



USAID COUNTRY PROFILE

PROPERTY RIGHTS AND RESOURCE GOVERNANCE

NIGERIA

OVERVIEW

Nigeria's status as a large, populous, lower-middle income country with an economy buoyed by significant oil and gas exports and achieving a five percent or better GDP growth rate (2000–2008) is not reflected in indicators measuring human development. Overall, Nigeria ranked 158th out of 182 developing countries in the United Nations Human Development Index for 2007, and reached only the 167th position regarding life expectancy at birth. More than half of Nigeria's population reportedly lives on less than US \$1 a day, with the greatest poverty in the northern region, which is primarily Muslim. Water contamination, air pollution, and urbanization are stressing natural resources throughout the country. Disputes regarding the allocation of rights and benefits to the resources of the oil-rich Delta region of southeastern Nigeria have repeatedly sparked civil conflict.

Oil and gas exploitation accounts for 80% or more of government revenues and 95% or more of export earnings. Agriculture and oil account for approximately equal shares of GDP, largely because the agricultural sector employs more than half of the working population. Most observers agree, though, that as Nigeria's population grows to more than 150 million, land for agriculture is becoming increasingly scarce for most farmers. Smallholder producers have compensated for land scarcity to some extent by increasing their productivity through intensification of labor, but smaller farms generate smaller per capita household incomes, perpetuating poverty.

Public investments in agriculture have been extremely low (less than 2% of total federal expenditure between 2001 and 2005), and corruption has been identified in areas where the federal and state governments have played a role (e.g., fertilizer distribution). Pressures have been growing, however, for the federal government to revitalize agriculture as well as to deal with the continuing political, social, and economic instabilities associated with the oil and gas sector. Responding to these pressures is likely to require both the federal and state governments to consider reform of their positions on resource governance and the ability of citizens to access productive land and acquire secure rights to that land.

Nigeria is a heterogeneous society, ethnically, socially, and in the people's relation to the land. The 1978 Land Use Act delegated authority over land allocation to the 36 states and their local governments in an effort to ensure that rural and urban populations had access and secure tenure to land. Land-allocation advisory committees were intended to assist in the issuing of customary certificates of occupancy to applicants, reducing speculation and streamlining access.

Most observers believe that not only have the objectives of the Land Use Act not been achieved, but that the law has contributed to further distortions and abuses of citizens' rights to access and own land. Further, government's land-use administration has not constrained the unrelenting expansion of agricultural land into fallow and forested areas or the overuse of forest resources to meet the population's energy and food needs. Environmental destruction and pollution from oil extraction operations threaten Nigeria's forest and water resources as well as agricultural livelihoods.

Stakeholders have expressed differing views as to the most effective methods of land tenure reform. These can be summarized as follows:

1. Allow smallholder farmers to expand in adjacent plots and otherwise consolidate their holdings to encourage mechanization and economies of scale;
2. Preserve smallholdings and provide smallholder farmers with appropriate technologies;

3. Tax landholdings to obligate farmers to increase their efficient utilization and bring large tracts of underutilized land into production; or
4. Redistribute lands that have been acquired in dubious fashion.

Some feel that individual freehold tenure should be granted, especially in urban areas, while others believe that maintaining usufruct and communal options will allow for more flexible responses to changing economic opportunities and demographics. Still others maintain that markets should replace the administrative allocation processes enshrined in the Land Use Act. In any case, in March, 2010 the Lower House of the National Assembly rejected President Umaru Yar'Adua's Bill to establish a National Land Reform Commission for the restructuring of land matters across the country.

Nevertheless land tenure issues remain critical to Nigeria's future. The greatest urgency is in urban areas, where unplanned, sprawling informal settlements without public water or sanitation facilities have continued to expand, in some cases engulfing smaller towns whose own property governance systems have been overridden. But as investments in low-lying riverine agricultural production ramp up with the Fadama III project (especially for rice) and new technologies for boosting production of cassava, yam, and maize are applied, the urgency of addressing land and water access and tenure security for rural land will also rise. Several of these activities fall within the scope of USAID's program for Economic Growth and, with greater US attention to food security in sub-Saharan Africa, should receive higher priority.

KEY ISSUES AND INTERVENTION CONSTRAINTS

- **Engage with the federal government under President Jonathan or his successor through the Bi-National Commission to determine opportunities to introduce legislative reforms.** Donors are undertaking a number of activities in the economic growth and agricultural sectors that could benefit from a clear analysis of land tenure issues. To obtain more current, comprehensive and investment-relevant land tenure information from all regions of the country, donors should be encouraged to document:
 - how land is held and used;
 - who is on the land under what terms (with particular attention to women and marginalized groups);
 - how the land is being cultivated;
 - how land markets are functioning;
 - the nature of the pressures on the land in various areas;
 - the nature of land disputes and the mechanisms for managing them;
 - what institutions are operating at state and local levels; and
 - how the formal and customary legal systems are impacting the rural population.

On the basis of this work and further engagement in dialogue with the federal government, donors should be able to better assess the priorities for reform and, potentially, pilot areas for testing implementation of different options. The results of the work could also give USAID a basis on which to design its own strategy and set priorities for its work in the area of land and other natural resources.

- **Pilot land-rights formalization processes.** Nigeria's planners have not yet determined how best to formalize land rights, particularly in areas of great sensitivity, such as informal urban settlements, communal lands that are under pressure for development, land used by pastoralists, and encroached forestland. *Donors can provide critical perspectives on formalization of land rights in these and other areas of the country to ensure that the rights of the economically and socially disadvantaged are protected. USAID experience in both Nigeria and elsewhere can assist planners in creating program designs that include components for legal literacy and dispute-resolution. Support for pilot efforts can provide the government with valuable information as well as begin to compile lessons learned and best practices as reforms proceed.*
- **Pilot and expand more effective forest management projects.** Nigeria's forests are heavily used by local communities for both timber and non-timber products. The current legal framework is not providing adequate protection for all forests and for unclassified forests in particular. Nigeria has had some experience with community-based programs but *may also be assisted by donors to prepare a national program that addresses forces for deforestation or poor forest protection practices that stem from factors beyond the communities' control. USAID could provide useful support: collecting information regarding Nigeria's experience with community-based natural resource management, documenting lessons learned and best practices, assisting with the design of a national program, and conducting pilots in various regions of the country.*

FOR MORE RECENT LITERATURE:

<http://usaidlandtenure.net/nigeria>

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SUMMARY

With an estimated population just over 151 million representing more than 250 ethnic groups, Nigeria is the most populous nation in sub-Saharan Africa. Since Independence in 1960, Nigeria has become a powerhouse in the global petroleum market, among the 10 largest exporters of oil in the world, sharing the top position in Africa with Angola. Since 2003, oil has generated an average of about a third of Nigeria's GDP, 80% of government revenue, and about 90% of the country's exports.

Despite the dominance of the country's oil sector, Nigeria has a large agricultural economy, principally serving domestic consumption needs. Once robust exports of palm oil, cotton, and peanuts have disappeared, but agriculture contributes a

significant percentage of GDP and provides employment for more than half the rural population. Still, agricultural productivity in Nigeria has languished for decades, suffering from low rates of both public and private investment, an inadequate enabling environment, and, at the farm level, from land scarcity. In peri-urban areas and in the southeastern Delta region where oil is extracted, soil, water, and air pollution also constrain productivity.

Almost half of Nigeria's population lives in cities; 80% live in slum conditions. Rapid growth of cities has engulfed nearby towns and villages, pushed back forests and coastal mangrove areas, and created conditions of congestion, poor health, and poverty. Sixty-four percent of Nigeria's population lives on less than \$1.25 per day; women-headed households are among the poorest.

Prior to 1978, Nigeria's system of customary land tenure provided families and individuals with use rights to rural land for agriculture and urban/town plots for housing that were heritable within families and lineages. In 1978, the Land Use Act (or Decree) was enacted. The objectives of the Land Use Act were to: (1) make land accessible to all Nigerians; (2) prevent speculative purchases of communal land; (3) streamline and simplify the management and ownership of land; (4) make land available to governments at all levels for development; and (5) provide a system of government administration of rights that would improve tenure security.

According to most observers, the Land Use Act achieved none of these objectives. The effort to replace the customary system made land less accessible to most people. Allocation procedures are highly discretionary, allowing opportunities for corruption and self-dealing by state and local government officials and politicians. Individuals can obtain land use rights, but they have no foundation of communal land holdings and no presumption of inheritance within families or lineages. Registration of Certificates of Occupancy under the Land Use Act is costly, time-consuming, and places the land-certificate holder on the tax rolls. Customary law continues to govern land tenure for the majority of Nigerians, even though tenure security in urban areas (and as

BOX 1. MACRO INDICATORS

	Year	Score
Population, total	2008	151,319,500
Population ages 0-14: 15-64: 65+ (% of total)	2008	42.7; 54.2; 3.1
Population growth (annual %)	2008	2.2
Rural population (% of total population)	2008	51.6
Population density (people per sq. km)	2008	166.1
Literacy rate, adult total (% of people ages 15 and above)	2007	72.0
Land area: Surface area (sq. km)	2008	910,770; 923,770
Arable land (% of land area)	2005	35.1
Agricultural land (% of land area)	2005	81.2
Permanent cropland (% of land area)	2005	3.3
Irrigated land (% of cropland)	2003	0.8
Forest area (% of land area)	2005	12.2
Nationally protected areas (% of total land area)	2006	6.2
Renewable internal freshwater resources per capita (cubic meters)	2007	1493.4
Annual freshwater withdrawals, agriculture: domestic: industry (% of total freshwater withdrawal)	2007	68.8; 21.1; 10.1
Crop production index (1999-2001 = 100)	2005	106.0
Livestock production index (1999-2001 = 100)	2005	107.8
GDP (current US\$)	2008	212,079,674,628
GDP growth (annual %)	2008	5.3
Agriculture: industry: manufacturing: services, value added (% of GDP)	2008	30.7; 41.4; 2.6; 27.9
Ores and metals exports: imports (% of merchandise exports: imports)	2006	0.0; 2.9
Aid (% of GNI)	2007	1.3

Source: World Bank, 2009

against the government and community outsiders in rural areas) is low. Land rights are transferred mostly in informal markets.

The Land Use Act of 1978 is incorporated into the 1999 Constitution, making it difficult to revise or replace. An effort to introduce new land reform legislation was buried in committee in March 2010 and is not likely to resurface before the 2011 elections.

While Nigeria has substantial freshwater resources, it has been unable to develop these resources to boost agricultural productivity significantly. Further, poor governance of water resources has allowed water quality to be compromised by soil erosion, saltwater incursion, inadequate sewerage and sanitation facilities, and pollution from urban and industrial sources. Illness due to waterborne diseases is common.

Between 70 and 90% of Nigeria's household energy supply comes from forests, which also provide building materials, medicinal plants, spices, and fodder for livestock. Nigeria's forest land and its timber and non-timber resources are under threat from the expansion of agricultural land, the overuse of resources to meet the population's energy and food needs, and destruction and pollution associated with oil extraction operations. The expansion of the city of Port Harcourt has destroyed areas of coastal mangroves.

Nigeria's laws establish total national ownership of all subsurface resources, including all minerals, oil, and gas. The governance regimes established to collect and redistribute the revenues generated by the oil and gas industry, therefore, assumed federal government control. One of the issues in the 1967–1970 Nigeria-Biafra War was this approach to resource governance. Protests against the distribution of benefits from oil wealth continued after the end of the war as people realized the substantial negative environmental impacts associated with the industry's expansion. Militant groups supporting the rights of local communities have disrupted oil production in the Delta with years of targeted violence and sabotage. The government of President Umaru Yar'Adua negotiated a ceasefire agreement in the fall of 2009, promising local communities a share in profits and cash payments to the militants, but the agreement is in question following his death and reports that communities are not receiving promised benefits.

I. LAND

LAND USE

Nigeria has a total land area of 910,800 square kilometers, more than 80% of which is suitable for production of both crops and livestock. The country has the largest population in Africa, with an estimated 2008 population of 151 million people. In 2008, 52% of the population was rural and 48% urban. And estimated 64% of Nigerians live on less than \$1.25 per day, and Nigeria ranked 158th of 182 countries on the United Nations' 2009 Human Development Index (World Bank 2009a; UNDP 2006; UNDP 2010; World Bank 2009b; ODI 2010).

Nigeria's total GDP was US \$212 billion in 2008, with industry accounting for 41% of GDP, agriculture 31%, and services 28%. In the 2003–2008 period, oil revenue accounted for an average of 33% of GDP. Agriculture is the principle source of food and livelihood for Nigeria's population and employs about 70% of the workforce. By some estimates, the agricultural sector has averaged about 7% annual growth rate over 1997–2008 period. However, the rate of growth is considered a result of the expansion of staple crops into new areas; agricultural productivity has been flat or declining (Nkonya et al. 2010; Phillip et al. 2009; World Bank 2009a; UNDP 2006; World Bank 2009b).

Nigeria produces agricultural commodities largely for domestic consumption in its three major agro-ecological zones: (1) the dry savanna in the north where production of sorghum, millet, cowpeas and cattle predominate; (2) the central moist savanna region (Middle Belt) of the country where maize, cassava, and yam are grown; and (3) the humid subtropics of the south where cassava, maize, oil palm, yam, and banana/plantain are produced. Nigeria is the world's largest producer of cassava, yams, and cowpea. Cash crops are palm oil, cocoa, and rubber and all are produced in the subhumid regions of the south. Farmers also take advantage of the riverine areas (often called *fadama*) that are present throughout the country to produce horticultural products under seasonal irrigation and, increasingly, are producing rice in improved *fadama* fields (Phillip et al. 2009; NFRA-NFCO 2010; Nkonya et al. 2010).

Forests account for 12% of Nigeria's total land area; 6% of total land area is nationally protected. The average annual rate of deforestation was 3% in the 2000–2005 period (World Bank 2009a; FAO 2005).

Nigeria's soil is reported to be of low to medium agricultural potential; much of the country's cropped land has low moisture content, lacks organic matter, and is subject to increasingly shorter fallows as population densities increase. Grasslands are used on a seasonal basis for livestock production (cattle, sheep, goats). Nomadic herders are sometimes in conflict with sedentary crop producers, especially as farms expand and encroach on communal grazing and open forest lands. Desertification, exacerbated by poor soil and climatic variability, affects the most northern part of the arid/semi-arid savanna regions in the north (FAO 2005; ADF 2005; ARD 2002).

Oil production, mining, and intensified and unsustainable agricultural techniques have overexploited the land in the Niger and Cross River Deltas and caused degradation and erosion that has reduced agricultural opportunities. In the southern wetlands and mangrove forests of the Niger and Cross River Delta region, air and water pollution, oil spills, industrial discharge, and construction are threatening the natural resources and the livelihoods of residents (ADF 2005; ARD 2002).

LAND DISTRIBUTION

Nigeria's population is ethnically diverse. Of the 250 ethnic groups in the country, the major ethnicities are the Hausa and Fulani (30%, mostly residing in the north); the Yoruba (21%, who consider the central and western regions their homelands) and the Ibo (18%, who are primarily located in the southeastern region). The country is roughly 50% Muslim and 40% Christian, with the remainder of the population holding indigenous beliefs. Many ethnic groups adhere to different versions of customary law. The 12 northern states, which have majority Muslim populations, have officially adopted Shari'a law (World Bank 2009b; Blench 2003).

Small-scale farms dominate rural landholdings, with average farm size ranging from 0.5 hectares in the humid south to 4 hectares in the dry north. About 50% of farms are less than 1 hectare; 15% are larger than 5 hectares. Smallholders and especially female farmers on small plots of land have less access to and control over production resources; often lacking irrigation systems, fertilizer, the support of farmers' associations, and access to agricultural research and extension services, they struggle to make the land productive (FAO 2005; ADF 2005; Phillip et al. 2009; Nkonya et al. 2010).

Where communal land is available, smallholders can expand their acreage by clearing and cultivating the land. In areas such as Imo State where populations have expanded, land is increasingly scarce. In such areas, communal land rights are more individualized. Land is perceived as a good investment in many rural areas, and commercial and other interests have bought up rights to smallholdings on the informal market or acquired them through applications for certificates from the government. In the Sokoto region, for example, 23% of landholders have farms larger than 121 hectares and control 80% of the arable land; 43% have farms 6 hectares and smaller and control only 5% of the land (Eboh and Lemchi 1994; FAO 2005; ADF 2005; Labaran 1986).

Land is also considered a good investment in many urban areas, especially by speculators who can identify land that the local government might acquire for development, entitling the landowner to compensation. However, 80% of Nigeria's urban residents live in informal settlements with inadequate shelter and limited access to water and sanitation services. These settlements are subject to takeover by the government if development needs are deemed to be of higher interest. In the capital, Abuja, for example, the government has repeatedly bulldozed informal settlements, destroying more than 800,000 homes since 2003. Sporadic efforts to support formalization of land rights through certification of occupancy in cities such as Lagos have been costly and largely unsuccessful (UN-Habitat 2010; Fabi 2008; Aluko and Amidu 2006a; Olayiwola and Adeleye 2006; Butler 2009).

Industrial development, particularly related to the oil industry, has put significant pressure on the people living in the Niger Delta. The discovery and extraction of the massive oil deposits in the Delta have resulted in loss of land and rights to other natural resources. In addition, the region's air, soil, and water have been polluted by oil spills, dredging, construction, and gas flaring, decimating livelihoods based on agriculture and fishing. Social instability and violent conflict have become endemic, with people asserting their rights to natural resources against the government and the oil companies (UNDP 2006; Amnesty International 2009).

LEGAL FRAMEWORK

The 1999 Nigerian Constitution provides that all citizens have the right to acquire and own immovable property. The 1978 Land Use Act (also known as the Land Use Decree) nationalized all land in Nigeria, formally replacing the customary system of land tenure. The 1999 Constitution incorporated the Land Use Act, which has the effect of requiring any revisions to the Act to comply with rules governing constitutional review and revision, i.e., an act of the National Assembly (RON Constitution 1999; RON Land Use Act 1978; Williams 1992).

The Land Use Act was intended to reduce land speculation, support equitable access to land, and encourage productive use of land by nationalizing land, instituting a system of occupancy certificates, and instituting a system of rents, fees, and taxes. The Act imposed a ceiling on urban and rural landholdings: no individual can hold more than 0.5 hectares of undeveloped urban land, 500 hectares of non-urban land, or 5000 hectares of grazing land. The Act prohibits challenge to the nationalization of land and gives state officials authority over provision and revocation of statutory and customary certificates of occupancy (RON Constitution 1999; RON Land Use Act 1978; Dada 2010; Fajemirokun 2002).

BOX 2. LAND TENURE INDICATORS

	Score
<u>Millennium Challenge Corporation Scorebook, 2009</u>	
– Land Rights and Access (Range 0–1; 1=best)	0.397
<u>International Property Rights Index, 2009</u>	
– Physical Property Rights Score (Range: 0–10; 0=worst)	4.4
<u>World Economic Forum's Global Competitiveness Index, 2008-2009</u>	
– Property Rights (Range: 1–7; 1=poorly defined/not protected by law)	4.2
<u>World Economic Forum's Global Competitiveness Index</u>	
– Ease of Access to Loans (Range: 1–7; 1=impossible)	2.3
<u>International Fund for Agricultural Development, Rural Poverty Report, 2001</u>	
– Gini Concentration of Holdings, 1981-1990 (Range: 0–1; 0=equal distribution)	..
<u>International Fund for Agricultural Development, Rural Sector Performance Assessment, 2007</u>	
– Access to Land, 2007 (Range: 1-6; 1=unsatisfactory access)	2.7
<u>Food and Agricultural Organization: Holdings by Tenure of Holdings</u>	
– Total Number of all Agricultural Holdings, Year	..
– Total Area (hectares) of all Agricultural Holdings, Year	..
– Total Number of Holdings Owned by Holder; Year	..
– Total Area (hectares) of Holdings Owned by Holder; Year	..
– Total Number of Holdings Rented from Another; Year	..
– Total Area (hectares) of Holdings Rented from Another; Year	..
<u>World Bank Group, Doing Business Survey, 2009</u>	
– Registering Property-Overall World Ranking (Range: 1–181; 1=Best)	118
<u>World Bank Group, World Development Indicators, 2009</u>	
– Registering Property-Number of Procedures	14
– Registering Property-Days Required	82
<u>World Bank Group, World Development Indicators, 1998</u>	
– Percentage of Population with Secure Tenure	
• Ibadan	85.8
• Lagos	93.0
<u>Heritage Foundation and Wall Street Journal, 2009</u>	
– Index of Economic Freedom-Property Rights (Range 0-100; 0=no private property)	30
<u>Economic Freedom of the World Index, 2008 (2006 data)</u>	
– Legal Structure and Security of Property Rights (Range 0-10;0=lowest degree of economic freedom)	3.98
– Protection of Property Rights (Range 0-10; 0=lowest degree of protection)	4.68
– Regulatory Restrictions of Sale of Real Property (Range 0-10;0=highest amount of restrictions)	3.45

The Land Use Act has never been fully implemented. Most citizens, especially most rural citizens, are unaware of the Act and few have applied for certificates of occupancy. Even in urban areas, where the majority of the population lives in informal settlements, customary and Shari'a law govern rights and obligations relating to land (Williams 1992; Kuruk n.d.; Olaywola and Adeleye 2006).

Nigeria's customary law is a local, uncodified, evolving system of principles and norms that vary by region and community. Under customary law, which prevails in Nigeria despite enactment of the Land Use Act, land is generally regarded as owned by a universal deity, held by a community, and administered for the benefit of the community by the village head, chief, or *oba* (head chief). The community may be a village or town with several different lineage groups, a single family, clan, or other grouping residing in a defined area. Shari'a law, which has been adopted in the northern predominantly Muslim states, is based on the Quran and on teachings of Mohammed. In some parts of northern Nigeria, Shari'a law supplanted customary law; elsewhere the two systems merged to create a type of hybrid system (Olugboji and Ogundare 2007; Lloyd 1962; Oluwasanmi 1966).

TENURE TYPES

Under the Land Use Act, all land in Nigeria is vested in the government. The Land Use Act recognizes two types of occupancy rights:

Statutory occupancy rights. Under the Land Use Act, individuals and entities can obtain a statutory right of occupancy for urban and non-urban land. Statutory occupancy rights are granted for a definite term, which is set forth in the certificate. Recipients of certificates of occupancy are obligated to pay the state for any unexhausted improvements (i.e., improvements with continuing value such as a building or irrigation system) on the land at the time the recipient takes possession and must pay rent fixed by the state. Rights are transferrable with the authorization of the state governor (RON Land Use Act 1978).

Customary right of occupancy. Local governments may grant customary rights of occupancy to land in any non-urban area to any person or organization for agricultural, residential, and other purposes, including grazing and other customary purposes ancillary to agricultural use. The term for customary rights (which is contained in the application form and not the legislation) is 50 years, and may be renewed for a second 50-year term. Recipients of customary rights of occupancy must pay annual tax on the land and cannot transfer any portion of the rights absent approval of the governor (for sales of rights) or the local government (other transfers) (RON Land Use Act 1978; Kuruk n.d.).

In contrast to the occupancy system in the Land Use Act, Nigeria's customary land tenure system allows for flexible leases, rentals, pledges, and borrowing arrangements that adapt to the needs and circumstances of different communities, such as new or temporary populations in a remote community (e.g., migrant laborers), or relocated populations of professionals residing in urban areas and seeking land to farm on the outskirts of cities. Other types of arrangements apply to specific crops such as palm oil, setting payment as a percentage of yield. Customary holdings have been increasingly individualized and in many areas may be transferred and sold (Ike 1984; Lloyd 1962; Arua and Okorji 1998).

An estimated 80% of urban landholdings in Nigeria are in informal settlements and considered by residents to be governed by customary law. The landholdings are individualized at the family or individual level, and landholders routinely exercise the rights of owners, asserting rights of exclusive possession and control over the land and freely transferring the holdings (Aribigbola 2007; Nwaka 2005).

SECURING LAND RIGHTS

Under the Land Use Act, individuals and entities can apply for statutory or customary rights of occupancy, consistent with the ceilings on urban and rural landholdings. Formal occupancy rights are heritable. Absent other applicable law, at the death of the holder of a statutory or customary right of occupancy, the right devolves in accordance with the customary law in effect where the land is situated. A statutory right of occupancy cannot be divided into two or more parts at the death of the occupier, except with the state governor's consent (RON Land Use Act 1978).

Under the Land Use Act, rural landholders using their land for agricultural purposes are entitled to seek registration of the right to use the land through the local government. Obtaining and registering the certificate of occupancy requires 14 separate steps beginning with production of a sketch, diagram, or other description of the land and application on a prescribed form. The landholder must pay a series of fees, including a "file opening fee," application fee, survey fees, and various additional charges that combine to exceed 22% of the land value. Once the certificate of occupancy is granted (a process that averages six to nine months), the landholder is required to pay the local government an annual rental fee or tax for the use of the land. A household holding 2 hectares devoted to cultivation with no requirement to pay tax on the land under customary law will likely spend more than the annual income from the land to obtain the certificate, and registration and will also be required to pay tax on the land in the future. Even if rural landholders were aware of the provisions for certificates of occupancy in the Land Use Act (and most are not), these costs and procedures are likely to deter them from filing applications. Very few rural landholders have obtained certificates of occupancy and registered their interests. In one 10-year study in Oyo State, less than 2% of the applications for certificates of occupancy were for undeveloped rural land; 15% were for developed rural land. The applications were primarily for urban land and submitted by wealthy urban residents, government officials, and commercial farms (Williams 1992; World Bank 2008; Aribigbola 2007; Nwaka 2005).

Under customary law that governs much of the country, all members of a rural community are entitled to have use of a portion of land, which they receive through inheritance, allocation by the chief, leasing, borrowing, pledge, or gift. Almost all urban landholders obtain their land-rights by purchase or inheritance. Separate members of a household or community may have separate rights to the same plot of land and the crops, trees, and improvements

on that plot. The multiple rights may have a range of durations, e.g., one-time use, license to take production from fruit trees, access for a cropping season, and perpetual rights of access to the land and its production. An individual community member desiring land can make a request to the chief or traditional ruler for an allocation of land on behalf of the individual and his or her family. Women can make requests for land either as heads of households or to obtain land to farm in addition to the land deemed to be held by the husband. The individual is responsible for clearing and cultivating the land and may be expected to make a tribute or gift to the chief in exchange. If the family cultivates the land, it usually has perpetual rights to the land, with the land passing to each generation in turn (Aribigbola 2007; Oluwasanmi 1966; Arua and Okorji 1998; Eboh and Lemchi 1994).

Persons who are not members of a community (such as people who come to a territory as migrant laborers, pastoralists who wish to settle in an area, and people fleeing violence or poorer conditions elsewhere) do not have an automatic or presumed right to land, even if they reside in an area for a lengthy period of time and contribute to the community. If a non-member wishes to obtain land in an area, the individual usually joins a household or receives assistance from a friend within the community who vouches for him or her. If land is available, the community may allow the individual to have access to land. In areas with increasing population density such as southeastern Nigeria, land is increasingly individualized and accessed through land-leasing and other monetary or sharecropping transactions (Oluwasanmi 1966; Lloyd 1962; Eboh and Lemchi 1994; Arua and Okorji 1998).

Rights to rural land held under customary and Islamic law are generally considered secure as against other claims from within the community or other communities recognizing customary or Islamic law. Very few people in Nigeria, and particularly those in rural areas, are aware of the Land Use Act, and they do not look to formal law for tenure security. However, customary law provides little if any protection against rights asserted by the state and third parties under formal law. In some cases, the Land Use Act is criticized for creating insecurity of tenure because the Act enhanced the state's ability to acquire land and concentrated power over land in the hands of local officials who have broad discretion to grant and revoke certificates of occupancy (Olayiwola and Adeleye 2006; Williams 1992; Dada 2010).

INTRA-HOUSEHOLD RIGHTS TO LAND AND GENDER DIFFERENCES

Nigeria's Constitution provides that all persons have the right to acquire and hold property and that no one can be discriminated against on the basis of sex. Land can be registered individually in the name of either a wife or husband, or can be registered jointly in the name of both husband and wife. A series of statutes address marriage, divorce, and inheritance rights in Nigeria and provide for the rights of women and surviving spouses, but most apply to the property division for couples in registered marriages. The vast majority of Nigerians have common law marriages, with some incidence of polygamy, especially among Muslims. Those statutes that do not limit their coverage to those in registered marriages, such as the Administration and Succession (Estate of Deceased Persons) Law, have limited regional application and tend to be unknown to the general population (RON Constitution 1999; Chikwendu and Arokoyo 1995; Gray and Kavane 1999; Aluko and Amidu 2006b; COHRE 2004).

BOX 3. LAND AND GENDER INDICATORS		Score
<u>OECD: Measuring Gender In(Equality)—Ownership Rights, 2006</u>		
— Women's Access to Land (to acquire and own land) (Range: 0-1; 0=no discrimination)		0.8
— Women's Access to Property other than Land (Range: 0-1; 0=no discrimination)		0.5
— Women's Access to Bank Loans (Range: 0-1; 0=no discrimination)		0.8
<u>FAO: Holders of Land Classified by Sex, 1993</u>		
— Percentage of Female Holders of Agricultural Land		..

Despite the support for women's land rights in the formal law, customary law and traditional norms tend to disregard the rights of Nigerian women, especially those in polygamous relationships and with regard to rural land. Under traditional customary tenure practices, and especially in non-Muslim areas, women usually accessed land through their status as daughters or wives. As the customary tenure system evolves to more individualized rights, the process usually fails to identify the land rights of women; not only do women fail to obtain the benefits of the more individualized rights, they often lose recognition of their traditional right of access (Chikwendu and Arokoyo 1995; Gray and Kavane 1999; Aluko and Amidu 2006b).

Most people in Nigeria apply principles of Islamic or customary law to the division of property. In the northern states, Islamic law provides that daughters inherit land in an amount that is half the share given to sons. As in the

majority of Muslim societies, in Nigeria most daughters will generally relinquish their shares to their brothers as a gesture toward family unity, to preserve the value of the land by limiting partition, and as insurance against a future in which they may need to appeal to their brothers for support. A wife who survives her husband receives a quarter of his estate if he had no descendants and a one-eighth share if he had descendants (Chikwendu and Arokoyo 1995; COHRE 2004).

Customary law tends to leave women with fewer rights than Islamic law. For example, in most Yoruba groups when the original cultivator of raw land dies, the rights of use and occupation of the land pass to his sons. His daughters will usually work on the land and receive some benefit of the production of the land until they marry, and in some communities, they may have a right to return to the family land in the event they are widowed, divorced, or abandoned. However, if a son partitions the land and takes his share, the land loses its character as family land and is deemed owned by the sons individually. The daughters do not usually receive a share. Widows do not receive any share of their husbands' property, although in the state of Oyo the government has issued a special decree providing for widows' rights (Lloyd 1962; COHRE 2004).

In 2010, the federal Ministry of Works, Housing and Urban Development announced the Women's Housing Plan Initiative (WHPI). The initiative provides support for women seeking to own their own homes by partnering with developers to identify and obtain land for housing developments, providing services to plots, and supporting development with subsidized loans. Houses showcased on the website begin at US \$16,000, suggesting the government program is targeting the middle class (WHPI 2010; Vanguard 2010).

LAND ADMINISTRATION AND INSTITUTIONS

Under the Land Use Act, governors of the 37 Nigerian states have principal authority for land administration. The governor has authority over all urban land within the state, while the local government has authority over all non-urban land. The governor has discretionary authority to classify land as urban or non-urban and to revoke rights of occupancy for overriding public interests, which include urban and rural development. The Land Use Act provides for establishment of a Land Use and Allocation Committee to assist the governor in the implementation of the Land Use Act, and a Land Allocation Advisory Committee advises the local government authority (RON Land Use Act 1978; ADF 2005).

In many areas, the Land Allocation Advisory Committees are reportedly not functioning, and the rural populations continue to look to their chiefs and emirs on matters relating to land. The chieftaincy or emirate (in northern Islamic states) is responsible for managing the community land, making allotments to individuals and households, establishing the areas of communal land (e.g., washing areas, grazing land, market sites), setting rules regarding communal land and its resources (and in some circumstances, the use of land allotted to individuals), and adjudicating land disputes (Kuruk n.d.; Blench et al. 2006).

The Land Use Act contains very few standards for interpretation, implementation, and enforcement. State and local officials have discretionary power over land allocation, siting of new developments, land occupancy, land transfer, and appropriation of land. The discretion and lack of transparent processes leaves room for rent-seeking and corruption (Koehn 1987; Boudreaux 2005).

The Federal Ministry of Agriculture and Rural Development has responsibility for the development and implementation of policies to improve agricultural production and alleviate rural poverty. The ministry has been the subject of allegations of corruption, fraud, and theft in its management of fertilizer procurement for agricultural development programs. All of the national agriculture and rural institutions fall under the Ministry. The Federal Department of Rural Development and Federal Department of Agriculture implement federally supported programs and provide technical backstopping at the state level. The Federal Department of Land Resources (FDLR) is responsible for land use, land management, soil fertility, land survey, and agroforestry. The Federal Department of Agricultural Land Resources (FDALR) conducts inventories of land resources so as to put them into optimum use and monitor changes in their potential for agriculture, rehabilitates degraded areas of the country affected by drought, desert encroachment, soil erosion on agricultural lands, and provides training (ADF 2005; Shariff 2005).

LAND MARKETS AND INVESTMENTS

Nigeria has three types of land markets: (1) a market for allocations of certificates of occupancy from the government (formal market); (2) a market for the transfer of land rights documented by certificates of occupancy (formal and informal markets); and (3) the market for land that has no certificate of occupancy (informal market). Formal markets are limited. A study of land allocations and transactions in Lagos and Kano states found that only an estimated 1% of land allocations and transactions occur on the formal market, i.e., in compliance with the Land Use Act. Roughly 25% of urban land transactions involve land for which there is a certificate of occupancy but the transactions are done without the required consent, payment of taxes, and registration. The balance of transactions involve land for which there is no certificate of occupancy. Almost all rural land is in this last category (Butler 2009; Adedipe et al. 1997).

Nigeria's informal land market is vibrant in urban and many rural areas of the country. Population growth, urban development, the increasing commercialization of agriculture, and the expansion of the money economy have spurred the evolution of customary tenure based on families to individualization of land rights. In the northern states, taxation of individuals has created an additional pressure for the commoditization of land. Rural land that used to be held in perpetuity for a family or lineage is increasingly available for lease or purchase by third parties, particularly in areas of high population concentration and fertile land (Boudreaux 2005; Lloyd 1962; Adedipe et al. 1997).

The Land Use Act itself is considered by many observers to be a primary barrier to the development of a formal land market. The high cost and time required to obtain certificates of occupancy and the right to transfer them has kept most land transactions within the informal market and increased land prices while reducing security of tenure after the sale. Fraudulent transfers are commonplace, and with only a very small percentage of transactions registered, disputes over the validity of land transactions are frequent (Olayiwola and Adeleye 2006; Dada 2010; Butler 2009).

The Land Use Act was intended to curb speculative purchases of land. Non-farmers bought up large tracts of land and left it idle while waiting to capitalize on rising land values, and those with information about government development plans purchased land in order to profit from land acquisitions. Observers suggest that the Act simply drives speculative practices underground. Urban land values in Lagos and Kano states increased by about 30% in 2007, and the practice of allowing purchased land to lie undeveloped continues (Olayiwola and Adeleye 2006; Butler 2009).

COMPULSORY ACQUISITION OF PRIVATE PROPERTY RIGHTS BY GOVERNMENT

The Constitution provides that no property can be taken except in accordance with applicable law and upon prompt payment of compensation. The Land Use Act, which was designed to assist the government in its ability to expropriate land, sets out the conditions for such acquisitions: a state governor can revoke a right of occupancy (statutory and customary) for a public purpose or in the event of breach of any provision of the right of occupancy. Local governments can take any land for a public purpose so long as the land is: (1) non-urban; (2) not the subject of a statutory right of occupancy; (3) not within any area compulsorily acquired by the government; and (4) not subject to any legislation regarding minerals or mineral oils (RON Constitution 1999; RON Land Use Act 1978).

For purposes of land acquisitions, the Land Use Act defines "public purpose" to include: exclusive government use or general public use; development of industries and public works; economic, industrial, agricultural, urban, and rural development; and development for educational and other social services. The occupier loses his or her right of occupancy upon receipt of notice of the revocation of the right. A holder of a certificate of occupancy is entitled to compensation for the value of his or her unexhausted improvements on the land at the time of expropriation, any rent paid by the occupier during the year in which the right of occupancy was revoked, and the value of any crops on the land (RON Land Use Act 1978).

Expropriation of land increased following enactment of the Land Use Act, and large numbers of people were displaced for the development of industry and urban areas, often without compliance with the law. As of 2006, roughly 2 million people had lost their homes and land to compulsory land acquisitions. More than 1.2 million people have been evicted from the Port Harcourt area to allow for development of the oil and gas industries, and since 2003 the government has evicted more than 800,000 people in the capital, Abuja. A study of farmers evicted

from 1000 hectares found that 53% of landholders interviewed received no notice of the land acquisition, 43% received no compensation, and 33% waited two to six years to be compensated for the expropriation. The government's use of its acquisition power is subject to increasing challenge – both by residents resisting eviction and by organizations questioning the “public purpose” in taking land from one set of private parties to give to another set (Nuhu 2007; COHRE 2006; Amnesty International 2006).

LAND DISPUTES AND CONFLICTS

Land disputes are frequent and often violent in many parts of Nigeria. Disputes over environmental destruction and access to natural resources in the Niger Delta are commonplace and can often be traced to the pressure of the oil industry on the region. In other areas, disputes occur between pastoralists and sedentary farmers, and between family members over inheritance and partition of land. In urban and peri-urban areas, clashes between residents of informal settlements and police executing eviction orders are frequent. Some commentators have suggested that the Land Use Act is responsible for increasing the number of land disputes in urban areas because some tenants ceased paying rent to landlords on the theory that the Act had nationalized land, leading to an increase in the incidence of eviction and land seizures for development (Amnesty International 2006; COHRE 2006; Panos 2007).

Under the Land Use Act, the High Court has jurisdiction over matters relating to a statutory right of occupancy and any claim relating to compensation payable under the Land Use Act (the amount of compensation paid cannot be challenged). Both formal and customary courts have jurisdiction over customary rights of occupancy, including rent payable. A right of appeal exists. Land disputes arising under customary law and without relation to the Land Use Act are handled by customary tribunals and Shari'a courts (RON Land Use Act 1978; Kuruk n.d.; Olugboji and Ogundare 2007).

Nigeria's formal court system suffers from corruption and lack of funding. Cases may take more than two years to resolve; appeals generally add another four years. Facilities are in disrepair, personnel have not received appropriate training, and, once rendered, judgments are poorly enforced in part because records are not computerized and the links are not well established between the courts and enforcement systems, such as the police. Judges are appointed by the President or state Governor in a non-transparent fashion. Court personnel, including judges, are often grossly underpaid and can be susceptible to bribes. The public, especially the poor, has a high level of distrust of the formal court system (Olugboji and Ogundare 2007).

In addition to its formal court system, Nigeria has Shari'a courts that apply Shari's law in the northern Muslim states. The formal law also allows states to establish customary courts, and most states have done so. Both systems hear cases on a broad range of issues, including issues of personal law (e.g., marriage, divorce, succession), contract enforcement, and land rights outside the scope of the formal law. The country's formal appellate courts have jurisdiction to hear appeals from the Shari'a and customary court systems, although the extent to which the parties invoke appellate jurisdiction is unknown (Olugboji and Ogundare 2007).

KEY LAND ISSUES AND GOVERNMENT INTERVENTIONS

In 2007, Nigeria's President Umaru Musa Yar'Adua announced a 7-Point Agenda, which included land reforms that optimized economic growth through the release of state land for commercialized farming and other large-scale businesses operated by the private sector. A Presidential Technical Committee on Land Reform was formed to advise the government on the creation of a national cadastre, a plan for registration of landholdings, and the development of mechanisms for land valuation and conflict resolution. The Government's 2010 budget includes support for a land reform program, but the details of the program have not yet become available (*Nigeria First* 2009).

In its effort to ensure food security, reduce poverty, and diversify the national economy, the government prioritized development of the agricultural sector. A series of presidential initiatives gave cassava, rice, vegetable oil, tree crops, livestock, fisheries and aquaculture special priority in resource allocation and emphasized agriculture in its overarching rural development programs, the National Economic Empowerment and Development Strategy (NEEDS), and the New Agricultural Policy Thrust known as NAP. However, the federal

government's agricultural expenditure as a share of the total budget has remained low and declined from 2.2% in 2001 to 1.7% in 2005 (Nkonya et al. 2010).

DONOR INTERVENTIONS

In 2005–2010, USAID implemented its \$21.7 million Improved Livelihoods in Selected Areas project, designed to increase the productivity of selected commodities and the number of value-added products, build a more commercial and competitive orientation among farmers and small entrepreneurs, and improve the agricultural policy environment. The project expects to benefit about 1.5 million farm households. USAID's FY10 to FY 14 programs will continue to improve the enabling environment through agricultural sector reforms. USAID is also continuing to implement activities under the US Feed the Future program, which aims to accelerate the uptake of proven production, processing, and marketing technologies, significantly increase the productivity of selected staple food crops, foster the development of agricultural value chains, and stimulate job creation through the growth of agribusiness enterprises (USAID 2009; USDOS 2009).

The International Fund for Agricultural Development (IFAD), in conjunction with the World Bank and the Food and Agriculture Organization (FAO), is carrying out the third stage of its Community Based Agriculture and Rural Development Program, having expanded from eight northern states to almost the entire country. The program is benefiting more than 400,000 families, with a particular emphasis on the landless, women, pastoralists, and small-scale farmers. The program: promotes awareness and builds capacity of public- and private-sector service providers to respond to the needs of poor rural women and men; empowers poor communities to manage their own development and supports vulnerable groups; improves agricultural practices; resolves conflicts between farmers and pastoralists; and intensifies crop and livestock production. IFAD is also implementing a US \$78 million Community Based Natural Resource Management Programme (2009–2013) in the nine Niger Delta states. The program, which reports 416,600 beneficiaries, supports community initiatives in sustainable livelihood improvement, natural resource management, and small-scale community infrastructure, with a special focus on women and young people. The program also builds capacity at different levels of government institutions to meet the development needs of the groups, and consolidates partnerships among donors, NGOs and other agencies. FAO has on-farm activities with goals of increasing food security, and the United Nations Development Programme (UNDP-Nigeria) is working with smallholders on food security and environmental management. The extent to which those programs include components addressing issues of land access and land tenure security is unknown (IFAD 2010; ARD 2002).

2. FRESHWATER (LAKES, RIVERS, GROUNDWATER)

RESOURCE QUANTITY, QUALITY, USE AND DISTRIBUTION

Nigeria's rainfall varies significantly across the country, creating three broad ecological zones that also define their potential for agriculture: the arid northern Sudan savanna; the wet Guinea savanna zone (Middle Belt); and the humid subtropical southern rainforest. The northern savanna receives the least rainfall (500 millimeters per year), the Middle Belt receives about 1000 millimeters per year, and it rains almost year round (2000 millimeters per year) in the humid rainforests in the southern region and strip of coastline (FAO 2005).

The country has four large surface water basins, providing opportunities for irrigated agriculture as well as fisheries. The two largest, the Niger Basin and Lake Chad Basin, cover 83% of the country. Rivers and lakes make up approximately 16% of Nigeria's total surface area. Two river systems – the Chad and Niger-Benue – dominate the country's hydrology. Nigeria has extensive *fadama* areas, which are flood plains found along the country's rivers, especially the Niger, Sokoto Rima, Benue, and Yobe. The *fadama* areas provide rich grazing and agricultural land and are internationally important areas for biodiversity (FAO 2005).

Nigeria has annual internal renewable water resources of 221 cubic kilometers. Sixty-nine percent of water is used for agriculture, 21% for domestic uses, and 10% for industry. Forty-seven percent of the total population (30% of the rural population) has access to safe water. However, in many areas water service is intermittent, sanitation facilities unavailable, and water quality is substandard nationwide, suggesting that far more than half the population is unable to access sufficient clean water on a regular basis. Nigeria's water resources have been degraded by soil erosion, siltation, salinization, saltwater incursion, and pollution from industrial sources and human and animal waste. Diarrhea and waterborne diseases are common and often deadly, especially for children (Nwaka 2005; ARD 2002; World Bank 2006; World Bank 2009a; FAO 2005; WaterAid 2010).

LEGAL FRAMEWORK

The Water Resources Act of 1993 gives the government the right to use and control all the country's surface and groundwater for the purpose of developing the country's water resources and coordinating their distribution, use, and protection. The federal government has authority over water shared by more than one state; otherwise, each state has authority to regulate the water resources within its boundaries. The federal government also has control of the country's dams (RON Constitution 1999; Kuruk n.d.).

The 1979 River Basins Development Authorities Act establishes and regulates 12 river basin authorities (within the country's four large river basins). The river basin authorities are under the Federal Ministry of Agriculture and Rural Development. The individual states have authority over the water resources within their boundaries, and most have issued legislation to create state water boards to manage, supervise, and control the use of the state's water resources. State Water Boards report to the governors of each state (Adoga 2006).

A 2004 National Water Resources Policy sets out numerous principles to guide management of the country's water resources, including: (1) water is considered to be a national asset and resource common to all, the use of which shall be subject to national control; (2) the nation's water resources shall be managed to achieve optimum, long-term, environmentally sustainable social and economic benefit for society; (3) the law should provide for water-use rights (rather than water-ownership rights); (4) planning and management of Nigeria's water resources shall take place within a framework that facilitates awareness and participation among all users at all levels; (5) water resources shall be assessed, developed, apportioned, and managed in such a manner as to enable all users to have equitable access; (6) operational management of water resources and services shall be decentralized to the lowest practicable level in accordance with the established eight hydrological areas as the basic units of water resources management in Nigeria; and (7) fees shall be charged for commercial extraction of water. To date, these principles have not been supported by federal legislation (RON National Water Policy 2004).

TENURE ISSUES

The Water Resources Act of 1993 permits people access to water for domestic use from public-access sources. Those with statutory or customary rights to land can take water from any underground water source or water course for domestic use, watering livestock, or personal irrigation systems. State-level water legislation and local water boards govern water use (Kuruk n.d.).

In urban and peri-urban areas, water charges are based either on the volume of water consumed or on a flat rate, and the rates are subsidized. In most rural areas, water is supplied to the population free of charge. Water scarcity is common in many towns and cities, and those who can afford the expense often buy water from private water vendors (OECD 2008).

Under customary law, a grant of land generally confers rights to all products of the land, including water resources. People can take water for domestic use from lakes, rivers, wells, and boreholes. There are usually no restrictions on rights to use large bodies of water. Use of small bodies of water often requires permission of the clan or household occupying the land with the water resource. Anyone improving a spring or other water source earns rights to that water source (Kuruk n.d.).

Water-related disputes tend to be resolved by traditional dispute-resolution processes and procedures, such as through the use of customary leaders and tribunals, mediation, arbitration, and adjudication. Lack of water law specialists, lack of specialized legal input into water-related contracts, and pervasive non-compliance with contract terms have increased the potential for water disputes (Adoga 2006).

GOVERNMENT ADMINISTRATION AND INSTITUTIONS

The Federal Ministry of Water Resources is the national coordinating body for the water sector. The Ministry develops and implements national irrigation policy, implements the Water Resources Master Plan, formulates legislation, and undertakes studies and research. The Ministry is assisted by 12 River Basin Authorities and the National Water Resources Institute. The River Basin Authorities are responsible for the development of surface and groundwater resources for multipurpose use, constructing and maintaining water-resource infrastructure, and supplying users with stored water. The National Water Resources Institute creates and implements training programs on water resources and advises the government on water-resource need and priorities. Water supply is

the responsibility of the states, and each state has a State Water Board (FAO 2005; Kuruk n.d.; World Bank 2006).

There are no separate customary institutions governing water rights in Nigeria; access, use, and development of water resources are governed by traditional authorities and local water boards. In *fadama* (flood plain) areas supported by the National Fadama Development Project, Fadama User Groups work with local government authorities and the government's agricultural project development staff to manage water resources (FAO 2005; Kuruk n.d.; Encyclopedia of Earth 2008).

GOVERNMENT REFORMS, INTERVENTIONS AND INVESTMENTS

In 2006 the Federal Ministry of Water Resources, with assistance from the European Commission (EC), prepared a comprehensive national water resources strategy that included: implementation of the national water policy; development of the regulatory framework governing water resources; harmonization of state and federal authority over water resources; management of conflict areas; and restructuring of the water-related institutions. The Nigerian government has been unable to execute its water strategy; major barriers in the sector are chronic problems with power supply, poorly maintained infrastructure, outdated information systems, weaknesses within state water authorities, and a regulatory framework that does not encourage the public-private partnerships believed necessary for investment in the sector (Atkins 2006; World Bank 2010).

Since the early 1990s the Nigerian government has implemented a series of projects focused on agricultural productivity and investment in *fadama* areas. With World Bank support, the first phase (Fadama I) focused on the development of simple, low-cost irrigation technology in *fadama* areas, irrigating roughly 55,000 hectares with pumps and tube wells. Fadama II (2004–2007) was a US \$125 million project (\$100 million from the International Development Association [IDA]) in 12 Nigeria states. The project worked with *fadama* user groups with common economic interests, such as farmers and pastoralists, and marginalized groups such as women and individuals with disabilities. Groups developed plans and applied for funding for income-generating community-level assets, such as water-pumps and generators. The project reports increasing incomes for 2.3 million households an average of 60% in the 2005–2007 period. Fadama III was launched in Zamfara State in northern Nigeria in 2009. The project will expand countrywide and receive IDA support of US \$250 million. The project will concentrate on supporting demand-driven investments and empowerment of local communities with the aim of improving productivity and land and water quality (World Bank 2009c; NFRA-NFCO 2010).

In response to conflict over water resources in the Komadugu-Yobe River Basin – which was caused in large measure by inadequate planning and management of water resources – the government designed a project to support participatory and informed decision-making about the equitable use and sustainable management of the basin. The EUR €1.5 million project built a knowledge base, piloted improved water-management field interventions, adopted a water charter, and created an updated management plan (Kuruk n.d.).

DONOR INTERVENTIONS AND INVESTMENTS

USAID has supported numerous water projects in Nigeria. In 2010 it is partnering with the Sokoto Rima River Basin Development Authority to rehabilitate the Bakolori irrigation system and provide training to stakeholders on the operation and maintenance of the system. USAID is also continuing to help the government improve water access and quality through construction of hand pump boreholes and rainwater catchment systems, drinking water treatment and water-related hygiene programs (Aliyu 2010; USDOS 2010).

The European Development Fund (EDF) financed a Water Supply and Sanitation Sector Reform Programme from January 2006 to December 2009. The objectives of the program were to increase access to safe, adequate, and sustainable water and sanitation services in six states and provide assistance on the reformation of the water sector. The project helped prepare a new proposed draft national water law (not adopted to date) and provided guidance on restructuring the water sector through focus on river basin authorities. The National Fadama Development Project, which has been funded by the World Bank, extended agricultural productivity in *fadama* (floodplain) areas by introducing the use of small pumps. The project formed more than 9000 community-based water user associations (WUAs) in the 1990s. The Fadama II Critical Ecosystem Management Project (2006–2011) has helped the local government form six state-level Water Committees. As of the FY09 Status of Projects in Execution (SOPE) report, three separate ongoing urban-focused water projects (totaling more than US \$300 million) have rehabilitated two large water treatment plants in Lagos, built 12 smaller plants that are now

functioning, and established 12,000 of 50,000 planned new water connections (World Bank 2009d; World Bank 2006; FAO 2005; Euroconsult 2006).

3. TREES AND FORESTS

RESOURCE QUANTITY, QUALITY, USE AND DISTRIBUTION.

About 3.8 million hectares of land in Nigeria are forest and savanna grasslands. Nigeria's tropical rainforests stretch from the western border with Benin through a narrow strand along the Niger-Benue River, expanding into the southeastern region. The rainforests include tall mahogany, iroko, obeche, and sapele wood trees that form the rainforest canopy and a thick lower layer of shrubs, herbs, and grasses. In the eastern areas, the rainforests have been indiscriminately cleared for palm oil plantations and agriculture (NSU 2010; Chemonics 2008; ITTO 2006).

Nigeria has three savanna belts characterized by their vegetation: (1) the Guinea savanna across in the middle of the country is distinguished by short trees and tall grasses; (2) the Sudan savanna in the northwest has short grasses and stunted trees; and (3) the Sahel in the extreme northeast has short grasses, sand dunes, and some pockets of date palms and acacia. The country also has coastal saline swamps that support thick mangrove trees and coconut palms; freshwater swamps farther inland are dominated by raffia palms (NSU 2010; Chemonics 2008).

The country's forests fall into three categories: protected areas, forest reserves, and unclassified forest. Nigeria's protected areas amount to roughly 1 million hectares, including eight national parks, and are under the control of the Federal National Park Service. Forest reserves are administered by the Department of Forestry and are generally managed as a source of revenue with no conservation mandate. The reserves have been subject to official and unofficial logging and collection of fuelwood and plants. Few reserves remain intact and many have been completely destroyed. There is no current estimate of the extent of remaining forest reserves. The balance of the country's forest land is considered open access (ITTO 2006; ARD 2002; EC-FAO 2003; Chemonics 2008).

Nigeria's forests serve critical human and biodiversity needs in Nigeria. An estimated 70–90% of Nigeria domestic energy supply comes from wood. In addition, forests provide building materials, medicinal plants, spices, and fodder for livestock. Nigeria's rainforests include various species of kola nut trees (family *Malvales*); kola nuts, which used to be used in the manufacture of Coca-Cola, contain a highly valued stimulant, and chewing kola nut is a traditional and often ceremonial practice in parts of Nigeria. Nigeria's lowland forests are home to a variety of primates, and mangrove forests provide spawning and nursery grounds for fish. The unrelenting expansion of agricultural land, overuse of resources to meet population energy and food needs, and construction and pollution associated with oil extraction operations are threatening Nigeria's forest land and forest resources (Ite 1997; ARD 2002; Gibbon n.d.).

LEGAL FRAMEWORK

Nigeria's Constitution provides that the federal government has responsibility for protecting the country's forests. Nigeria's most recent national forest law dates from 1956 and is no longer considered legally relevant. A draft national forest law was prepared in 2001 but has yet to be enacted. Each state has a separate forest law but most are decades old, and the central government remains responsible for federal forestland, including national parks. Conflicts between state and national authority over forests, particularly national parks and reserves, is common. The draft national forest law takes an integrated approach to forest management, conservation, and development, with the goal of managing the forest resources for sustainable use. The draft law encourages private sector participation in forest management, emphasizes forest protection and sustainable use, and prioritizes community rights to forest access and forest products (RON Constitution 1999; Fameso 2008; Chemonics 2008; FAO 2003).

Nigeria's National Forest Policy, 2006, articulates a primary objective of sustainable forest management that allows for increases in the economic, social, and environmental benefits from trees and forests for present and future generations, including poor and vulnerable people. The policy supports: partnerships for all stakeholders (private sector, communities, civil society, NGOs); the decentralization of forest governance; implementation of a national forest program; and promotion of active participation of women and vulnerable groups in forest resource development (Fameso 2008).

TENURE ISSUES

Access to Nigeria's protected areas and use of forest resources in protected areas is restricted. Many forest reserves, which are administered by the Department of Forestry, have been converted into plantations for revenue generation. Regulations restricting access to reserves are rarely enforced; rather, the government encouraged clearing the reserves for agriculture and plantation development. In the early 20th century, Nigeria adopted *taungya*, the practice of intercropping trees and food crops. Government officials gave farmers access to forest reserves to clear for agriculture. The forestry officials gave the farmers plantation crop seedlings to plant and tend, with the government receiving the timber and profits from the plantation. When the economy began declining, the seedling program was eliminated, but forestry officials continued to allow farmers to clear forest land for agriculture. By one estimate, less than 10% of Nigeria's remaining forest reserves are managed sustainably (Chemonics 2008; FAO 2003; Akindele 2001; von Hellermann 2007).

The country's unclassified forest land is generally considered open access, although in some pockets local communities have taken a management and protection role with relation to the forest resources. The unclassified forest land is rapidly being encroached by farmers who gain income and customary land rights by clearing the land, selling the timber, and cultivating the land (ARD 2002; EC-FAO 2003; Aribigbola 2007; Oluwasanmi 1966).

GOVERNMENT ADMINISTRATION AND INSTITUTIONS

The Department of Forestry is housed within the Federal Ministry of the Environment. The Department is responsible for: advising the government on forest development; ensuring the implementation of sound and efficient forest management systems; coordinating conservation and utilization of forest resources; disseminating technical information; and providing extension and advisory services to the states. The Department has three divisions: (1) the Forestry Resources Survey and Products Utilization Division, which is responsible for the utilization and marketing of non-timber forest products; (2) the Agro-Forestry Support Services and Extension Division, which is responsible for agroforestry and communal forestry development; and (3) the Forest Management Division, which is responsible for management of forest reserves, forest fire prevention and control, and control and monitoring of forest pests and diseases (Fameso 2008; EC-FAO 2003; ARD 2002; Chemonics 2008).

State-level forestry offices are authorized to enforce state forestry laws, but enforcement tends to be weak. The institutional base for forest management is not consistent across the states: some departments are within the State Ministry of Environment and others within state ministries of agriculture. Local government councils (LGCs) are permitted to make rules and regulations that relate to natural-resource conservation, provided such regulations do not run counter to those of the state and federal governments. The National Forest Policy provides that LGCs have authority to establish woodlots, protect forests from illegal logging and against fire, and protect wildlife from poachers. The LGCs lack funding and support for their roles, and, in many areas, traditional leaders govern the forest resources. Regulation of forest resources is rarely enforced by the formal judicial tribunals or customary courts because the population depends on use of forest resources for their livelihoods (Chemonics 2008; FAO 2003).

GOVERNMENT REFORMS, INTERVENTIONS AND INVESTMENTS

The government adopted a progressive forest policy in 2006 and has had draft forest legislation under consideration for several years. The cause of the delay in enactment of the legislation is unknown, but the extent of current state control over forest resources and the presumed lack of enthusiasm among states for stronger federal legislation may be factors (Fameso 2008).

DONOR INTERVENTIONS AND INVESTMENTS

The Linkage Center for Forests, Conservation and Biodiversity at the University of Agriculture in Abeokuta is collecting and coordinating data on forests and biodiversity conservation, and the Forestry Research Institute of Nigeria conducts conservation work. The UK Department for International Development (DFID) implemented a EUR €2.4 million Community Forestry Project in Cross River State in 1996–2001. The project created replicable models for community-based forest management, built capacity of forest department staff to support communities in participatory forest management, and supported a variety of income-generating activities based on sustainable

forest management principles. More recently, DFID implemented a five-year (2005–2010) participatory forest management project for forest-edge communities in Taraba State. The Canadian International Development Agency (CIDA) is developing programs focusing on land degradation and water-resources management. One component of the program will focus on community tree-planting and forest management (DFID 2001; DFID 2010; ARD 2002; CIDA 2010).

Civil society groups working on forest issues include: the Nigeria Environmental Study/Action Team (NEST) (conducts assessments regarding climate change and the environmental health of the forests); the Nigeria Conservation Foundation (NCF) (works on renewable natural resources and sustainable development); Ibadan Forestry Development Centre (IFDC) (focuses on forestry resources management and forest industries); and UNICALCONS Service Company (conducts environmental and community service work) (Fameso 2008).

4. MINERALS

RESOURCE QUANTITY, QUALITY, USE AND DISTRIBUTION

With Angola, Nigeria is one of the top two largest producers of crude oil in Africa and among the top 10 global producers. Nigeria's effective annual pumping capacity is about 900 million barrels, and its recoverable reserves are estimated at 34 billion barrels. In the 2003–2008 period, the oil sector accounted for over an average of 33% of GDP and about 90% of export receipts. In the 2005–2008 period, oil accounted for about 80% of government revenue. However, despite its significant oil resources, because of the poor condition of its oil refineries, Nigeria imports 90% of its domestically consumed petroleum products (*African Economic Outlook* 2010; OECD 2008; Mobbs 2009; EITI 2010).

Nigeria's production of crude oil has declined in recent years due to civil disturbances in the Niger Delta, vandalism of pipelines, and criminal violence directed at international oil companies and personnel. In addition, investment in the minerals industry declined due to lack of confidence in Nigeria's business environment (*African Economic Outlook* 2010; Mobbs 2009; Amnesty International 2005).

Nigeria also has significant reserves of natural gas (159 trillion cubic feet, among the 10 largest reserves in the world), and deposits of clay, cement, gold, iron ore, limestone, and gypsum. The Ministry of Mines and Steel Development reports the presence of over 50 different minerals in more than 500 locations across the country. The largest developed deposits of coal are in Enugu State; gold has been mined in Kwara State in western Nigeria, and iron ore is found in Kogi, Enugu, and Niger states. Uranium deposits have been confirmed in Cross River, Tarabari, Plateau, and Kano states. The country's focus has been on its oil and gas reserves, and domestic mining of other minerals is underdeveloped. The government has prioritized development of "Seven Strategic Minerals (7SM)": coal, bitumen, limestone, iron ore, barytes, gold, and lead/zinc (Alison-Madueke 2009; Mobbs 2009).

The country has 180 trillion cubic feet of proven gas reserves, but the majority of Nigerians are not benefiting from those natural resources. The country exports about 3 billion cubic feet of natural gas a day and loses an estimated 3.5 billion cubic feet a day (30% of the European Union's annual gas consumption) to flaring because it lacks the infrastructure to put the gas to productive use. Nigeria's domestic market only receives 0.5 billion cubic feet of gas per day. Seventy percent of Nigerians have no access to electricity; 70–90% of Nigerians rely on wood for cooking and heating (Living Earth Nigeria 2010).

The construction of the 678-kilometer (569 kilometers of which are offshore) West African Gas Pipeline, which runs from Nigeria's Escravos region to Takoradi, Ghana, and also hooks up to the Escravos-Lagos pipeline, increased Nigeria's capacity to export its natural gas. The project cost about US \$1 billion and is owned by a consortium, with Chevron and the Nigeria National Petroleum Company as the primary shareholders. The project is designed to substitute natural gas from Nigeria for the alternate fuels (primarily oil) used by power, industrial, mining and commercial sectors in Ghana, Togo and Benin. The project, which received financing from the World Bank, was criticized by civil society members for failing to compensate local communities for the negative impact of the pipeline and its construction and the ongoing environmental damage caused by the oil and gas operations (Bretton Woods 2007).

In 2006, the government-sponsored Niger Delta Natural Resource Damage Assessment and Restoration Project characterized the Niger Delta as one of the most severely petroleum-impacted ecosystems in the world. Decades of oil operations have included spillage of between 9 and 13 million barrels of oil (1.5 million tons) into the delta's ecosystem. In the period from January 2006 to January 2010, there were reports of more than 3200 oil spills in the Delta. The industry has also caused extensive habitat and environmental degradation through forest clearing, road building, and dredging and filling. The practice of gas flaring, which sends up large toxic gas plumes that emit chemicals, has contaminated surrounding waterways and farmland. In 2008, Nigerian officials reported that radioactive waste from 1100 abandoned columbite and tin mining fields in Plateau State threatened the health of about 2 million residents (Aghalino and Eyinla 2009; *AFP* 2008; RON 2006; Ezigbo 2010).

LEGAL FRAMEWORK

The Constitution provides that all rights to minerals in, under, or upon land in Nigeria vest in the government. The Nigerian Minerals and Mining Act, 2007, reasserts government ownership and control over all minerals in Nigeria and regulates prospecting, mining and quarrying. The Act is intended to promote the expeditious and beneficial development of the country's mineral resources. The Act prioritizes the use of land for mining over other uses of land, and provides that mining for the purposes of access, use, and occupation for mining shall constitute an overriding public interest under the Land Use Act. The Act provides incentives for mining through fiscal and tax incentives. Mining companies are required to establish a tax deductible reserve for environmental protection, mine rehabilitation and reclamation, and mine closure costs (RON Constitution 1999; RON Minerals Act 2007).

Legislation is pending that would give local communities 10% of Nigeria's equity share in oil produced in the Niger Delta (*African Economic Outlook* 2010).

TENURE ISSUES

Under the Minerals and Mining Act, individuals and entities can obtain reconnaissance permits and exploration licenses, small-scale mining leases, mining and quarry leases, and water-use permits (available for use in conjunction with the underlying contractual right). The Act provides processes for competitive bidding for licenses and leases for mineral exploration and extraction. Reconnaissance permits, small-scale mining leases, and quarry leases are restricted to Nigerian citizens. Permits and leases have terms ranging from one year (reconnaissance permits) to 25 years (mining leases). With the exception of reconnaissance permits, mining rights are transferable with Ministry approval (RON Minerals Act 2007).

Quarrying leases are available under the Minerals Act for all naturally occurring quarriable minerals including asbestos, china clay, gypsum, marble, limestone, mica, pipe clay, slate, sand, stone, late rite, and gravel. Quarry leases are granted for five-year renewable periods. Entities producing crude oil can enter into joint ventures with Nigeria's state-owned National Petroleum Corporation or enter into production-sharing and services contracts (RON Minerals Act 2007; Mobbs 2009).

GOVERNMENT ADMINISTRATION AND INSTITUTIONS

The Ministry of Mines and Steel Development: manages the solid minerals sector; administers the Minerals and Mining Act; formulates and issues policy; and ensures the orderly and sustainable development of mineral resources. The Mining Cadastre is a stand-alone institution that administers mineral titles, maintaining an atlas and registry of titles. The Cadastre has the authority to suspend and revoke titles. The Ministry of State for Petroleum Resources manages the oil sector, and the Ministry of Industry manages the cement industry. The National Energy Council is responsible for the Nigerian National Petroleum Corporation, which is a state-owned entity that oversees the refineries and is the major partner in natural gas and petroleum joint ventures with international oil companies (Mobbs 2009; RON Minerals Act 2007).

The National Oil Spill Detection and Response Agency (NOSDRA) is responsible for enforcing Nigeria's environmental regulations regarding spills, undertakes surveillance, ensures the implementation of oil-spill contingency plans, and coordinates the management of oil spills. Whenever there is an oil spill, NOSDRA assesses the damage and the culpability of the company involved (Ezigbo 2010).

GOVERNMENT REFORMS, INTERVENTIONS AND INVESTMENTS

The global Extractive Industries Transparency Initiative (EITI), which supports improved governance in resource-rich countries through the verification and full publication of company payments and government revenues from oil, gas and mining, accepted Nigeria as an EITI Candidate Country in 2007. Audits of Nigeria's accounts identified financial discrepancies, mispaid taxes, and system inefficiencies, including US \$800 million of unresolved differences between what companies said that they paid in taxes, royalties and signature bonuses, and what the government reported receiving. The Nigerian government agreed to a comprehensive remediation action plan designed to: develop a revenue-flow interface among government agencies; improve Nigeria's oil and gas metering infrastructure; develop a uniform approach to cost determination; build human and physical capacities of critical government agencies; and improve overall governance of the oil and gas sector. Nigeria also adopted the national Nigeria Extractive Industries Transparency Initiative (NEITI) to promote the EITI principles. NEITI's primary task is to reconcile payments made by extractive industry companies with receipts recorded by public agencies. In 2007, its existence was institutionalized by the enactment of the Nigeria Extractive Industries Transparency Initiative Act. NEITI's governing officials have been traveling the country holding public meetings to discuss the initiative and engage civil society members in the auditing processes (EITI 2010; NEITI 2010).

Nigeria's federal government has controlled revenues from the oil and gas industry throughout the sector's development. The centralized approach to resource governance was one of the issues in the 1967–1970 Nigeria-Biafra War. Protests against the distribution of benefits from oil wealth have continued, and increased as people recognized the impact of the growing industry on the environment. Militant groups supporting the rights of local communities have disrupted oil production in the Delta with years of targeted violence and sabotage. Beginning in 2006, militants in the Niger Delta attacked pipelines, kidnapped petroleum company employees, and fought government troops. In October 2009, the government entered into a ceasefire agreement with the militant groups, promising legislation granting local communities 10% of Nigeria's equity in joint ventures, improved infrastructure, and cash payments to some militant fighters. Some 12,000 militants registered for reintegration into society. In January 2010, the main militant group, the Movement for the Emancipation of the Niger Delta, called off the agreement because President Umaru Yar'Adua, who negotiated the agreement, was absent from the country for medical treatment for an extended period of time. It is unknown how the subsequent death of the President and appointment of President Goodluck Jonathan in May 2010 will impact the agreement (CTV 2010; *African Economic Outlook* 2010; Madiebo 2000).

The 2007 Minerals and Mining Act was the result of government efforts to diversify the mining sector and attract more investors to the sector, especially for the purpose of conducting exploration of undiscovered reserves (Mobbs 2009).

DONOR INTERVENTIONS AND INVESTMENTS

The World Bank has an 8-year (2004–2012) US \$128 million Sustainable Management of Mineral Resources Project, which is designed to increase the government's long-term institutional and technical capacity to manage Nigeria's mineral resources sustainably. The project is focused on rural economic renewal in selected areas of the country through activities designed to empower small-scale miners and surrounding communities that depend directly or indirectly on the exploitation of solid minerals. Affected communities have taken charge of their own development agenda by defining their own needs in the context of business and community development plans. The project also plans to strengthen transparent governance of the sector through: revisions to the legal framework; institutional capacity-building for efficient public mining institutions and transparent management of the sector; and development of a computerized registry. As of the FY09 Status of Projects in Execution (SOPE) report, the project is achieving its development objectives: the government is drafting mining regulations and undertook extensive training and capacity-building for civil servants at the central and state levels. Airborne geophysical surveys of 50% of the country were completed, and the project was helping the government to tender and attract investors for the development of coal and bitumen resources. The project also focused on building long-term capacity in the mining sector and has funded the establishment of the Nigeria Institute of Mining and Geosciences in Jos. The Institute has initiated short courses and extension services to improve and promote small-scale mining as a means to diversify rural livelihoods. The extension services are coupled with a small grants program to provide limited funding to small-scale miners and mining communities (World Bank 2004; World Bank 2009d).

As part of its Sustainable Utilisation of Nigeria's Gas and Renewable Energy Resources (SUNGAS) program, which plans to develop natural gas and renewable energy markets and sustainable community-based energy facilities within the Niger Delta, the Living Earth Nigeria Foundation, IIED, and other partners introduced a Gas to Power project in 2010. With about US \$3 million in funding from the European Commission, DFID, and Shell Petroleum Development Corporation, the demonstration project will use a 0.5 Megawatt gas turbine to use gas from a flow-station or oil well to produce and distribute electricity locally to about 3000 households, 500 small businesses, five health centers and six schools. The project operations and project assets will be managed by a community-owned and community-based utility company. The demonstration project is not anticipated to reduce gas flares but is intended to create a sustainable model for increased domestic utilization of gas, and give communities a stake in the region's oil production (*Living Earth* 2010).

A local NGO, the Center for Environment, Human Rights and Development (CEHRD), and Amnesty International have been involved in documenting the impact of the oil industry on the people and natural resources of the Niger Delta and advocating for the rights of the people in the Delta (Amnesty International 2009).

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