interests.

Amaza et al. (2006) used a multi-stage sampling technique to study the determinants and measurements of food insecurity in Nigeria. This study aimed at identifying and analyzing food security measures in Borno State. A multistage sampling technique was applied to 1,200 households. Cost-of-Calories (COC) method and the logit model are used as analytical techniques for the study. Based on the recommended daily energy levels of 2,250 kcal, food insecurity line (s) for the households is ₦23, 700.12 or \$176.87 per adult equivalent per year. Over 58 percent of the sample households are therefore food insecure. Major determinants of this food insecurity factors are, household size, gender, educational level, farm size and type of household farm enterprise. Policy measures directed towards the provision of better family planning should be given adequate attention and priority by the government in addition to improved access to education, credit facility and agricultural extension services by rural households.

Adeola and Doppler (2005) examined the socio-economics and food security of farming families in southeast Nigeria. The study found that farming families in Nigeria have to cope with food supply shortages; price fluctuation and pressure to get “more” out of thinned out resources, especially land. Some of the reasons for this situation include poverty, inadequate or near absence of infrastructure, a population explosion and an unstable macroeconomic environment. South East Nigeria is generally densely populated with an average of 480 people per square kilometer. However, there exists in some areas an imbalance of the population distribution even within the same locality, which has implications for resource availability and capacity.

This study examined families' ownership and access to resources such as land, labor, and capital, and the impact of these on family living standards and household food security (supply and access). To achieve this, the researchers used the farming systems approach. The farm-family-household system is considered as a whole which ensures that overlaps between the subunits are considered.

One hundred five randomly selected families were interviewed. They were eventually clustered into two main groups, the resource rich and resource poor. The researchers carried out descriptive, comparative and econometric analyses. Results show that the incomes of the two groups differ significantly, and in both cases off-farm income plays an important role. The farming systems in highly populated areas have relatively smaller resources and capacity base, are crop-oriented and have a lower living standard. They sell more of their outputs but purchase less to meet household food supply. The farming systems located in low-or medium- populated areas expend more on market supply purchases though they have more land resources. Both groups show a desire for more food in terms of frequency, quantity and quality. There is a clear indication that access to food either through their own supply or market purchases are not a guarantee of food security for both groups.

Rural Services and Health Outcomes

Francis and James (2003) cited in Robinson (2003) documented that in the early 1980s and 1990s, there were no real success stories as far as development performance at the local level in countries like Uganda, Nigeria, Kenya and Tanzania. In particular, local government service delivery in Uganda has not been able to arrest the deterioration of agricultural services. According to Crooks and Sverrisson (2001), as cited in Robinson (2003), in Côte d'Ivoire, new opportunities were created for popular participation through the introduction of multi-party competition for local council (commune) elections. Even so, the mayors continued to exert over-riding control and influence. As a result, the preferences expressed by local people for roads, social facilities and water supplies did not correspond to the communes' spending priorities, which focused on municipal buildings and secondary schools. In any case, most commune development programs collapsed because there were reductions in public spending during the financial crisis of the early 1990s. A similar finding emerges from Ghana, where survey evidence from two districts demonstrates that 70percent of respondents felt that the elected assembly did not respond to their needs. Expressed preferences for road repairs, health facilities, water supplies and electricity were not reflected in district assembly expenditure priorities which focused on commercial transport services, farming, manufacturing enterprises or markets, a situation exacerbated by the dominance of recurrent expenditures in district budgets (Crooks and Sverrisson 2001).

In Nigeria, a study of primary health care in the early 1990s revealed a complete lack of real participation in decision-making despite the devolution of responsibility to elected local officials. Local residents saw primary health care as unreliable, ineffective and unresponsive to their needs, while councilors were unclear about the health needs of their constituents and had little knowledge of health plans and activities (Crooks and Sverrisson, 2001). Robinson (2003) concluded that greater emphasis should be given to measuring and monitoring service delivery outcomes under decentralized forms of provision, to ensure that participation produces real gains for the poor in terms of improved access and quality of services.

Mills (1994), Kolehmainen – Aitkan (1999), and Wang, Collins, Tang and Martineaus (2002) documented that provision of health services by the local authorities is justified on the grounds that it leads to a reduction in rural and urban inequalities and improved intersectoral coordination. In a study of pro-poor initiatives and service delivery in rural Nigeria, using Ekiti State as a case study, Oluwatayo (2006) used descriptive statistics and multivariate

regression analysis and concluded that rural services are usually politically motivated. Furthermore, it was generally concluded that there has been remarkable improvement in the wellbeing of the people in the state in terms of access to more infrastructural facilities. Oluwatayo concluded that there is need to execute more projects to meet the standard requirements of the Millennium Development Goal of reducing poverty by half by 2015.

Gupta, Gauri and Khemani (2003) carried out a study on decentralized delivery of primary health services in Nigeria using Lagos and Kogi States. They concluded that there is evidence of large scale leakage in public resources in Kogi away from original budget allocations. They found some evidence that active community participation in health service delivery may make staff more responsive to community health needs and increase the overall productivity of facilities. Communities were particularly active in making use of health services in the Kogi State, whose population largely lives in rural areas, and depends heavily on public institutions for service delivery. The most striking result is that community participation in Kogi is significantly associated with greater productivity per staff in providing in-patient deliveries, immunizations, and outpatient consultation.

Gender and Basic Services

Many households in both urban and rural areas in Nigeria lack access to basic services such as water, energy and sanitation. With respect to water, women and girls are usually responsible for collecting water for domestic use. Some may sustain injuries or health hazards (such as spinal problems) because of carrying heavy buckets and plastic jerry cans of water on their heads or shoulders. Travelling over long distances is also tiring. Many girls miss school or go late because they have to fetch water for domestic use. With respect to energy, women and girls (and sometimes boys) are responsible for fetching firewood for domestic fuel. In Nigeria, kerosene is often unavailable and has become too expensive for poor households to afford. Public provision of electricity at affordable rates could reduce women's household burdens. The majority of urban households in many Nigerian cities are without adequate sanitation for— refuse and sewage disposal. Poor sanitation is associated with health problems such as typhoid, malaria, cholera, intestinal worms, dysentery and diarrhea. (Budlender et al. n.d.). Poor sanitation also increases women's household burden, as they bear the responsibility for health care in the household.

Conclusion

In summary, many consider decentralization one of the most important strategies for public sector reform. This is because donors and governments in Sub-Saharan Africa believe decentralization will bring service delivery closer to consumers and improve the central government's responsiveness to public demands. These improvements, in turn, are supposed to reduce poverty, improve the efficiency and quality of public services and empower lower units to feel more involved and in control. In this connection, decentralization is linked to the concept of subsidiarity, that is, making decisions at the lowest feasible level. It is also meant to reduce overload and congestion at the center and speed up operational decision-making and implementation. Decentralization does this by minimizing the bottlenecks associated with powers concentrated at just one or two points in the hierarchy of a public service organization or ministry. In other words, proponents argue, it will bring about greater efficiency of public management, through improved coordination and shorter decision-making hierarchies ("less bureaucracy"). It will also bring about improvements in political stability through the legitimization of differences in local needs and perspectives (pluralism). Consequently, decentralization seeks to increase the operational autonomy of line managers and agencies, leaving only broad policy guidelines to be worked out at the center (Asante and Ayee 2005).

This paper has reviewed the constitutional provisions for political, administrative and fiscal decentralization in Nigeria and its implications for public service delivery. It also reviewed rural access to public services as well as the impacts of rural service delivery on agricultural productivity and other development outcomes. Lastly, it identified various constraints on public service delivery.

Nigeria has entrenched decentralization in its constitution. In practice however, the country has not realized its expectations of improved service delivery. As in other parts of Africa, Nigeria's experience of decentralization suggests that both state and local governments have failed to deliver public services. Constraints on effective fiscal and administrative decentralization in Nigeria are varied. There is general over-concentration of political and financial power as well as human resources at the federal level to the detriment of state and local governments. There are no clear guidelines on the interface between central line ministries such as education and health, and local governments. In Nigeria, decentralization has been used by ruling parties at the federal and state levels to renew or consolidate their power and influence at the local level.

Inadequate finance and insufficient tax power are also major constraints on local government performance. Local governments depend heavily on national and state governments for funds, but the creation of local governments has not really led to fiscal decentralization. Some countries have been marked by a lack of political support for local governments from the central and state governments. They are reluctant to devolve authority, create an enabling environment, or facilitate decentralization activities. Decentralization in Nigeria has remained at the level of deconcentration of public functions—but not budget—from the central to the state or local government, (delegation). There has also been limited administrative decentralization whereby local governments are empowered to hire and fire local staff without consulting state governments. In Nigeria, local governments are supervised by state-level Ministries of Local Government.

Decentralization is a process whose success hinges on a range of political, social and economic factors. It will take some time before the informational systems, local tender boards, and procurement procedures are in place. Likewise with auditing systems, sanctions for poor performance, as well as establishment of accountability to the center. Any effort to use decentralized governance to deliver services and alleviate poverty will depend upon a real effort to create an enabling environment and to strengthen and broaden accountability mechanisms at national, regional and local levels. The federal governments should set minimum standards for quality, quantity, and access. It should also finance minimum access to basic services such as education and health, on grounds of inter-jurisdictional equity. Local government has had limited success in rural service delivery, partly because resources accruing to them are relatively small, with little for provision of public services.

The federal government could facilitate the decentralization process by establishing financial guidelines, building capacity (for making policy and managing finance), and setting up advisory or regulating bodies. A lack of human resources limits local governments' ability to perform effectively. Poor salaries and working conditions, a lack of training opportunities, and the requirement that staff work in rural areas, make it difficult to attract competent staff at the local level. Fostering capacity is best done in partnership between the center and the local governments. In the partnership, the functions of central staff change from line management to policy formulation, technical advice and monitoring (World Bank 2004). Civil service reforms should be extended to all levels of government and not targeted only at federal government staff.

Furthermore, apart from the education and health sectors, most of the policies to deliver public services are not gender-sensitive. Most policies assume that women and men will benefit equally. Policymakers must recognize that there are gender differences in the impact of limited access to water, poor roads, and other rural services. Even in the agricultural sector, where women predominate as subsistence farmers and food processors, policies tend to focus on male farmers. Thus gender dimensions should be taken into account in policies and programs for public service delivery. As of now, there are very few female decision-makers at the levels of government where policies and strategies are designed. There is a need for decision-making aimed at helping women and poor people at the national, state and local levels of government. . These changes will be crucial at the local level, especially, if Nigeria intends to deliver rural services more effectively. Thus, in Nigeria, good local governance implies that local governments should aim at effective delivery of the following (Bharat and Chawla n.d.):

- efficient basic service amenities
- planned housing with adequate infrastructure such as schools, parks, drainage systems, etc.
- efficient transportation planning including adequate roads, parking lots, alternative systems of transportation, and mass transit facilities
- effective environmental infrastructure, including sewage and waste disposal
- development of an efficient private sector, both formal and informal, to promote poverty reduction through job creation
- efficient health care system
- promotion of rule of law and security
- delivery of agricultural support services to farmers in rural areas

For effective service delivery at the local level, especially in rural areas, the technical and managerial competence of local government administrators is an important factor. The level of education and skills, and the incentive and welfare packages for local government staff play a role in this respect. This may require capacity building of local government staff. Having skills is not sufficient if organizations cannot make effective use of them. The capacity of local government organizations, especially efficiency, is important for effective service delivery and for creating an enabling environment for the locality's economic and social development. Public sector reforms should extend to the local level.

Finally, if policies are to be gender-sensitive, some critical issues need to be addressed. There is a need to increase women's participation in the full spectrum of human endeavour, pay greater attention to issues concerning women, and foster gender awareness and gender competence among both men and women. This needs to be done in the political arena, and in the policymaking and planning processes.

References

- Abedian, I. 2002. Infrastructure, growth and economic globalization Paper presented at the seminar "The Role of Infrastructure on Development and Economic Growth, organized by the Center for Education in Economics and Finance Africa (CEEFA, Africa), June 21, 2002, Johannesburg Country Club.
- Acemoglu, D., S. Johnson and J. A. Robinson. 2001. Reversal of fortune: Geography and institutions in the making of modern income distribution. Cambridge, Mass: Massachusetts Institute of Technology, Department of Economics, Working Paper No. 01-38. Mimeo.
- ADB. (African Development Bank). 1999. Infrastructure development in Africa. *African Development Report*. New York: Oxford University Press for the African Development Bank.
- _____. 2001. Fostering good governance in Africa. *African Development Report 2001*, New York, Oxford University Press for the African Development Bank.
- _____. 2007. *African Economic Outlook*. Paris: OECD (Organization for Economic Cooperation and Development) for the African Development Bank.
- Addo, S.T. 1988. The role of transport in the procurement and distribution of a rural energy resource in the humid tropics: A Nigerian example. *Philippine Geographical Journal*, Vol. 32,(2-3): 66–82.
- Adebayo, L. 2007. A cybernetics appraisal of reforms in the educational sector. In Nigeria's reform programme: Issues and challenges, eds. Saliu et al. Ibadan, Nigeria: Vantage Press.
- Adeola, A., and W. Doppler. 2005. Socioeconomics and food security of farming families in southeast Nigeria. Paper presented at Tropentag 2005, The global food and product chains: dynamics, innovations, conflicts and strategies, October 11-13, 2005, University of Hohenheim, Stuttgart, Germany.
- Akramov, K.T. and C.E. Okojie. 2008. Decentralization and rural service delivery in Nigeria. Paper presented at the international Food Policy Research Institute Workshop "Developing Evidence for Agricultural and Rural Development Policies and Strategies in Nigeria," May 20, 2008, Abuja.
- Amaza, P. S., J.C. Umeh, J. Helsen and A. O. Adejobi. 2006. "Determinants and measurements of food insecurity in Nigeria: Some empirical policy guide. Poster presented at the 26th Conference of the International Association of Agricultural Economists, August 12-18, 2006. Gold Coast, Australia.
- Anyanwu, J. C.. 1997. *Nigerian public finance*. Onitsha, Nigeria: Joanne Educational Publishers Limited.
- _____. 1999. "Fiscal relations among the various tiers of government in Nigeria. In: *Fiscal federalism and Nigeria's economic development*. Selected papers of the 40th Annual Conference of the Nigerian Economic Society.
- Anyanwu, J. C., A. Oyefusi, H. Oaikhenan, and F.A. Dimowo. 1997. *Structure of Nigerian economy, 1960–1997*. Onitsha, Nigeria: Joanne Educational Publishers.
- Aregbeyen J. B. O. 2004. Health policy and performance. In *Democratic governance and development management in Nigeria's Fourth Republic (1999–2003)*, eds. I. B. Bello-Iman, M. I. Obadan. Center for Local Government and Rural Development Studies. Ibadan, Nigeria: Jodad Publishers.
- Asante, F. A., and J. R. A. Ayee. 2008. Decentralization and poverty reduction . In *The economy of Ghana: Analytical perspectives on stability, growth and poverty*, eds E. Aryeetey and R. Kanbur. Oxford, U.K.:James Currey Publishers.
- Awopegba, P. O., and C. O. Orubu. 2003. *Structural shifts and gender access to education in Nigeria: Implications for development and the Universal Basic Education Programme*. Monograph submitted to the research department, National Centre for Economic Management and Administration, Ibadan, Nigeria. 17–29.

- Awopegba, P. O. and S. O. Adedeji. 2004. Education policy: Trend and development. In *Democratic governance and development management in Nigeria's Fourth Republic (1999–2003)* eds. I. B. Bello-Iman, M. I. Obadan. Center for Local Government and Rural Development Studies. Ibadan, Nigeria: Jodad Publishers.
- Babalola, J. B. 2000. *Fundamentals of economics of education*. , Educational Planning Unit (EPU), Department of Educational Management, University of Ibadan, Ibadan, pp. 13-27.
- Barth, U. 1986. The transport needs of women in subsistence agriculture in Sub-Saharan Africa. Institut fur Regionalwissenschaft, Universitat Karlsruhe, Karlsruhe, Germany, Vol. 2(6): 19-21.
- Bello-Iman, I. B. 1996. *Local government in Nigeria: Evolving a third-tier of government*. Ibadan, Nigeria: HEB, Plc.
- Bentema, N. M., and G. B. Ayoola. 2004. Agricultural science and technology indicators". ASTI Country Brief, No. 10, February 2004. ISNAR/IFPRI.
- Bharat, A., and C. Chawla. n.d. Urban governance for sustainable development. Mimeograph, Department of Architecture and Planning, Bhopal, India. alka bharat@yahoo.com.
- Bhorat, H., M. Lebbrandt, M. Maziya, and S. Van der Berg and I. Woolard 2001. *Fighting poverty: labor markets and inequality in South Africa*. Cape Town: UCT Press.
- Blaser, J., D. Besdziek and S. Byrne. 2003. *Lessons learned on decentralization: A literature review*. Institute of Federalism and Swiss Agency for Development Cooperation, January.
- Bonfiglioli, A., 2003. *Empowering the poor: Local governance and poverty reduction*, United Nations Capital Development Fund. New York, November.
- Budlender, D., and N. Dube. 1998. Starting with what we have—Basing development activities on local realities: A critical review of recent experience In: The Impact of Infrastructure Investment on Poverty Reduction and Human Development. DBSA Discussion Paper No 4. DBSA: Midrand.
- Budlender, D., N. Moodley, S. Parnell, M. Pickering, J. Sunde, and S. Young. n.d.. *Gender and performance indicators of local government*. Gender Advocacy Programme (GAP), Cape Town.
- Central Bank of Nigeria. 1999. Nigeria's development prospects: Poverty assessment and alleviation study. Abuja: Central Bank of Nigeria, Research Department.
- _____. 2000. *The changing structure of Nigerian economy and implications for development*. Lagos: Realm Publications.
- _____. 2004. Annual Report and Statement at Accounts, 31st December, Abuja.
- _____. 2006. Annual Report and Statement of Accounts, 31st December 2006, Abuja.
- Chete L. N. 1998. Fiscal decentralization and macroeconomic management in Nigeria. In *Journal of Economic Management* 5 (1) (January).
- Crook, R. C. and A. S. Sverrisson. 2001. Decentralization and poverty alleviation in developing countries: A comparative analysis or is West Bengal unique? IDS Working Paper 130, Brighton: Institute of Development Studies.
- Danjumah, T. Y. 1992. Revenue sharing and the political economy of federalism. Paper presented at the National Conference on "Federalism and Nation-Building in Nigeria: The Challenges of the Twenty-First Century", organized by the National Council on Inter-Governmental Relations, December 14 –18, 1992, Abuja, Nigeria.
- Davis, J., A. Kang, J. Vincent and D. Whittington. 2001. How important is improved water infrastructure to microenterprises? Evidence from Uganda. *World Development* 29 (1): 1753-1767.
- De Graaf, K. 2005. Public expenditure tracking (PET) in Tanzania district levels: Effects on local accountability. In Proceedings of the European Conference of African Studies organized by the African Europe Group for Interdisciplinary Studies, June 29–July 2, 2005, London.

- Desjardins, S., G. Halseth, P. Leblanc and L. Ryser. 2002. *Services, social cohesion, and social capital: A literature review*. New Rural Economy Project, NRE, Geography Program, University of Northern British Columbia, July, pp. 1-36.
- Development Bank of Southern Africa (DBSA). 1998. Infrastructure: A foundation for development. In: *Development Report 1998*, ed. Heymans C. and J. Thorne-Erasmus. DBSA: Midrand.
- Development Bank of Southern Africa (DBSA). 2000. "The SADC agricultural sector Country Review Discussion Paper No 9, Compiled By Stilwell, T. DBSA: Midrand.
- Ekpo, A., and J. Ndebbio 1998. *Local government fiscal operations in Nigeria*. AERC Research Paper No.73, African Economic Research Consortium, Nairobi, Kenya.
- Energy Sector Management Assistance Programme, ESMAP. 2005. *Nigeria: Expanding access to rural infrastructure issues and options for rural electrification, water supply and telecommunications*. ESMAP Technical Paper No. 091, December, pp. 1-90.
- Fan, S., X. Zhang and N. Rao. 2004. Public expenditure, growth, and poverty reduction in rural Uganda. Development Strategy and Government Division (DSGD), Discussion Paper No. 4. IFRRI.
- Federal Ministry of Education. n.d. Human capital development. Submission to the NEEDS-2 process.
- Federal Republic of Nigeria 2000a. Obasanjo's economic direction. 1999–2003. Lagos: Dawn Functions Nig. Ltd.
- _____. 2000b. Nigerian economic policy, 1999—2003. Office of the Chief Economic Adviser to the President, National Planning Commission, Abuja.
- _____. 2005. *Nigeria: Millennium development goals*. Published by the National Planning Commission, Abuja.
- Federal Republic of Nigeria 2006. *National Accounts of Nigeria*, Harmonized Series, NBS, Abuja, Nigeria.
- Fishbein, R. 2001. "Rural Infrastructure in Africa: Policy Directions" *Africa Region Working Paper Series* No.18. The World Bank.
- Food and Agriculture Organization of the United Nations. 2003. http://www.fao.org/waicent/portal/statistics_en.asp. FAOStat Database.
- Francis, P., and R. James 2003. Balancing rural poverty reduction and citizen participation: The contradictions of Uganda's decentralization program." *World Development*, Vol. 31, No. 2, pp.325-337.
- Gbayesola T. O., and Uga E. O. 1999. Source and structure of government revenue. In *Fiscal Policy Planning and Management in Nigeria*, ed. S.O. Komolafe. Ibadan: National Center for Economic Management and Administration.
- Gill, A., and J. Everitt. 1993. The social geography of small towns. In *The Changing Social Geography of Canadian Cities*, ed. L. Bourne and D. Ley, Montréal: McGill – Queen's Press.
- Greer, J., and E. Thorbecke. 1986. A methodology for measuring poverty applied to Kenya. *Journal of Development Economics* 24 (1) pp 59-74.
- Gupta, M. D., V. Gauri and S. Khemani 2003. *Decentralized delivery of primary health services in Nigeria: Survey evidence from the states of Lagos and Kogi*. World Bank Working Paper Series. Washington, D.C.: World Bank.
- IHCR. 2002. *Local rule, decentralization and human rights*. Geneva, Switzerland: International Human Council on Rights Policy.
- IHDR. 2001. Putting people first: A compact for regional integration". Indonesian Human Development Report 2001. Indonesia: UNDP.
- Ihimodu I. I. 2007. Reforms in the agricultural sector. In *Nigeria's Reform Programme: Issues and Challenges*, ed. Salu et al., Ibadan, Nigeria: Vantage Press.
- Iyoha M. A. 2000. Fiscal federalism, decentralization and macroeconomic management in Nigeria. In *NCEMA Policy Analysis Series* 5 (2).
- Jutting, J., E. Corsi, and A. Stockmayer, 2005. Decentralization and poverty reduction. *OECD Policy Insights* 5 (January).

- Kadzandira J. M, S.W. Khaila, P.M. Mvula. 2002. Malawi: Tangled web. In *Voices of the Poor From Many Lands*, ed. D. Narayan and P. Petesch. New York: Oxford University Press and World Bank.
- Kaunekia, D. and K. Anderson 2006. Making decentralization work: A cross-national examination of local governments and natural resource governance in Latin America. Paper submitted to: *American Journal of Political Science* (October).
- Khemani, S. 2001. *Fiscal federalism and service delivery in Nigeria The role of states and local governments*. Paper Prepared for the Nigeria PER Steering Committee, July. 1–27, Nigeria.
- Khemani, S. 2004. *Local government accountability for service delivery in Nigeria*. Development Research Group, The World Bank, Preliminary Draft, March.
- Kolehmainen-Aitken, R. 1999. Decentralization of the Health Sector. In *Decentralization: Briefing Notes*, ed. J. Litvack and J. Seddon. Washington, D.C.: World Bank Institute Working Papers.
- Kunfaa E. Y., T. Dogbe, H. J. Mackay and C. Marshall. 2002. Ghana: Empty pockets. In *Voices of the Poor From Many Lands*, ed. D. Narayan and P. Petesch. New York: Oxford University Press and World Bank.
- Library of Congress. 2008. Country profile: Nigeria. Federal Research Division, July 2008.
- Mijinyawa, Y., and J. A. Adetunji. 2005. Evaluation of farm transport system in Osun and Oyo states of Nigeria. *Agricultural Engineering International: CIGR Ejournal* 7 (September).
- Manin, B., A. Przeworski, and S. Stokes. 1999. Elections and representation. In *Democracy, Accountability, and Representation*, ed. B. Manin, A. Przeworski and S. Stokes Cambridge: Cambridge University Press.
- Mbanefoh, G. F., S. Adedoyin and J. C. Anyanwu. 1998. Women's demand for health care Services in Nigeria: An econometric investigation. *The Nigerian Economic and Financial Review* 3 (December): 43-57.
- Mills, A. 1994. Decentralization and accountability in health sector from an international perspective: What are the choices? *Public Administration and Development* (14).
- Mogues, T., and A. Dillon. 2008. Nigeria agriculture public expenditure review (NAGPER), and planned research on agricultural subsidies and the health productivity nexus. IFPRI, 2008. Supported by DFID, CIDA and World Bank.
- Mogues, T., M. Morris, L. Freinkman, A. Adubi, and S. Ehue. 2008a. Nigerian agricultural public expenditure review. Nigeria Strategy Support Program Brief No. 2. Washington, D.C.: International Food Policy Research Institute.
- National Bureau of Statistics. 2005. *Poverty profile for Nigeria*. Abuja, Nigeria: National Bureau of Statistics, Federal Republic of Nigeria.
- _____. 2005a. *The Nigerian statistical fact sheets on economic social development*. Abuja, Nigeria: National Bureau of Statistics, Federal Republic of Nigeria.
- _____. 2005. *Social statistics in Nigeria 2005*. Abuja, Nigeria: National Bureau of Statistics, Federal Republic of Nigeria.
- _____. 2006. *The Nigerian statistical fact sheets on economic social development*. Abuja, Nigeria: National Bureau of Statistics, Federal Republic of Nigeria.
- _____. 2006a. Core welfare indicator questionnaire survey. Abuja, Nigeria: National Bureau of Statistics, Federal Republic of Nigeria.
- National Planning Commission. 2004. *National economic empowerment and development strategy*. Abuja, Nigeria: National Planning Commission.
- _____. 2007. National economic empowerment and development strategy (NEEDS-2), 2008-2011. Abuja, Nigeria. Draft.
- _____. 2007a. *Nigeria millennium development goals 2006 report*. Abuja, Nigeria: National Planning Commission.
- National Revenue Mobilization, Allocation and Fiscal Commission. 1989. *Main Report 2* (1989). Abuja, Nigeria: National Revenue Mobilization, Allocation and Fiscal Commission.

- _____. 1989a. *Memoranda from the federal, state and local governments, government agencies, private organizations and individuals* 4 (May). Lagos, Nigeria.
- Ndegwa, S. N. 2002. Decentralization in Africa: A stocktaking survey. African Regional Working Paper Series, No. 40. Washington D.C.: World Bank.
- Ndiyo, N., 2005. The Poor and Social Services in Nigeria. *Journal of Economics and Finance* 3 (2).
- Oates, W.E. 1972. *Fiscal Federalism*. New York: Harcourt Brace and Jovanovich.
- Obadan, M. I. and S.E Edo. 2004. Overall economic direction, strategy and performance. In *Anthology of Democratic Governance and Development Management in Nigeria's Fourth Republic, 1999 – 2003*, ed. I.B. Bello-Imam and M.I. Obadan. Ibadan, Nigeria: HEB, Plc.
- _____. 2006. An overview of the reform program in Nigeria, In *Nigeria's Reform Programme: Issues and Challenges*, ed. Saliu et al. Ibadan, Nigeria: Vantage Press.
- Ogwumike, F. O., and Isumonah V.A. 2004. Fiscal federalism and the alleviation of poverty: The experience so far. in *Fiscal Federalism and Democratic Governance in Nigeria*, ed. I.O. Taiwo and A.A.Fajingbesi. Ibadan, Nigeria: NCEMA.
- Okafor, S. I., S. I. Abumere, L. Egunjobi and D. B. Ekpeyomg. 1998. *Structural adjustment and access to essential social services: A case study of health care services in selected states*. NISER/SSCN National Research Network on Liberalization Policies in Nigeria, 2–48.
- Okereke, C., 2009. Report on projects and project management in Nigeria. *PMWorld Today*. Vol XI, Issue I. Regional Report – Nigeria, January 2009.
- Okigbo, P.N.C. 1965. *Nigerian Public Finance*. Longmans.
- Okojie, C. E. E. 1998. Gender, poverty, and educational human capital investment in Nigeria. *Nigerian Economic and Financial Review* 3 (December): 71–110.
- _____. 2002. Gender and education as determinants of poverty in Nigerian households. *WIDER Discussion Paper* 2002/37. Helsinki: World Institute for Development Economics Research of the United Nations University.
- _____. 2004. Women as economic assets in national development. Guest lecture at the Edo Women International Conference, February 18-20, Benin City, Nigeria.
- Okojie, C. E. E., et al. 2006. A research proposal submitted to the International Development Research Centre study on mapping health information initiatives in Nigeria:
- _____. 2007. Growing women's enterprises in Nigeria: A review of current business support initiatives. Paper presented at the Institute for Small Business (ISBE) Conference, November 7–9, Glasgow, Scotland.
- Okoye, J.K. and P. M. Achakpa (2007); "Background Study on Water and Energy Issues in Nigeria to inform the National Consultative Conference on Dams and Development", Submitted to the Federal Ministry of Agriculture and Water Resources, March.
- Okunmadewa, F. O. Aina, G. B. Ayoola, A Mmman, N. Nweze, T. Odebiyi, D. Shehu, and J. Zach. 2002. Nigeria: Ill being and insecurity. In *Voices Of The Poor From Many Lands*, ed. D. Narayan and P. Petesch. New York: Oxford University Press for the World Bank.
- Olaniyi, O. 1999. Fiscal federalism and the performance of local governments in Nigeria's economic development: An impact analysis. In *Fiscal Federalism and Nigeria's Economic Development*. Paper presented at the 1999 Annual Conference of the Nigerian Economic Society (NES).
- Olowu, D. and J. Erero. 1995. Nigeria: Institutional delivery mechanisms and the poor, Faculty of Administration. Background Paper Prepared for the World Bank Poverty Assessment, Obafemi Awolowo University, Ile – Ife, Nigeria.
- Oluwatayo, I. B. 2006. "Pro-Poor initiatives and service delivery in rural Nigeria: Evidence from Ekiti state. Workshop on Public Expenditure and Service Delivery in Africa: Managing Public Expenditure to Improve Service Quality and Access. United Nations Economic Commission for Africa, October 9-11, Lusaka, Zambia.

- Omorodion, F. I. 2007. Rural women's experiences of microcredit schemes in Nigeria. Case Study of Esan Women, University of Windsor, Canada, *Journal of Asian and African Studies* (6): 479-494.
- Onakerhoraye, A. G. 1984. *Social services in Nigeria: An introduction*. London: Kegan Paul International Limited.
- Oriakhi, D. E. 2004. "Creation of States and the flow of Government Revenue: An Assessment of the Nigerian Experience", in *Fiscal Federalism and Democratic Governance in Nigeria*, ed. I.O. Taiwo and A.A. Fabingbesi. Nigeria: NCEMA.
- Porter, R. E. 1988. Perspectives on trade, mobility and gender in a rural market system Borno, Northeast Nigeria. Department of Geography, University Of Durham, Durham, U.K. 79 (2): 81-92.
- Porter, G. 2002. Living in a walking world: rural mobility and social equity issues in Sub-Saharan Africa. *World Development* 30 (2): 285-300.
- Reardon, T. 2001. Rural nonfarm income in developing countries. Michigan State University, Mimeo.
- Reardon, T., J. Berdegue, and G. Escobar. 2001. Rural nonfarm employment and incomes in Latin America: Overview and policy implications. *World development* 29 (3): 395-409.
- Robinson, M. 2003. Participation, local governance and decentralized service delivery. Paper Presented at the Workshop on New Approaches to Decentralized Service Delivery Held in Santiago, March 16-20, Chile.
- Ukpong, I. I. 1979. Social and economic infrastructure. In *Structure of the Nigerian Economy*, ed. F.A. Olaloku et al. Lagos, Nigeria: Macmillan Press Ltd. and University of Lagos Press Ltd.
- United Nations, 2007. *Population and vital statistics report*, Table 2, Population, <http://unstats.un.org/unsd/demographic/products/vitstats/seriesa2.htm>.
- UN-HABITAT. 2001. *Women in urban governance*. Policy Dialogue Series Number 1. Nairobi, Kenya: United Nations Center for Human Settlements (Habitat).
- Wang, Y., C. Collins, S. Tang and T. Martineau. 2002. Health system decentralization and human resources management in low and middle income countries. *Public Administration and Development* (22).
- Wanmali, S., and Y. Islam 1995. Rural services, rural infrastructure and regional development in India. *The Geography Journal* 161:1-3.
- Wanmali, S., and Y. Islam 1997 Rural infrastructure and regional development in southern Africa. In *Achieving Food Security in Southern Africa: New challenges, New Opportunities*, ed. L.Haddad. Washington, D.C.: International Food Policy Research Institute.
- World Bank. 1990. *World Development Report—Poverty*. Washington, D.C: World Bank.
- _____. 1996. Nigeria: Poverty in the midst of plenty: The challenges of growth with inclusion. A World Bank Poverty Assessment Report. 61–87.
- _____. 1996b. Nigeria: Federal public expenditure review. Report No. 14447-UNI. Washington D.C.: World Bank.
- _____. 1999. *Poverty reduction and the World Bank: Progress in fiscal 1998* (June). Washington, D.C.: World Bank.
- _____. 2000. *World Development Report 2000/2001: Attacking poverty*. New York: Oxford University Press.
- _____. 2000a. *Implementation Completion Report: National Fadama Project*. Lagos, Nigeria.
- _____. 2002. *State and local governance in Nigeria*. Sector Report No. 24477. Washington, D.C.: World Bank.
- _____. 2003. *Nigeria: State finances*. Study Sector Report No. 25710. Washington, D.C.
- _____. 2005. Initiating the World Bank's peri-urban/rural and renewable energy activities in Nigeria. Proceedings of the workshop organized under the auspices of the World

- Bank's Energy Sector Management Assistance Program. ESMAP Technical Paper 073, June 2005, Abuja, Nigeria.
- _____. 2007. *Nigeria: A fiscal agenda for change—Public expenditure management and financial accountability review (PEMFAR) 2*, Executive summary, May 2007.
- Wunsch, J. 1999. Institutional analysis and decentralization: Developing an analytical framework for effective Third World administrative reform. In *Polycentric Governance and Development*, ed. M.D. McGinnis. Ann Arbor, Michigan: The University of Michigan Press.

