



USAID COUNTRY PROFILE

PROPERTY RIGHTS AND RESOURCE GOVERNANCE

TANZANIA

OVERVIEW

Tanzania's property rights and resource governance systems have been in flux for more than 50 years. Just prior to independence in 1961, the British colonial government attempted to introduce the concept of freehold land ownership, but the proposal was rejected by TANU, the Tanzanian political party that took power when independence was granted. Instead, the new President of Tanzania, Julius Nyerere, developed and applied the concept of —African socialism,” an initiative that transferred the customary land rights of ethnic groups and clans to newly established elected village councils and encouraged collective cultivation of the land. A series of laws enacted throughout the 1960s provided the framework for this new system of property rights and resource governance, all of which reinforced the authority of the state (and specifically the President) to allocate and designate the uses of Tanzania's natural resources. While the approaches embodied in these new laws were embraced by some, such as women, who found their access to and security in landholdings improved, the laws did not foster greater investment, sound resource management, or adequate rates of economic growth. Preference for individually allocated and individually cultivated farmland was strong. The sometimes forced movement of people into villages under the policy of *ujamaa* (collective production) resulted in better health and education services and the creation of a —Tanzanian” identity, but it was by all accounts not an economic success. The country remained among the poorest in the world.

When President Nyerere left power in 1985, the new government of President Mwinyi began to chart new directions for Tanzania's economy and society. By the early 1990s, it was apparent that a new approach to property rights and resource governance was needed, and steps were taken, including the establishment of a Presidential Commission of Inquiry regarding Land Matters (the Shivji Commission), to define it. In general, the approach involved a gradual transition to a legal framework that supports private property rights (while still granting the President ultimate authority over all land), permits individualized (rather than collective) control of resources in farming areas, and promotes private investments that utilize Tanzania's natural resources for economic gain. The legal framing of this approach has also integrated initiatives that recognize aspects of customary tenure that were, in theory, abolished in the *ujamaa* period; retained the rights that women were granted in that period; and continued some of the laws regarding communal management of rangeland, forests and wildlife, especially with the idea of preserving Tanzania's great national wealth of wild animals. The door has been opened wide (too wide, some say) to foreign investors.

The new legal framework governing land has been more difficult to put into practice than anticipated, and the process that was followed in developing many elements of the law has encouraged those who feel their views are not yet adequately reflected to maintain an activist stance. In 2006, the government issued its Strategic Plan for the Implementation of the Land Acts (SPILL) to guide the implementation efforts. Additional legislation affecting resource governance – regarding water (2009), management of deforestation and the environment (in process), and mining (2010) – has been prepared or come into force. Thus, Tanzania has set itself an ambitious agenda of policy and legal reform regarding property rights and resource governance that is not yet complete. Just how it will play out in coming decades will depend on national and local government capacity to grasp and manage details of administration; adequate mechanisms for the adjudication of disputes;

and whether the legal structures prove to be responsive to the evolving social, political, environmental and economic priorities of the country.

KEY ISSUES AND INTERVENTION CONSTRAINTS

- **Implementing legal frameworks for property rights.** Most Tanzanians have yet to realize the full potential benefits of the new land laws in terms of increased access to land or improved management of communal land. In both rural and urban areas, most occupancy rights have not been registered, and small landholdings rarely, if ever, can be used as collateral for borrowing or property for commercial investment. Moreover, access to large tracts of land with clear title is a serious problem for investors in commercial agriculture. Greater efforts to register individual property rights, to apply laws regarding communal grazing lands, forests and natural resource reserves and parks, and to involve local authorities in land and mineral rights decisions could increase transparency of reforms as well as improve tenure security and reduce unsustainable practices. Moreover, to the extent that Tanzania indeed seeks to strengthen the economic impact of individual property rights in agricultural land, amendments to the legal framework will be necessary. *Donors have already provided some assistance in developing the Strategic Plan for Implementing the Land Acts (SPILL) and have carried out pilot projects on the administration of the new land laws and public awareness campaigns. However, more could be done to advise people of their rights under the land legislation and marital property law, which do not depend on land registration, and to support mechanisms and institutions necessary to enforce those rights. More can also be done to help accomplish registration and certification of holdings (where there is demand, and where the objectives of the formalization can likely be achieved), and to ensure that the potential for corruption and abuse is checked. USAID is likely to be concerned with farmland administration, as it seeks to support greater investment and productivity in Tanzania's smallholder sector, as well as with sustainable management of the extensive system of rangelands, parks and reserves on which income from tourism and livestock both depend.*
- **Improving women's land rights.** While the formal laws provide equal rights for women with regard to access to land and secure tenure (through mechanisms such as registration of joint rights and marital property laws), in many areas of Tanzania customary law and traditional practice prevent these provisions from being applied. Women account for at least half of the workforce in farming and trading, but their access to property rights and the other services that accompany such rights (access to banks, participation in associations) remains constrained. Lack of knowledge of the laws among women, men, local leaders and local authorities presents another significant barrier to equal access. Assessments conducted to inform the development of the US Government's Feed the Future (FtF) initiative in Tanzania identified limitations on women's access and rights to land as barriers to increasing agricultural growth and expanding the staple food supply. USAID is leading Tanzania's FtF initiative, which includes plans to help advance GOT policy reform efforts to improve women's land rights, access to credit, and decision-making authority over household income and assets. *Donors could support policy reform efforts by helping to ensure the meaningful participation of local and national-level civil society groups in the development of reforms and supporting programs; providing technical assistance with legislative drafting and design of implementation strategies; and supporting the development of programs to build public awareness of women's rights to land.*
- **Implementing legislation regarding exploitation of the mining sector.** The Government of Tanzania has prioritized initiatives that support growth potential in the mining sector, beginning with revision of the legal framework to increase the revenue potential for the central government. The government has recognized the importance of supporting the artisanal and small-scale mining subsector, as it provides employment and small-enterprise opportunities for many Tanzanians. However, that support has often given way to the interests of large mining operations. Central government officials issuing mining licenses are often unaware of current land uses and existing mining permits, and large mining operations have been granted rights to land on which there are conflicting agricultural, conservation and artisanal mining interests. Foreign mining companies consider Tanzania a favorable environment and are increasing investments in exploratory operations and expansion of existing operations. As the number of large-scale operations increases, it will become critically important to identify the interests of small-scale miners and other land users and to secure and address the rights of various groups and the potential conflicts. *The lessons emerging from the joint USAID and US State Department Property Rights and Artisanal Diamond Development (PRADD) Pilot Project, which was implemented in the Central African Republic and Guinea, might provide useful guidance to help the government design ways to strengthen property rights of artisanal and small-scale miners and increase local benefits from production and marketing of diamonds and gemstones.*

FOR MORE RECENT LITERATURE:

<http://usaidlandtenure.net/country-profiles/tanzania>

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SUMMARY

Tanzania embraced “African socialism” after gaining its independence from Britain in 1961. As championed by Tanzania’s first President, Julius Nyerere, this approach completely redefined the Tanzanian property-rights regime. The approach largely abolished family and individual rights held under customary law, instituting in their place a system that nationalized the country’s land and moved a good portion of the rural population from scattered settlements and small individualized holdings into communal (*ujamaa*) villages and promoted large-scale collective farming. A change of government in 1985 led to a reversal of this policy and a gradual transition to the property- rights and resource-governance systems still being put in place today. Customary law and individualized rights to farmland were again recognized, and efforts were made to enact laws that would lead to greater investment and increases in productivity. Foreign investors were once again invited to contribute to Tanzania’s economic growth. Since the new laws began to take effect in 1995, GDP growth rates have on average exceeded 5% per annum. However, not all Tanzanians are satisfied that the post-1995 framework provides a meaningful mechanism for the transparent and efficient purchase and sale of land; sufficiently supports gender equity; protects national interests in Tanzanian land and other natural resources; or fulfills its potential to support sustainable economic development.

Tanzania’s population of over 40 million occupy a large country with diverse terrain. In addition to Mount Kilimanjaro, Tanzania has large expanses of savanna that provide habitat to large populations of wildlife and livestock, as well as significant areas that are suited to intensive agriculture. The country also has extensive coastal and aquatic resources on the archipelago of Zanzibar, along the coastal area of the mainland, and in Lake Victoria. Seventy-five percent of Tanzania’s population lives in rural areas; most are engaged in the agricultural sector. Most rural residents are smallholders cultivating cereal crops on rainfed land and raising livestock. Use of inputs is limited and productivity generally low. Pastoralists and agro-pastoralists raise cattle, goats, and sheep, and Tanzania is the third-largest producer of livestock in Africa. While Tanzania was also the site of many large-scale commercial plantations in the colonial era, many were abandoned in the *ujamaa* period. However, investment in Tanzania’s land has increased since the early 2000s, and, to a limited degree, an influx of capital is supporting the reestablishment and new development of large-scale commercial plantations and livestock enterprises.

BOX 1. MACRO INDICATORS

	Year	Score
Population, total	2008	42,483,923
Population ages 0-14: 15-64: 65+ (% of total)	2008	44.7: 52.3: 3.1
Population growth (annual %)	2008	2.9
Rural population (% of total population)	2008	74.5
Population density (people per sq. km)	2008	48.0
Literacy rate, adult total (% of people ages 15 and above)	2007	72.3
Land area: Surface area (sq. km)	2008	885,800: 947,300
Arable land (% of land area)	2005	10.4
Agricultural land (% of land area)	2005	38.8
Permanent cropland (% of land area)	2005	1.3
Irrigated land (% of cropland)	2003	1.8
Forest area (% of land area)	2005	39.8
Nationally protected areas (% of total land area)	2006	38.7
Renewable internal freshwater resources per capita (cubic meters)	2007	2035.1
Annual freshwater withdrawals, agriculture: domestic: industry (% of total freshwater withdrawal)	2007	89.4: 10.2: 0.5
Crop production index (1999-2001 = 100)	2005	110.6
Livestock production index (1999-2001 = 100)	2005	109.6
GDP (current US\$)	2008	20,490,444,784
GDP growth (annual %)	2008	7.5
Agriculture: industry: manufacturing: services, value added (% of GDP)	2006	45.3: 17.4: 6.9: 37.3
Ores and metals exports: imports (% of merchandise exports: imports)	2007	12.6: 1.3
Aid (% of GNI)	2007	17.4

Source: World Bank, 2009

The land legislation enacted since the mid-1990s recognizes long-term occupancy rights to land and allows for land inheritance and transfer. However, all of Tanzania's land is still held by the President as trustee for the people of Tanzania, and any property rights granted are land use rights. While most Tanzanians believe that rights gained through the prior regime or through customary systems are secure, all of the country's land, including land held under occupancy rights, is vulnerable to expropriation by the government for uses deemed to be in the public interest. On a practical level, the authority that remains with village and regional authorities over the country's so-called village lands has resulted in very limited opportunities to buy, sell, consolidate or improve those smaller plots of land that are most accessible to smallholder farmers. The process of transferring customary land rights is cumbersome, confusing, and lacking in transparency. Thus, opportunities for efficiency improvements and entrepreneurship among less empowered constituencies have not been improved by the changes in the law. Although private ownership of land is legally possible, and very important in urban areas, most of Tanzania's farming and herding land remains, as a practical matter, communally owned and controlled.

With the new legal framework for property rights in place, the government has launched efforts to issue and register certificates evidencing land rights in order to provide a mechanism for landholders to obtain financing for investment and encourage the development of a formal land market. The initiatives have not yet moved beyond pilot projects, however, and banks and other lenders rarely, if ever, extend credit to smallholders. Their reasoning, of course, is that government-issued certificates of customary rights of occupancy over village land have no value as collateral in the event of a borrower's default.

Moreover, although the formal laws mandate gender equality in property rights and require female representation on land governance bodies, in practice, customary law, traditional practice and religious norms combine to maintain paternalistic systems and limit women's ownership and control of land. Women are typically given few or no rights to land during their marriages – never being permitted, for example, to add their names to documents indicating ownership of property – and even fewer upon the death of a husband. The option of seeking redress court is theoretically available to women – and, indeed, judges and magistrates are trained to enforce the land ownership and inheritance rights of women, deference to customary norms notwithstanding – but, in practice, that process is long, difficult to access, and confusing. Women subject themselves to powerful social ostracism when they attempt to exercise their rights to real property.

Most urban residents live in informal settlements. Government practice has been to focus on upgrading informal settlements rather than destroying them to make room for new construction, and most residents therefore feel relatively secure in their property rights. Few residents have elected to obtain formal certificates evidencing their occupancy rights, but they do invest time and money in upgrading their residences, and the informal land market is active. In its latest Strategy for Growth and Poverty Reduction (2011–2015), known as *Mkukuta II*, the government is focusing on titling and registering occupancy rights in informal urban and peri-urban settlements.

The country has significant freshwater resources, including Lake Victoria, Lake Tanganyika and several large rivers. However, despite abundant water resources overall, climate variability and poor management of surface waters have created regions where water is scarce and agricultural output is negatively affected. Tanzania adopted a new legal framework governing water resources in 2009. The laws support the devolution of authority for water management, creating basin-level and local governance bodies. Community Owned Water Supply Organizations (COWSOs) own water-points and infrastructure, are empowered to grant and deny water-access and can levy fees. The government's Agriculture Sector Development Programme has set ambitious goals to develop the country's irrigable land, and some donors have provided support although progress to date has been slow. Donors, including the U.S. Millennium Challenge Corporation (MCC) and the African Development Bank (AfDB), are assisting with development of infrastructure to supply safe drinking water to urban and rural residents.

Forty percent of Tanzania's land is classified as forest, an area roughly equivalent to the land classified as agricultural. The country has two of the world's global environmental hotspots and one of the greatest concentrations of megafauna on the planet. Much of the forest area as well as some of the agricultural land has been nationally protected. Nonetheless, due to the expansion of cultivation areas and widespread use of wood for fuel, Tanzania has one of the highest rates of deforestation in Africa. The forest laws support participatory forest management, and local communities have entered into agreements with the forest department to manage local forestland and forest resources. Local communities can also designate village land as protected forestland and can develop plans for sustainable use and conservation. To date, however, the country's participatory forest management experience has not significantly reduced the rate of deforestation and land degradation: programs are

expensive and time-consuming to establish; local forest departments often lack sufficient human and financial resources; and the benefits to communities have not been sufficient to offset their loss of unrestricted use of the forest resources.

Tanzania has substantial reserves of gold, diamonds, coal, uranium, industrial minerals and its own gemstone, tanzanite. To date, most mining operations have been artisanal and small-scale; however, there is growing interest in exploitation of the resources and mining is (after tourism) the country's second-fastest growing sector. The government has completed revisions to the legal framework governing minerals; reforms include increased royalties and a mandatory minimum percentage of state ownership in mineral operations. Industry experts predict that the sector will have steady growth over the near future, with increased production planned for existing operations and the development of new projects. New mining rights often overlap with existing operations and property interests, and the government is encouraging partnerships between large-scale operations and existing small-scale and artisanal miners as well as negotiations with land occupants. Results have been mixed.

I. LAND

LAND USE

Tanzania has a total land area of 885,800 square kilometers, including 2643 square kilometers that comprise the Zanzibar archipelago. The mainland terrain includes highlands in the north and south and a central plateau. The country has large active and extinct volcanoes, including Mount Kilimanjaro and Mount Meru in the north, and a block of ancient rock formations in the east known as the Eastern Arc. Coastal plains run along the 1300-kilometer coastline, and Lake Victoria, Lake Tanganyika and Lake Malawi have a combined 2300 kilometers of shoreline. The Zanzibar archipelago consists of two large islands (Unguja and Pemba) and several smaller islands collectively referred to as Zanzibar. The mainland, known as Tanganyika, obtained independence from Britain in 1961, with Zanzibar following in 1963. In 1964, the two regions combined to form the United Republic of Tanzania. Zanzibar has significant representation in the Union Government and is also semiautonomous, with its own president, legislature and bureaucracy. Zanzibar has separate legal frameworks governing land, water and forests (World Bank 2009a; FAO 2005a; GOT 2009a; USDOS 2010a).

Tanzania had a 2008 population of 42 million people, of whom 75% live in rural areas. About 3% of the population lives in Zanzibar. Most of the population lives in the fertile northern and southern highlands, along the shores of Lake Victoria, and in urban and coastal areas. The central region of the country, which has an arid climate and relatively poor soil, is the least populated. Tanzania's 2008 GDP was US \$20 billion, with agriculture accounting for 45%, services 37%, and industry 17%. In 2008, 37% of the rural population and 24% of the urban population (excluding Dar es Salaam) lived below the poverty line. Poverty is highest (39%) among those working in the agricultural sector, especially pastoralists and women-headed households; the lowest poverty rate (16%) is in Dar es Salaam (World Bank 2009a; FAO 2005a; USDOS 2010a; Rweyemamu 2009; GOT 2010f).

Thirty-nine percent of Tanzania's land is classified as agricultural. An estimated 9.2 million hectares is under cultivation, with between 1.1 and 1.3 million hectares classified as permanent cropland. About 310,000 hectares were irrigated as of 2009 (including about 350 hectares in Zanzibar). The main food crops are maize (about 1.5 million hectares), sorghum, millet, rice, wheat, sweet potato and cassava. The leading cash crops and agricultural exports are coffee, tea, cotton, cashew nuts and tobacco. Zanzibar grows spices, rice, cassava and banana. Tanzania's main irrigated crops are rice, maize, vegetables and banana. Household-level urban agriculture is common, with available ground planted with crops for household consumption and sale to urban residences and businesses (FAO 2005a; GOT 2004b; GOT 2010a; World Bank 2010a; *African Economic Outlook* 2009).

Tanzania ranks third in livestock production in Africa, and the livestock subsector generates about one-quarter of agricultural GDP. Cattle account for about 75% of total livestock production. Sheep, goats, poultry and pigs are also raised. Smallholders and seminomadic pastoralists are responsible for approximately 97–99% of the livestock subsector; large dairy farms and commercial enterprises account for 1–3%. Most of the livestock is raised for the domestic market. The state-owned National Ranching Company, with operations covering 623,000 hectares, is responsible for most commercial ranching. Since 2007, the government has been restructuring ranch ownership – divesting itself of several ranches and subdividing others – and actively seeking buyers and joint-venture partners to develop an export market (GOT 2010b; Edwin 2009).

Most of Tanzania (80%) is covered by woodlands, open grasslands and bush vegetation. About 40% of Tanzania's land area is classified as forestland. Thirty-nine percent of Tanzania's total land area is designated as national protected area. The average annual deforestation rate for 2000–2005 was 1% (World Bank 2009a; Huggins 2000; LEAT 2009).

LAND DISTRIBUTION

Tanzania is home to about 120 primarily Bantu-related tribal groups. Through the nation-building efforts of the first President, Julius Nyerere, the separate identities of the different ethnic groups have to some extent been melded into a "Tanzanian" population, although in many rural areas tribal and clan identity remains strong. The population is 63% Christian and 35% Muslim, with the balance holding traditional animist beliefs. Ninety-five percent of Zanzibar's population is Muslim (Miguel 2002; USDOS 2010a).

Eighty percent of the working population is engaged in agriculture, which is dominated by smallholder farming. There are about 4.9 million holdings; 90% of holdings average 1–3 hectares of rainfed land, although a few larger commercial plantations still exist. The most intensive land cultivation is in the Kagera, Kilimanjaro, Arusha, Kigoma and Mbeya regions, where smallholders and large commercial enterprises grow banana, coffee and a wide range of vegetables. Rice and sugarcane cultivation is found in the alluvial river valleys. Seminomadic pastoralists, primarily from the Masai and Sukuma tribes, and agro-pastoralists raise cattle, goats, sheep and chickens. Much of the rangeland is in the northern and central regions of the country (GOT 2010a; FAO 2005; GOT 2010b).

Global interest in investing in Tanzania's agricultural land has grown in recent years. The Tanzanian government has been actively seeking investors in the agricultural sector, with particular emphasis on livestock operations and plantation development. Between 2004 and 2009, roughly 50,000 hectares of agricultural land were transferred to large commercial investors. Most of the land transferred (about 29,000 hectares) will be developed as teak plantations, with rice and livestock-ranching the other intended uses (World Bank 2010a; GOT 2010b).

Nationwide, an estimated 10.5 million people live in urban areas; between 70% and 80% of urban residents live in informal settlements. The largest city, Dar es Salaam, is on the country's eastern coast and has an estimated 2.9 million people. Dar es Salaam was the capital until 1996, when the capital was officially moved to the central city of Dodoma (estimated population 1.7 million). Dar es Salaam remains the commercial center of the country and many government functions continue to be performed there (World Bank 200a; ITDP 2010; UN-Habitat 2010; City Population 2010).

For decades, Tanzania hosted the largest refugee population in Africa. As recently as 2000, Tanzania provided a relatively peaceful and stable sanctuary for as many as 700,000 refugees escaping conflict in the Great Lakes region. Most refugees have either returned home or obtained Tanzanian citizenship. In 2010, Tanzania granted citizenship to about 162,000 Burundian refugees who fled their country nearly 40 years ago. Approximately 270,000 people fleeing from neighboring countries, including the newly naturalized refugees, asylum seekers and remaining refugees, continue to live in Tanzania, primarily in the northwest (UNHCR 2010; BBC 2010).

LEGAL FRAMEWORK

The Constitution of Tanzania (1977, as amended, 1998) provides that every person has the right to own property and the right to have his or her property protected in accordance with the law (GOT Constitution 1977).

Tanzania's current legal framework governing land was adopted between 1994 and 2004 and is best understood in relation to the country's post-independence history. Under the socialist approach undertaken by President Nyerere following independence, all land is considered public land, with the President serving as trustee for the people. Customary land rights and chieftainship were abolished, and district and village governance systems established. In 1973, the villagization plan Operation Vijiji was implemented. In an effort to facilitate the delivery of public services and support the establishment of large-scale collective farming, hundreds of thousands of rural residents (an estimated 75% of the population) were relocated from scattered homesteads and smallholdings to live in communal (*ujamaa*) villages of 2000–4000 residents. Village Councils were responsible for land allocation and management (Lange 2008; Dondeyne, et al. 2003; Maoulidi 2006; Abdallah and Monela 2007).

The socialist approach was abandoned when President Ali Hassan Mwinyi came to power in 1985. High levels of land tenure insecurity and a rising number of land disputes led the new government to appoint a Land Commission to review existing laws, gather input from stakeholders and advise the government on a new legal framework. After three years of work, the Commission (headed by Professor Issa Shivji) issued its report in 1994. One of the most significant portions of the report was a call for village assemblies to own village land, and state land to be owned by the national assembly (Lange 2008; Dondeyne, et al. 2003; Maoulidi 2006).

As the Commission was working on its report, the government began the process of drafting a new legal framework governing land. In 1995, the government adopted a Land Policy that set out the fundamental principles guiding land rights and management. Members of the Land Commission and civil society challenged the policy for failing to take into account all the recommendations of the Commission and the interests of civil-society groups such as the Gender Task Force. The Land Policy maintained central control of land, reaffirming that all land in Tanzania is considered public land vested in the President as trustee on behalf of all citizens. Observers also criticized the policy as supporting foreign and commercial interests by providing for broad land acquisition rights and failing to adequately recognize and address the need for affirmative measures to change patrimonial and male-dominated practices that prevent women from realizing equal land rights (Maoulidi 2006; GLTF 1998).

The principles set forth in the Land Policy (and again in the Land Act enacted four years later) are as follows.

1. The law shall recognize existing rights to land and longstanding occupation or use of land.
2. Land legislation shall facilitate an equitable distribution of and access to land by all citizens.
3. Land legislation shall encourage productive and sustainable use of land.
4. Each interest in land has value that should be taken into consideration in any transaction affecting that interest.
5. Citizens shall participate in decision-making on matters connected with their occupation or use of land.
6. A land market shall be facilitated in such a manner that rural and urban small-holders and pastoralists are not disadvantaged.
7. A system of land dispute resolution shall be established that is independent, expeditious and just;
8. Land information shall be accessible to the population.
9. Women shall have the same rights as men have to acquire, hold, use, deal with, and transfer land.

(GOT Land Policy 1995)

The Land Policy was followed by the adoption of the Land Act and Village Land Act in 1999. Tanzania's Land Act classifies land as: (1) reserved land; (2) village land; and (3) general land. Reserved land includes statutorily protected or designated land such as national parks, land for public utilities, wildlife reserves and land classified as "hazardous," which designates land whose development would pose a hazard to the environment (e.g., river banks, mangrove swamps). Village land includes registered village land, land demarcated and agreed to as village land by relevant village councils, and land (other than reserved land) that villages have been occupying and using as village land for 12 or more years (including pastoral uses) under customary law. All other land is classified as general land. General land includes woodlands, rangelands and urban and peri-urban areas that are not reserved for public use. Under the Land Act, general land includes unoccupied or unused village land. The Land Act governs reserved land and general land (GOT Land Act 1999a; Alden Wily 2003).

BOX 2. LAND TENURE INDICATORS

	Score
<u>Millennium Challenge Corporation Scorebook, 2009</u>	
— Land Rights and Access (Range 0–1; 1=best)	0.733
<u>International Property Rights Index, 2009</u>	
— Physical Property Rights Score (Range: 0–10; 0=worst)	4.8
<u>World Economic Forum's Global Competitiveness Index, 2008-2009</u>	
— Property Rights (Range: 1–7; 1=poorly defined/not protected by law)	3.8
<u>World Economic Forum's Global Competitiveness Index</u>	
— Ease of Access to Loans (Range: 1–7; 1=impossible)	2.8
<u>International Fund for Agricultural Development, Rural Poverty Report, 2001</u>	
— Gini Concentration of Holdings, 1981-1990 (Range: 0–1; 0=equal distribution)	0.79
<u>International Fund for Agricultural Development, Rural Sector Performance Assessment, 2007</u>	
— Access to Land, 2007 (Range: 1-6; 1=unsatisfactory access)	4
<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)	127
<u>World Bank Group, World Development Indicators, 2009</u>	
— Registering Property-Number of Procedures	9
— Registering Property-Days Required	73
<u>World Bank Group, World Development Indicators, 1998</u>	
— Percentage of Population with Secure Tenure	...
<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)	5.94
— Protection of Property Rights (Range 0-10; 0=lowest degree of protection)	4.92
— Regulatory Restrictions of Sale of Real Property (Range 0-10;0=highest amount of restrictions)	6.01

The companion legislation, the Village Land Act 1999, governs village land, which falls into one of three categories: (1) communal land (e.g., public markets and meeting areas, grazing land, burial grounds); (2) occupied land, which is usually an individualized holding or grazing land held by a group; and (3) vacant land, which is available for future use as individualized or communal land (specifically encompassing unoccupied land within the ambit of village land, as opposed to general land). The Act does not recognize grazing land as a separate category, but pastoralists can assert customary rights of occupancy to grazing land (GOT Village Land Act 1999b; Maoulidi 2006; Alden Wily 2003).

The 2004 Land (Amendment) Act revises and expands the mortgage provisions in the 1999 Land Act to facilitate the granting of mortgages to secure loans, and to make it easier for lenders to take possession of mortgaged land and sell it in the event that the borrower defaults on the loan (GOT Land [Amendment] Act 2004a; Maoulidi 2006).

In Zanzibar, all land was vested in the government in 1965. The Land Tenure Act of 1992 provides that the government can grant rights of occupation, which are perpetual and transferable. The government can

cancel the occupation-right if the holder fails to use the land in accordance with good land use principles. The government also retains the right to approve any transfer of land rights under the Land Transfer Act of 1994. Most land-occupancy rights have not been registered and are held and transferred under principles of customary and Islamic law (Mirza and Sulaiman 1998; Jones-Pauly 1998).

TENURE TYPES

All land in Tanzania is considered public land, which the President holds as trustee for the people. The following tenure types are recognized:

Village land. The Village Land Act recognizes the rights of villages to land held collectively by village residents under customary law. Village land can include communal land and land that has been individualized. Villages have rights to the land that their residents have traditionally used and that are considered within the ambit of village land under customary principles, including grazing land, fallow land and unoccupied land. Villages can demarcate their land, register their rights and obtain certificates evidencing their rights. As of 2009, 10,397 villages were registered, and 753 had obtained certificates (GOT Village Land Act 1999b; World Bank 2010a; Dondeyne, et al. 2003; Lange 2008).

Customary right of occupancy. Villagers have a customary right of occupancy for village land that they hold under customary law or have received as an allocation from the village council. Customary rights of occupancy can be held individually or jointly, are perpetual and heritable, and may be transferred within the village or to outsiders with permission of the village council. Village land allocations can include rights to grazing land, which are generally shared. The village council may charge annual rent for village land (GOT Village Land Act 1999b; Sendalo 2009; Baha et al. 2008; Alden Wily 2003).

Granted right of occupancy. Granted rights of occupancy are available for general and reserved land, subject to any statutory restrictions and the terms of the grant. Grants are available for periods up to 99 years and can be made in periodic grants of fixed terms. Granted land must be surveyed and registered under the Land Registration Ordinance and is subject to annual rent. Squatters and others without granted rights may have customary rights to occupy general land, which may be formalized with a residential license or remain unformalized and insecure (GOT Land Act 1999a; Maoulidi 2006).

Leasehold. Leaseholds are derivative rights granted by holders of granted or customary rights of occupancy. Holders of registered granted rights of occupancy may lease that right of occupancy or part of it to any person for a definite or indefinite period, provided that the maximum term must be at least ten days less than the term of the granted right of occupancy. Leases shall be in writing and registered. Short-term leases are defined as leases for one year or less; they may be written or oral and need not be registered. Holders of customary rights of occupancy may lease and rent their land, subject to any restrictions imposed by the village council (GOT Land Act 1999a).

Residential license. A residential license is a derivative right granted by the state (or its agent) on general or reserved land. Residential licenses may be granted for urban and peri-urban non-hazardous land, including land reserved for public utilities and for development. Residents of urban and peri-urban areas who had occupied their land for at least three years at the time the Land Act was enacted had the right to receive a residential license for the relevant municipality, provided they applied within six years of the enactment of the Land Act (i.e., by 2005) (GOT Land Act 1999a).

SECURING LAND RIGHTS

The most common means of obtaining both formal and informal access to land are through inheritance, gifts, borrowing from family members, land allocations from village councils, informal land transactions in urban areas, allocation from a municipality in an urban or peri-urban area, land purchase and squatting.

Where land is abundant, an occupier can take possession by clearing and cultivating the land. Livestock owners can obtain land for grazing under customary law, through a recognized right of customary use under the Village Land Act or by a specific land allocation by the village council. Migrants and other non-villagers can lease village land with permission from the village council. Leases are subject to requirements for use imposed by the village council, and the length of the lease is generally dictated by the size of landholding granted, with longer leases available for larger parcels. Companies seeking commercial or industrial development opportunities generally obtain land use rights through the central or local government (GOT Village Land Act 1999b; Kironde 2006; Maoulidi 2006; Odgaard 2006; Kaunzeni et al. 1998).

In an effort to address land disputes arising as a consequence of Operation Vijiji, the Village Land Act provides that any allocation of land granted under the program, which was effective from 1970 to 1977, is considered a valid allocation of land, and all prior rights to the land are extinguished (GOT Village Land Act 1999b; Maoulidi 2006).

The Land Act recognizes the validity of customary rights of occupancy without the need to issue and register a formal certificate. In theory, however, certificates are required to mortgage the land right to secure a loan. The Village Land Act provides a process for village councils to issue certificates for customary rights of occupancy. According to the Act, the steps for obtaining a certificate of customary right of occupancy to village land are: (1) application for a certificate to the village council by the landholder; (2) council review of the application; (3) issuance of a letter of offer stipulating development conditions, yearly rent and other conditions; (4) the landowner's written agreement to these conditions on a prescribed form; and (5) issuance of the certificate. Certificates have been issued for about 3% of village land (GOT Village Land Act 1999b; Sundet 2005). Notwithstanding these efforts to provide for title security and creditor protection, due to the sharp limitations on

its transferability, village land is not suitable for as collateral for lending. Moreover, there is a widespread lack of confidence in the validity of many certificates, which are often perceived as defined and issued according to personal and political connections (USAID/AgCLIR 2010).

In urban areas, a business wishing to register rights to purchased land must pay a fee equal to 4.4% of the property value. The registration process takes an average of 73 days and requires nine steps: (1) conduct an official search at the Land Registry; (2) obtain documentation from the Ministry of Lands verifying payment of land tax for 10 years; (3) obtain a property tax clearance from the municipality for the 10-year period; (4) obtain a valuation report; (5) arrange for inspection of the property by a government valuer to determine its value; (6) draft the land-sales agreement and have it notarized; (7) obtain approval for the transfer from the relevant municipal authority; (8) obtain a capital-gain tax certificate; and (9) deliver the transfer deed to the Land Officer for its recording under the buyer's name in the land registry. About 30% of urban land is registered (World Bank 2008; Sundet 2005).

Spouses registering land must co-register. The registrar is required to register both spouses as occupiers in common, which grants each spouse rights to half of the undivided whole of the property. Even if land is registered in the name of one spouse, the other spouse has a legal interest in the land if he or she contributes labor to improvement of the land (Giovarelli 2008; Dondeyne et al. 2003).

In many areas, rural land tenure in Tanzania is considered at least somewhat insecure. Tenure security is most threatened in areas of urban growth, peri-urban expansion and commercial development. Mining exploration and extraction operations and land acquisition for infrastructure-development also create a sense of tenure insecurity. Other causes of insecurity include migrations of people in search of land for livelihoods, and changes in land use that encroach on existing residents. The sense of tenure security in urban areas is reported to be somewhat higher than elsewhere. Although most urban land residents live in informal settlements without land certificates or registered land rights, the limited studies available report that residents believe their rights are secure, a sentiment supported by evidence that they invest in improving their plots and housing. In urban areas, much of the upheaval caused by the collapse of the villagization scheme in the 1970s has resolved into established settlement patterns, and the government's general practice of upgrading rather than destroying settlements has helped foster a greater sense of security. Many of the government's upgrading schemes have included opportunities for residents to register their rights. The presence of all income-groups in informal settlements provides the residents with a stronger voice than if settlements were composed of only the poorest and most marginalized people (UN-Habitat 2010; World Bank 2002).

INTRA-HOUSEHOLD RIGHTS TO LAND AND GENDER DIFFERENCES

In general, women's rights to land are relatively well-supported in Tanzania's formal legal framework: the Constitution and formal law provide for equal rights to property and prohibit discrimination on the basis of sex. However, as members of civil society argued to the Land Commission and policy makers, statements of equality and even many specific statements of the legal rights of women are unlikely to alter entrenched patterns of male dominance and control in the economic, social and political spheres in which land rights operate (GOT Constitution 1977; Maoulidi 2006; Dondeyne et al. 2003; Bell 2003; GLTF 1998).

Tanzania's 1999 Land Act expressly states that women shall have equal rights to obtain and use land, and that customary law cannot be used to discriminate against women. The legal framework for land rights also provides for women's representation in governing bodies. The Village Land Act provides that three of the seven positions on village councils shall be filled by women. A quorum, which is four members, requires at least two members to be women. Many of the land-allocation programs have included specific requirements for including widows and women-headed households among the land recipients. Tanzania's Marriage Act (1971) is also relatively progressive. The Act requires registration of both monogamous and polygamous marriages. Married women are permitted to hold property individually, and polygamous wives have individual rights to hold property. Married

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)	1.0
— Women's Access to Property other than Land (Range: 0-1; 0=no discrimination)	0.8
— 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	17.1

couples are presumed to hold land jointly; marital property is co-registered, and spousal consent is required when marital property is transferred or mortgaged. The provisions of formal law have been upheld by the courts: the High Court invalidated a customary norm preventing women from selling land on the grounds that it was contrary to the Tanzanian Constitution and to international human rights treaties (GOT Land Act 1999a; GOT Village Land Act 1999b; Dondeyne et al. 2003; Ikdahl et al. 2005; Giovarelli 2008; Cotula et al. 2004).

However, despite these legislative pronouncements and programmatic efforts, women hold only an estimated 20% of the land registered in Tanzania. The percentage of women holding primary rights to use and control land under customary law is likely far lower. In rural areas in particular, knowledge of land law is not widespread, and even where the formal laws are known, customary law and religious practices continue to govern how land is accessed and transferred. Most women access farmland from their natal families. If a woman's clan follows a patrilineal and patrilocal system, as does the majority of the population, she will move to her husband's village when she marries and will cultivate his land and the land of his family. A woman's rights to the land depend upon her marriage, and the rights are usually lost if she divorces or becomes widowed. In matrilineal societies (a minority of the population, located primarily in the central and southern regions of the country), assets traditionally passed through the woman's line, but male family members often controlled the assets, including land. Matrilineal systems that include matrilocal marriage (husband moves to wife's village) tended to have the most egalitarian distribution of assets, but patrilineal/patrilocal (wife moves to husband's village) systems have become increasingly favored. For the 35% of the country's women who are Muslim, *Shari'a* law provides that women generally receive one-half the share of men, and a widow with children receives a one-eighth share of her deceased husband's estate (one-fourth if there are no children) (Dondeyne, et al. 2003; Maoulidi 2006; FAO 2010a; Myenzi 2009).

Recognizing the strength of customary law and traditional practice to perpetuate male dominance and the subordination of women's rights, women's advocacy groups have worked for language underscoring gender equality in Tanzania's legislation. The National Women's Forum (*Baraza la Wanawake la Taifa*, BAWATA) advocated for women's rights to land beginning in the early 1990s, and in 1997 the Gender Land Task Force (GLTF) was formed to advocate for gender equality in the land law. The GLTF was an active voice in the Land Commission forums and with policy-makers working on the draft land legislation and was responsible for much of the language supporting women's rights. However, the GLTF was disappointed by the inability of the Commission and policy-makers to support inclusion of provisions that would mandate social change (Dondeyne et al. 2003; Maoulidi 2006; Bell 2003; GLTF 1998).

Women's land rights are also supported by groups such as the Women's Legal Aid Centre and the Tanzanian Women Lawyers' Association, but most women continue to have little knowledge of the formal laws and of their rights, particularly in rural areas. Women who are aggrieved have limited access to unbiased tribunals: local adjudicatory systems such as councils of elders have a limited number of female representatives and tend to support the traditional dominance of men. Few women have the assets and experience with administrative proceedings necessary to bring a claim in formal court (FAO 2010a; Myenzi 2009).

In the rural areas, there is a profound shortage of resources available to support women seeking to enforce their property rights. The vast majority of advocates reside and work in Dar es Salaam and Arusha, with other municipalities and areas represented by just a handful of advocates – or, in some instances, none at all. One practical impact of this dearth of lawyers in the rural areas is that women seeking to exercise their property rights lack resources and support. Similarly, their rights upon divorce, domestic violence and other events are significantly underserved. A number of solutions have arisen in response to the deficit. Among them are Tanzania's longstanding but vaguely understood —*busi* lawyers,” which are individuals who assist illiterate or semi-literate citizen in preparing documents or otherwise seeking to enforce their rights. A significant movement to provide community members with paralegal training has emerged in recent years. Specifically, citizens receive training in various issues impacting underprivileged members of their communities, including women dealing with domestic violence or dissolution of marriage (USAID/AgCLIR 2010).

LAND ADMINISTRATION AND INSTITUTIONS

While the President of Tanzania serves as the trustee of all land and is responsible for allocations of general land, these responsibilities are generally executed by the Ministry of Lands and Human Settlement Development

(MLHSD). The Ministry has three divisions: the Survey and Mapping Division, Land Development Services Division, and Human Settlements Development Division. The Ministry directs the establishment of land policy and planning and is responsible for administering reserved land and general land, including the allocation of granted occupancy rights and management of the country's land resources. A Commissioner of Lands executes most of the ministry's responsibilities (GOT Land Act 1999a; Sundet 2005; WWG 2004; GOT 2010g).

Tanzania's 26 regions are divided into districts and subdivided into divisions. On the mainland, urban authorities consist of city councils, municipal councils and town councils. The rural authorities are the district councils, township councils and village councils. District councils coordinate the activities of the township authorities and village councils, approve village council bylaws and coordinate land use planning district-wide (CLGF 2006; GOT 2010g).

The village councils and township councils have the responsibility for formulating plans for their areas, managing village forest reserves and collecting revenue. Village councils are elected by the village assembly, which includes all adult residents. One-quarter of the council must be female. The urban and district councils are comprised of members elected from each ward, plus women appointed by the National Electoral Commission in proportion to the number of elected positions held on the council (not less than one-third). Zanzibar has town councils, municipalities and district councils (CLGF 2006).

The village council is responsible for making decisions about village land use and land allocations. A village adjudication committee marks land boundaries, sets aside land for rights-of-way and settles boundary disputes between villagers. The power of allocation of village land by the village council is, however, subject to the approval of the village assembly, which is the supreme authority on all matters of general policy-making in relation to the affairs of the village. The village council's authority is also circumscribed by the district council, which will hear appeals from decisions of the village council, and by the Land Commissioner (GOT Village Land Act 1999b; WWG 2004; Maoulidi 2006).

Although the governance structure is designed to foster decentralized administration of land, the central government continues to exercise significant authority over land through the Land Commissioner and, to a lesser extent, the district councils. For example, decisions of the village allocation committee must be approved by the Land Commissioner, and the Commissioner has, for example, the power to change the classification of a parcel, including converting village land to general land to prepare the way for commercial development. The law requires consultation with the village council, but council approval is assumed. In many areas, village councils are also constrained in exercising their authority and responsibilities by their lack of knowledge – of the land laws and procedures generally, and obligations regarding women's land rights in particular (GOT Village Land Act 1999b; Maoulidi 2006; Bell 2003).

LAND MARKETS AND INVESTMENTS

In principle, rights of occupancy can be bought, sold, leased and mortgaged in Tanzania; in practice, however, the land market is constrained by many layers of government control. The formal market for transfers requires government approval, and land received through grants must be held for three years before the landholder can sell the rights. The transfer of a granted right of occupancy must be approved by the municipality and registered. A holder of a customary right of occupancy can sell the right, subject to the approval of (and subject to any restrictions imposed by) the village council. Mortgages are regulated by formal law, and land rights must be registered before they can be mortgaged (Sundet 2005; Kironde 2006; GOT Land [Amendment] Act 2004a).

There is a very limited formal land sale market in Tanzania, and little information is available concerning its operation. Only a small percentage of land is registered, and most of what is registered is in urban areas. Most land transactions occur on the informal market, and these tend to be leases. In rural areas, land sales were historically conducted between members of families or clans; landholders tended not to sell rights to buyers from outside the village. Since the end of the villagization project, and in keeping with the growing commoditization of land, the informal market has expanded; there is increasing demand for land in productive areas and areas with high potential for commercial development. In some cases investors and land speculators follow formal procedures to obtain land rights, but in many cases buyers proceed informally, negotiating with traditional village

authorities and government bodies, with the transaction evidenced by an informal deed signed by representatives of the official or traditional village authorities (Odgaard 2006; Daley 2005).

The 1997 Tanzania Investment Act allows non-citizens to own land for the purpose of investment. The 2004 Land (Amendment) Act permits the sale of bare land and allows mortgage financing as a means of encouraging domestic and foreign investment. The Tanzania Land Bank Scheme was created under the Investment Act. Land is identified as suitable for investment and brokered by the Tanzania Investment Centre. As of 2005, 2.5 million hectares of land were identified as available for investment. However, government records reveal that only 50,000 hectares were transferred to foreign investors during 2004–2009. The Land Bank is considered generally unsuccessful because the parcels it holds are too few, too small, and too scattered to be of much interest to investors (Odgaard 2006; World Bank 2010a; USAID/AgCLIR 2010).

Primary constraints to development of the formal land market include: (1) the requirement for pre-sale notification of the Land Commissioner about the intended transaction; (2) the requirement that the Commissioner acknowledge such notification as a condition for registering the transaction; (3) prohibition of sale of land rights held for less than three years; and (4) the ability of the Land Commissioner to void a land transaction anytime within two years of the transaction if the Commissioner has reasonable cause to believe there has been fraud, undue influence or lack of good faith in the transaction (GOT Land Act 1999a; GOT Village Land Act 1999b; Sundet 2005; Kironde 2006).

COMPULSORY ACQUISITION OF PRIVATE PROPERTY RIGHTS BY GOVERNMENT

The 1970–1977 villagization program was based on the President of Tanzania’s authority to acquire and reallocate land. Hundreds of thousands of Tanzanians were resettled in the 1970s to implement a public policy of communal production and shared labor. The 1977 Constitution of Tanzania (as amended in 1998) provides some protection against the introduction of similar programs, mandating that no one can be deprived of property for purposes of nationalization or other purpose except in accordance with law and upon the government’s payment of fair and adequate compensation. However, the Constitution, the 1967 Land Acquisition Act, and land laws of 1999 do permit the President to acquire general, village or reserved land for “public purposes.” Public purposes include public works, commercial development, environmental protection and resource exploitation (GOT Constitution 1977; Maoulidi 2006; GOT Village Land Act 1999b; GOT Land Act 1999a).

The laws governing land acquisitions state that the government must give landholders at least six weeks notice of the acquisition, but provide that the President has the discretion to shorten this notice period. The government must promptly pay landholders fair compensation, including annual interest of 6% for any delay in payment. The Land Act identifies seven factors to be considered in determining fair compensation: (1) the market value of the property; (2) disturbance allowance; (3) transport allowance; (4) loss of profits or accommodation; (5) cost of acquiring the subject land; and (7) any other cost loss or capital expenditure incurred in the development of the subject land. The government can offer landholders alternate land in lieu of or in addition to monetary compensation (GOT Village Land Act 1999b; GOT Land Act 1999a).

In practice, land expropriation is often not conducted in accordance with legal requirements. In some cases, the government converts village land to general land to make it available to investors without paying the village adequate compensation and without requiring or encouraging joint ventures or other local community participation in land development and enterprises. In addition to failing to compensate cultivators for the value of annual harvests lost, government compensation may fail to compensate other users of land, such as pastoralists and users of forest resources. Pastoralists in particular have lost land to tourism development, national park expansion and infrastructure development. In some cases, investors have circumvented the requirement for government land expropriation and dealt directly with villages. Village councils may be incentivized to negotiate directly with investors rather than wait for government intervention because the councils have an opportunity to set annual rent and request premium payments from the investors (World Bank 2010a; Kironde 2006; Kironde 2009; Pallotti 2008; Hakiardhi 2009).

LAND DISPUTES AND CONFLICTS

The number of lingering land disputes stemming from the villagization program of the 1970s was one of the drivers of the reform of the legal framework governing land rights in the 1990s. Under the villagization program, an estimated 75% of the population moved; when they returned to their land in the 1980s, they often discovered it had been settled by other people or found that the process of dislocation had revealed latent disputes regarding boundaries and rights. Following a failed effort to address the problem by extinguishing all customary rights to village land under the Regulation of Land Tenure (Established Villages) Act 1992, the 1999 land legislation legitimized customary law and validated land rights allocated through Operation Vijiji. Nonetheless, some disputes have lingered unresolved (Abdallah and Monela 2007; Stein and Askew 2009; Maoulidi 2006; Odgaard 2006).

More recently, land disputes in rural areas of Tanzania reflect the competition for natural resources, promotion of commercial development and tenure insecurity. All types of interests are involved in disputes: farmers and pastoralists vie for land for cultivation and grazing; small-scale miners try to protect their rights to minerals in areas allocated to large-scale mining concessions; commercial farms dominate water resources relied on by smallholders and pastoralists; and conservationists seek to preserve habitats from encroachment and development. Land investors circumventing government procedures and negotiating directly with villages have created ambiguity in land rights, leading to disputes. Classified broadly, the most common causes of disputes are: (1) competition for natural resources such as water and minerals; (2) conflicts over land uses, such as grazing versus cultivation; (3) demarcation of village boundaries and allocation of common resources; and (4) adoption of land use plans that deny local communities access to land and natural resources needed for livelihoods (Ojalammii 2006; Lukumbo 1998; Maoulidi 2006; World Bank 2010a).

In some cases, disputes have become violent. In 2008, tensions between pastoralists and farmers in Kilosa District in central-southwestern Tanzania resulted in a series of violent confrontations during which people were severely injured and some were killed. Pastoralists and farmers depended on the same pastureland, which farmers had begun to irrigate to extend the cropping period, thus reducing the availability of grazing land. The tension was exacerbated by increases in livestock numbers, lack of demarcated village boundaries, the absence of an agreed-upon land use plan, and allocation of land to migrants. The parties attempted to use existing mechanisms and forums to resolve their disputes but were frustrated by corruption within the police department and government offices and lengthy and bureaucratic dispute-resolution processes. An uneasy truce was eventually reached but at the cost of at least a dozen lives, significant property damage and displacement of people who fled the violence (Baha et al. 2008).

Both formal and informal tribunals have jurisdiction to hear land disputes under Tanzania's formal law. The Courts (Land Disputes Settlements) Act of 2002, the Land Act and the Village Land Act recognize the jurisdiction of informal elders' councils, village councils and ward-level tribunals. Village councils can establish an adjudication committee, with members elected by the village assembly. The primary mode of dispute resolution in these forums is negotiation and conciliation. The forums have not yet realized their potential to address land disputes. More than a decade after adoption of the legal framework for land, the dispute-resolution tribunals are not operating. Causes for the delay include lack of funding and lack of capacity for creating the necessary institutions (Odhiambo 2006; Sundet 2005; Odgaard 2006; Alden Wily 2003).

In general, most people prefer have their land conflicts resolved as close as possible to the place where the conflicts occur. Most people try to resolve problems using family and clan members and village elders with personal knowledge about the area, its history, the parties and the issues in dispute. Local forums often tend to reinforce existing hierarchies, and women and socially marginalized people may obtain less equitable results than if they had brought their claims in other tribunals. Nonetheless, many people prefer the rapid and socially legitimate results that can be achieved using local relationships and institutions (Odhiambo 2006; Sundet 2005; Odgaard 2006).

The formal court system has a more adjudicatory approach and includes district-level land courts, housing tribunals in urban areas, the land divisions of the high courts and the courts of appeal. Regardless of the tribunal,

customary law will be applied to resolve disputes over land held under a right of customary occupancy (Odhiambo 2006; Sundet 2005; Odgaard 2006; Manning and Kasera 2010).

In addition to the informal and formal tribunals, the Commissioner of Lands can operate as an independent adjudicator. The Commissioner has authority to commission an inquiry on land matters, conduct proceedings and reach determinations. The proceedings do not require adherence to rules of evidence, and the procedure is distrusted by many rural communities, which prefer to find local solutions to conflicts (Hakiardhi 2009; Baha et al. 2008; Odgaard 2006; Maoulidi 2006).

KEY LAND ISSUES AND GOVERNMENT INTERVENTIONS

The government's National Strategy for Growth and Reduction of Poverty 2011–2015 (*Mkakati Wa Kukuza Uchumi na Kupunguza Umaskini Tanzania II*, or *Mkukuta II*) is the country's organizing framework for the development of government programs. The strategy identifies urban growth and agriculture as priority areas for interventions. The strategy includes plans to support the managed growth of urban settlements with: (1) development of settlement plans, land surveys and gender-balanced issuance of land titles; (2) establishment of land reserves in peri-urban areas; (3) regularization of unplanned settlements; (4) capacity-building for local leaders, including education and awareness-building on land rights, obligations and women's rights. In the agricultural sector, *Mkukuta II* recognizes challenges posed by inadequate technical support for small farmers, lack of irrigation and other rural infrastructure, environmental degradation and lack of financing for investment. Planned interventions include: (1) improving and expanding irrigation infrastructure and developing rainwater-harvesting infrastructure; (2) developing contract-based grower and producer relationships; and (3) supporting access to and expansion of land for agriculture and livestock-development in a manner that balances the demands for large- and small-scale farmers (GOT 2010f).

The government's Property and Business Formalization Programme, *Mpango wa Kurasimisha Rasilimali na Biashara za Wanyonge Tanzania* (MKURABITA), is an initiative designed to transform property and business assets in the informal sector into legally held and formally operated entities in the formal sector of the economy. The program began in 2004 with technical support provided by the Institute of Liberty and Democracy (ILD) of Lima, Peru, with the national MKURABITA office taking over in 2007. The Ministry of Land and Human Settlement Development is implementing the land rights formalization component of the program through the Strategic Plan for the Implementation of the Land Acts (SPILL). SPILL was created to: operationalize the Land Act; improve tenure security; encourage investment on land; and support development of a land market. SPILL's activities have included development of land-administration machinery to support land allocation and land-administration services, land demarcation, and issuance and registration of certificates of customary occupancy rights (MKURABITA 2010; MKURABITA 2008; GOT 2010g; Hakiardhi 2009; Hakiardhi 2007; Odgaard 2006).

MKURABITA implemented several pilots, including a pilot to map 220,000 properties and issue 47,000 residential licenses in Dar es Salaam, and a pilot to demarcate land and register land certificates in Handeni District (Tanga Region) in late 2006. Implementation of the pilot in Handeni District experienced some technical problems with delivery of land certificates and some land disputes emerged in the course of the project. Observers also raised concerns about the potential for corruption and abuse in programs that marginalize the village assembly and give extensive power to the village councils to allocate and issue certificates for village land. More broadly, the principles behind MKURABITA have been challenged by civil society organizations that question the emphasis placed on individualization of land and the use of registered land rights to obtain credit. Some observers note that the principles of the program do not respect pastoral land uses and do not help poor farmers overcome barriers to obtaining credit, even with land as collateral (Pallotti 2008; Odgaard 2006; Hakiardhi 2009; Hakiardhi 2007; Stein and Askew 2009).

The initial MKURABITA phase ended in 2005. In 2006, the World Bank agreed to include the land rights formalization project as a component in the US \$157 million Private Sector Competitiveness Project, which runs thorough 2012. As of mid-2010, project staff reported that the project was behind schedule, due at least in part to slow progress in reforms and weakening donor support. The project has not released current figures for land registrations. In October 2010, MKURABITA staff met with media representatives to engage the media in a

public awareness campaign and enlist the media's help in ensuring that the program is represented accurately (World Bank 2010c; MKURABITA 2010).

DONOR INTERVENTIONS

The Norwegian Agency for Development Cooperation (NORAD) provided US \$7 million to support the first phase of MKURABITA. The midterm review of the program noted a need for greater local stakeholder involvement in and ownership of the program, which had little visibility and did not appear well-tailored to the policy environment. The report also cautioned against proceeding with a large-scale program to register rural land rights until more information was collected. A final report reiterated these challenges and noted that the program timeframe was unrealistic. The report also noted that the program did not include attention to the land rental market, which is an avenue to land access often used by the poorest and most marginalized people. The report also challenged the relevance of two key assumptions behind the program: (1) that registered land can be used as collateral to obtain loans; and (2) that land titling will create a functioning land market and increase the market value of land. The report recommends that, as the program proceeds to its next phase, emphasis be placed on engaging stakeholders in design and implementation, and that the program conduct research to test assumptions that land titling and registration are effective means to alleviate poverty (Fregus et al. 2007; Claussen et al. 2008).

CONCERN Worldwide, an Irish NGO, is supporting land rights registration through its EUR €1.8 million Rights-Based Programme for the Fulfillment of the Right to Adequate Food and Right to Land for Poor and Vulnerable Citizens. The program was implemented in Iringa, Kilolo and Mtwara Districts and was extended from its initial 3-year term (2005–2007) to continue through 2009. The program has provided training to local residents on the land laws and land registration process. It is unknown whether the program continues or whether it successfully registered any land (Concern 2008; Stein and Askew 2009).

Tanzania is one of the focus countries for the US Government's Feed the Future (FtF) initiative, which will support GOT efforts to increase agricultural growth and expand the staple food supply. USAID is leading the FtF initiative in Tanzania, including the Enabling Policy Environment for Agricultural Sector Growth project, which plans to advance GOT policy reform efforts in areas identified as critical barriers to transformation of the agricultural sector. The project includes focus on improvement of women's access and rights to land and decision-making authority over household income and assets. USAID's FY11 programming also includes projects designed to expand smallholder access to inputs, stimulate the private sector to improve storage and processing capacity, support the development of infrastructure, and support access to credit through a US \$20 million credit guarantee (USDOS 2010b; USAID 2010; USG 2010).

In addition to funding the Private Sector Competitiveness Project, which includes the MKURABITA program, the World Bank is providing funding for the government's US \$40 million Housing Finance Project for Tanzania (2010–2015), which continues the government's efforts to develop the mortgage finance market. The project focuses on housing in urban and peri-urban areas. The project will create the Tanzanian Mortgage Refinance Company (TMRC) to provide medium- and long-term liquidity to mortgage lenders. Other components of the project include the development of a Housing Microfinance Fund and expansion of affordable-housing supply (World Bank 2010b).

2. FRESHWATER (LAKES, RIVERS, GROUNDWATER)

RESOURCE QUANTITY, QUALITY, USE AND DISTRIBUTION

Tanzania has substantial freshwater resources, including three large lakes that it shares with other countries and that account for about 6% of total surface area of the country. Lake Victoria in the northwest (shared with Uganda and Kenya), has a surface area of about 69,000 square kilometers and is the second-largest freshwater lake in the world (after Lake Superior in the U.S./Canada). Tanzania has a 51% share of the lake. Tanzania also has a 41% share of Lake Tanganyika on the western border (shared with Burundi, the Democratic Republic of Congo and Zambia), and an 18% share of Lake Nyasa (also known as Lake Malawi) in the southwest (shared with Malawi and Mozambique). The largest rivers are the Rufiji, the Great Ruaha, the Igombe and the Ruvuma, which forms the border with Mozambique to the south. Tanzania has nine drainage basins, including the Lake Victoria basin, which is part of the Nile River basin (FAO 2005a).

Rainfall varies from about 500 to 1000 millimeters annually in most of the country. The highest rainfall (1000–3000 millimeters annually) occurs in the northeastern part of the Lake Tanganyika basin and the southern highlands. The central region receives the least rainfall and is arid or semiarid (FAO 2005a).

Total renewable water resources in Tanzania amount to 93 cubic kilometers per year, of which about 84 cubic kilometers are internally produced. Total actual renewable water resources per person are 2035 cubic meters per year. Agriculture is the largest user of freshwater resources (89% of withdrawals), followed by domestic use (10%) and industry (1%). Tanzania's irrigation potential is estimated to be about 2 million hectares. The government has been supporting the expansion of irrigation, which has grown from 150,000 hectares in 2002 to about 310,000 hectares in 2009. Gravity-fed irrigation using surface water accounts for over 99% of irrigated area, and groundwater is utilized in only 0.2% of all irrigated area (FAO 2005a; *African Economic Outlook* 2009; Huggins 2000; World Bank 2009a; Mwaka 1999).

Tanzania has an estimated hydroelectric power potential of 4.7 gigawatts, only 10% of which has been developed. About 10% of urban residents and 1% of rural residents have electricity. Most of the country's hydropower potential is in the Rufiji river system, which runs 600 kilometers across the country from its source in the southwestern part of the country to its mouth on the Indian Ocean. Other rivers with hydropower potential are the Kagera, Wami and Pangani (FAO 2005a; Abdullah and Monela 2007).

Although Tanzania has abundant water resources, some parts of the country experience water scarcity due to low and variable rainfall, climate variability and poor surface-water management. The fertile highlands, especially in Kilimanjaro and Meru, have been committed to growing cash crops, especially coffee and tea, while the production of food crops is concentrated in low-lying areas where rainfall is less reliable and the land is subject to periodic drought and flooding. Climate change is exacerbating already unpredictable weather conditions; since the 1920s, the country has experienced decreasing rainfall and rising temperatures. Dependence on rainfall is a limiting factor in agricultural production, creating food insecurity and low income-generation (Lema and Majule 2009; Mtalo et al. 1990; FAO 2005a).

On the mainland, as of 2007, 57% of the rural population and 83% of the urban population had access to improved drinking water sources. A slightly higher proportion (59%) of Zanzibar's rural population had access, as did an estimated 75% of Zanzibar's urban population. However, Zanzibar has frequent drinking-water shortages during times of drought. Overall, about 47% of rural households in Tanzania use unprotected sources of drinking water, and women and children spend a significant amount of time obtaining water for their families (UNDP 2010; Muzzini and Lindeboom 2008; GOT 2008; GOZ 2007).

Tanzania's groundwater quality is generally good. Surface water quality has been compromised in some areas by the discharge of untreated effluents, untreated waste and pesticides into rivers and lakes. Expanding coastal populations and emerging industrial development have severely polluted some coastal waters, especially off the coast of Dar Es Salaam, Tanga and Mtwara. Lake Victoria suffers from discharge of raw sewage and untreated industrial effluents from the Mwanza municipality. Zanzibar's surface water sources suffer contamination from improperly managed human waste and sanitation services (LEAT 2009; Mohammad n.d.; Mwaka 1999; GOZ 2007).

LEGAL FRAMEWORK

In 2002, the government issued the National Water Policy, which was designed to address: the competing demands on the country's water resources; scarcity of water in some regions of the country; degradation of water sources; inadequate access to safe drinking water; and fragmented planning. The National Water Policy is based on principles of: (1) equal and fair access to and allocation of water resources; (2) effective and efficient water-resources utilization; (3) better management of water quality and conservation; (4) better management and conservation of ecosystems and wetlands; (5) financial sustainability and autonomy of Basin Water Boards; and (6) promotion of regional and international cooperation in the planning, management and utilization of water. The policy supports decentralized water-management and revision of the existing perpetual water-right system to a system allocating water rights for a specific duration (GOT Water Policy 2002b; FAO 2005a; GOT 2008).

The 2006 National Water Sector Development Strategy (passed in 2008), designed to implement the 2002 National Water Policy, recognizes the importance of universal access to improved water supply and sanitation and the need to develop institutions and methods capable of rapidly expanding services across the country. The National Water Sector Development Strategy and Programme focuses on water-resources management, institutional development and capacity-building, development of district water supply and sanitation plans, execution of business plans for utilities operating in regional and district capitals and plans for water delivery and management in small towns (GOT 2008).

The 2009 Water Resources Management Act (Water Resources Act) implements the 2002 Water Policy and 2006 Water Sector Development Strategy. The Act creates the institutional and legal framework for the sustainable management of the country's water resources. The Act regulates the management, use and protection of the country's water resources for the benefit of the population, to meet basic human needs and promote equitable access, and to support the sustainable efficient use of water resources. The Act sets out the ownership and use-structure for water resources and the governance structure, which includes National Water Boards, Basin Water Boards, Catchment and Sub-Catchment Water Committees and Water User Associations (GOT Water Resources Act 2009c).

A companion law, the 2009 Water Supply and Sanitation Act, focuses on the supply of drinking water and sanitation services. The Act provides for the transparent regulation of water supply and sanitation services and the creation of authorities to manage water supply and sanitation sustainably. The Act restructures the water supply sector around decentralized and devolved authorities, which are designed to be commercial entities, and outlines the responsibilities of government authorities involved in the water sector. The Act provides for the creation of Community Owned Water Supply Organizations (COWSOs) to manage potable water resources at the local level. The law gives COWSOs ownership of water points and infrastructure, empowers COWSOs to grant and deny access to water in accordance with established conditions, and grants COWSOs the right to levy fees for water services (GOT Water Supply Act 2009d).

Zanzibar enacted a new water law in 2006 (Water Act No. 4 of 2006) to control water-use on the island and prevent water pollution. The law declares all water resources to be the property of the government and imposes a fee for the use of all water other than rainwater and seawater. Zanzibar's 2007 Strategy for Growth and Poverty Reduction identifies the water sector as a priority area and provides that the government will: implement the new legal framework governing water resources; develop plans to protect water catchments; conduct research on groundwater potential; rehabilitate infrastructure; promote and strengthen public-private partnerships in water development, supply and financing; and promote community-based management of water supply (IRIN 2006; GOZ 2007).

The Nile Basin Initiative (NBI) is a cooperative framework created in 1999 to govern Nile Basin water resources. All ten riparian states (Tanzania, Kenya, Uganda, DRC, Egypt, Sudan, Burundi, Rwanda, Eritrea and Ethiopia) signed the agreement and committed to developing cooperative-use agreements to achieve sustainable socioeconomic development through the equitable utilization of the common Nile Basin water resources. The NBI, based in Entebbe, is implementing numerous projects, including a regional power trade between Tanzania and Kenya and the Rusumo Falls Hydroelectric and Multipurpose Project. The Rusumo Falls project is developing a hydroelectric power station (60–75 megawatt estimated capacity) that will connect to the national grids in Rwanda and Burundi and supply electricity to the western provinces of Tanzania, which are not on the national grid (World Bank 2009e; Mwaka 1999; ICA 2008).

TENURE ISSUES

The 2009 Water Resources Act provides that the country's water is a public resource vested in the state, with the President authorized to act as trustee of the resource on behalf of the population. The Act requires anyone who diverts, dams, stores, abstracts or uses water – other than for domestic purposes – to obtain a water permit from the Basin Water Board. Individuals and groups with legal access to land are permitted to access surface water for domestic needs without a permit. Landholders are also permitted to access to groundwater through hand-dug wells and may construct facilities to harvest rainwater for domestic use without a permit (GOT Water Resources Act 2009c).

Upon recommendation from the Basin Water Board, the Ministry of Water and Irrigation can declare an area to be a Groundwater Controlled Area. Anyone sinking, deepening or enlarging a borewell in a Groundwater Controlled Area must obtain a groundwater permit from the Basin Water Board. The Ministry of Water and Irrigation and the Basin Water Boards also have authority to prevent actions causing pollution or other harm to water resources, including through establishing Protection Zones around water sources and requiring permits for the discharge of effluents and other substances into water bodies (GOT Water Resources Act 2009c).

The Basin Water Board is required to recognize customary water rights as equivalent in status to granted water rights. Customary rights can be recorded and can be subject to annual fees or payment of a premium. All water rights, whether customary or granted, are subject to the management authority of the Basin Water Boards and Ministry of Water and Irrigation, which can restrict use during periods of drought and natural disasters. The ministry can designate water resources necessary for public purposes such as firefighting, protection of ecosystems, and providing water to urban settlements. The statement of public purpose authorizes the minister to restrict other water uses, subject to payment of compensation to holders of permits (GOT Water Supply Act 2009d; GOT Land Act 1999a).

The 2002 Water Policy and 2009 Water Resources Act and Water Supply and Sanitation Act reflect the country's effort to devolve authority for the management of natural resources to the local level and establish sustainable systems for natural resource management. The new legal framework emphasizes: (1) shifting planning and management of water resources closer to beneficiaries; (2) considering multi-objective planning; (3) private-sector participation; and (4) supporting economic sustainability. Tanzania has only limited experience with the new legal framework governing water resources and issues arising from the implementation of the new laws. Areas where issues may arise include: (1) providing service to all segments of society within a framework of higher cost-recovery and for-profit enterprises; and (2) implementing an integrated management framework without losing accountability for sustainable water-management and access (Arvidson and Nordstrom 2006).

GOVERNMENT ADMINISTRATION AND INSTITUTIONS

The Ministry of Water and Irrigation is responsible for setting policy and national strategy for water resource development and ensuring execution of the national strategy for drinking-water and other water uses. The Minister appoints the National Water Board, establishes and supervises the work of Basin Water Boards, and ensures the sustainable development of water resources in the public interest. The minister is supported by the Director of Water Resources who oversees water management and planning, coordinates the work of the Basin Water Boards, resolves disputes, supervises data collection and water audits, and determines investment priorities. The National Water Board serves as an advisor to the Minister and provides inter-sectoral coordination and resolution of international water issues (GOT Water Resources Act 2009c).

The Ministry of Water and Irrigation establishes the Basin Water Boards and appoints the Basin Water Officer, which is the lead position on the board. The Basin Water Boards: create water management plans; prepare guidelines for construction of water-source structures; collect and analyze data for water resources management; monitor water use and pollution; resolve intra-basin water conflicts; and serve as a channel of communication to water users. Basin Water Boards maintain a registry of water permits issued. The minister can also declare areas to be catchments and sub-catchments and establish Catchment Committees and Sub-Catchment Committees. The committees are responsible for coordinating water management plans, resolving disputes and performing other functions delegated by the Basin Water Boards. At the community level, Water User Associations (WUAs) are responsible for managing water supply and distribution for other uses, including irrigation. WUAs can obtain permits, collect fees for the Basin Water Board, and represent a special interest or value for water resources, such as in a conservation area (GOT Water Resources Act 2009c).

Management of the supply of drinking water has a separate governance system under the Ministry of Water and Irrigation and the Minister of State for Regional Administration and Local Government. The Minister of State for Regional Administration and Local Government ensures that water supply and sanitation services are implemented and is responsible for coordinating the roles and duties of local authorities and community organizations. The ministries have joint responsibility for establishing district water authorities. A regional secretariat is responsible for implementing ministry directives in each region. In urban areas, Urban Water and Sanitation Authorities (UWSSAs) manage water and sanitation services. Water supply in small towns is covered

by District Urban Water Supply and Sanitation Authorities, while Community Owned Water Supply Organizations (COWSOs) are created to manage water supply and distribution in rural areas. District councils provide COWSOs with block grants to pay for infrastructure development, but COWSOs are expected to finance their costs and operations through consumer fees (GOT Water Resources Act 2009; GOT Water Supply Act 2009d).

In addition, Tanzania established a multi-sector regulator, the Energy and Water Utilities Regulatory Authority (EWURA), within the urban water supply and sanitation sector. EWURA licenses all providers of urban water services, sets technical standards and monitors performance (GTZ 2008).

GOVERNMENT REFORMS, INTERVENTIONS AND INVESTMENTS

The government completed the restructuring of the water governance sector and established a new legal framework governing the water sector in 2009. Initiatives under the government's National Strategy for Growth and Reduction of Poverty 2011–2015 (*Mkukuta II*) include plans to: (1) strengthen the capacity of basin-level water-resources management institutions including water-user associations; (2) rehabilitate equipment and infrastructure; (3) construct new dams; (4) demarcate and protect water sources in all basins to protect them from environmental depletion and pollution; (5) rehabilitate and construct new drinking-water sources; (6) register Community Owned Water Supply and Sanitation Organizations; and (7) conduct water-point mapping countrywide (GOT 2010f).

Mkukuta II also restates the government's plan to build a dam on the Ruvu River in the Kidunda area of the Morogoro region to supply water to Dar es Salaam and its environs. Construction is expected to begin in 2011–2012 and take three years. The area is environmentally and socioeconomically sensitive. Of the 473 square kilometers of land designated as dam area, 123 square kilometers comprises the Selous Game Reserve (a UNESCO World Heritage Site), 85 square kilometers are in the Mkulazi Forest Reserve, 25 square kilometers are productive agricultural land, and 8 square kilometers are residential land (Kamndaya 2010; Rustagi 2005; GOT 2010f).

In 2006, the government created the National Water Sector Development Programme, which runs through 2025. During the initial phase from 2006 to 2011, total investments for the different subsectors are expected to reach US \$950 million. The government's Agriculture Sector Development Programme (ASDP), which is funded with US \$1.5 billion over seven years, initially planned to increase the extent of irrigated land to 1 million hectares by 2011. Progress since the project began in 2006 has been slow, with only about 10,000–15,000 hectares put under irrigation annually. The government has revised its goal to have 379,000 irrigated hectares by 2011. As of 2009, about 310,000 hectares were irrigated. The US Government's Feed the Future (FtF) initiative is supporting the GOT's efforts with funding for irrigation and the development of models for local water resource management (Rweyemamu 2009; GOT Water Supply Act 2009d; GOT Water Resources Act 2009c; GTZ 2008; USG 2010).

In Zanzibar, the government has been engaged in reforming the water sector with the adoption of a new water law in 2006 (Water Act No. 4 of 2006), the establishment of the Zanzibar Water Authority (ZAWA) in 2006, and adoption of new water regulations in 2008 that create a tariff structure and set water-service charges. The African Development Bank (AfDB) and UN-Habitat are providing institutional development, capacity-building and technical assistance to help the government implement the new framework (AfDB 2009).

DONOR INTERVENTIONS AND INVESTMENTS

The World Bank provided US \$165 million for a Dar es Salaam Water Supply and Sanitation Project that is ending in 2010. The project was designed to provide a reliable, affordable and sustainable water supply service and improve the sewerage and sanitation in the Dar es Salaam Water and Sewerage Authority (DAWASA) service area (Dar es Salaam and part of the coast region). The project replaced aging high-lift pumps and spares essential to the continued functioning of the Upper Ruvu and Lower Ruvu plants, which had been experiencing frequent breakdowns that had disrupted service-delivery to Dar es Salaam. As of the end of 2009, the DAWASA service area had been largely restored. In the project areas, water supply is stable and reliable, water quality meets targeted standards, and about 80% of the population (estimated 2.1 million) has water-supply access with rationing and storage. The project also delivered off-network services to about 406,000 people in peri-urban areas under the Community Water and Sanitation Program (World Bank 2009b).

The Millennium Challenge Corporation (MCC)'s 2008–2012 US \$698 million compact with Tanzania includes a US \$65.6 million water component that aims to: (1) increase the quantity and reliability of potable water for domestic and commercial use; and (2) reduce the incidence of water-related disease. The MCC's project builds on the World Bank's investment in the Upper and Lower Ruvu plants. The MCC project is designed to expand the capacity of the Lower Ruvu water treatment plant, improve system efficiencies of the DAWASA, rehabilitate water intake and water treatment plants, and improve the existing distribution network in the city of Morogoro, which is about 190 kilometers west of Dar es Salaam (MCC 2010).

The World Bank is also funding a 5-year (2007–2012), US \$200 million Water Sector Support Project designed to strengthen sector institutions for integrated water-resources management and improve access to water supply and sanitation services. The project includes components that will: (1) strengthen institutional capacity for improving the management of water resources by providing logistical and technical assistance to the nine basin institutions and their management systems; (2) support all local governments in the scaling-up of the provision of rural water and sanitation services in pursuit of the Millennium Development Goals (MDGs); (3) support urban areas and gazetted small town utilities in the scaling-up of provision of urban water and sanitation services in pursuit of the MDGs; and (4) support the Ministry of Water and strengthen subsector planning and operational capacities. After 18 months of implementation (the end of 2009), the program was active in all nine basin level offices, 124 of 134 districts, and over 70 regional and district utilities. About 1843 of 3948 subprojects were completed in rural areas, adding about 4047 water points and increasing coverage to some 1,045,000 people. About 250 new water rights were granted, 175 WUAs were established and 68 gauging stations were rehabilitated (World Bank 2007; World Bank 2009b).

The Worldwide Fund for Nature (WWF) has been working with water users, local communities and decision-makers in Tanzania and Kenya to help them manage the Mara River, which runs through the Masai Mara Game Reserve in Kenya and the Serengeti National Park in Tanzania before flowing into Lake Victoria. Communities along the river have been experiencing water shortages and increasingly poor water quality as a result of agricultural runoff, mining and large-scale irrigation development. The WWF project is facilitating an integrated river-basin management approach to create initiatives for the conservation, sustainable and equitable use, and restoration of freshwater resources of the Mara River. On the Tanzanian side, as of 2010, the 9-year project had helped form a Catchment Committee with 14 Water User Associations, had created 25 community action plans, and supported the Ministry of Water and Irrigation's effort to rehabilitate 13 stalled river gauging stations (WWF 2010).

With US \$90 million in World Bank funding, the government is undertaking the Lake Victoria Environment Management Project. One objective of the project is to harmonize the national policies, legislation and regulatory standards of Tanzania, Kenya and Uganda to ensure sustainable management of Lake Victoria's shared water and fishery resources (World Bank 2009b; Kabundi 2005).

The AfDB is funding the 4-year (2009–2012), US \$42 million Zanzibar Water and Sanitation project to support the Zanzibar Water Authority with institutional development and technical support and help it develop and implement its Rural Water Supply and Sanitation Program, which includes schemes for eight regions in Unguja and Pemba, including schemes to provide water to schools and health centers. The project has an urban water-supply component that will improve water infrastructure, drill new boreholes and update water-testing techniques and equipment (AfDB 2009).

3. TREES AND FORESTS

RESOURCE QUANTITY, QUALITY, USE AND DISTRIBUTION

Tanzania has 33–35 million hectares of forests and woodlands. About 40% of the country's total land and up to 90% of its forestland is miombo woodland. In Tanzania, miombo woodlands are found in the southeastern portion of the country and contain as many as 300 different species of trees, dominated by the oak-like subfamily *Caesalpinioideae*, shrubs and grasses. North of the miombo woodlands are the Eastern Arc Mountains and the central savanna bushland and thickets. Savanna grasslands extend from east of Mount Kilimanjaro to the coast and along the Kenyan border. Coastal forests and about 110,000 hectares of mangrove forest are found along the eastern coast. The mangrove forest at the mouth of the Rufiji River in southwestern Tanzania is one of the largest

in the world. The country has two global biodiversity hot spots: (1) the Eastern Afromontane Hotspot, which includes the Eastern Arc forests, Albertine Rift forests and Kenya/Tanzania highlands; and (2) the Coastal Forest Hotspot, which is part of the Eastern Africa Coastal Forests Ecoregion. The forests of Unguja and Pemba (Zanzibar's two main islands) have at least 17 endemic plant and six endemic vertebrate species (including two of Africa's most endangered mammals, the Zanzibar Red Colobus and Aders' duiker) and are priority landscapes within the ecoregion. The mainland has one of the greatest concentrations of megafauna on the planet, including elephant, rhino, gazelle, zebra, large predators, and vultures, buzzards and storks (GOT 2009a; Abdallah and Monela 2007; Pollack 1998; CI 2003).

Tanzania's forests provide a range of benefits to the human population, from fuelwood and charcoal to ecosystem services. Forests provide game meat, fodder, medicinal plants, dyes, fibers, gums, resins, oils, beeswax and honey. The miombo woodlands have 83 different species of trees and bushes that provide nuts and fruits. Ninety percent of the population relies on fuelwood and charcoal for cooking and heating. Seventy-five percent of construction materials are harvested from forests, both legally and illegally. Several non-timber forest products of economic value provide nutrition to rural consumers. Ecosystem services include watershed functions, maintenance of soil fertility, conservation of biodiversity, carbon dioxide sequestration and ecotourism (GOT 2010c; Abdallah and Monela 2007).

During the colonial period and early years following Independence, beekeeping was a significant non-timber forest resource use, generating 1% of export earnings. The creation of the Forestry and Beekeeping Division of the Ministry of Natural Resources reflected the importance of the industry to the sector. However, the industry is currently only utilizing about 3.5% of its potential, and, despite significant demand, product exports are negligible. Constraints to development include poor product quality, low levels of production, loss of beekeeping habitat and inadequate marketing (Mwakatobe and Mlingwa 2006).

About 37% of Tanzania's forests are categorized as government reserved forests, 9% are private and village forests, and the balance (54%) are classified as general land (i.e., ungazetted public land). All classifications of forest are increasingly under pressure of conversion to other competing land uses such as agriculture, livestock-grazing, settlement, and industrial development. Shifting cultivation accounts for at least half the forest loss, with charcoal production the second-most common cause of deforestation and degradation. Other threats are hunting, mining and road construction. Forestland and catchment areas have suffered from erosion, increased sedimentation and loss of soil productivity. Particularly in forest areas near urban areas, forests have been overharvested and overgrazed, leading to shortages of forest products. Between 1990 and 2000, Tanzania lost an average of 412,300 hectares of forest per year, a deforestation rate of 0.99%. Between 2000 and 2005, the annual rate of deforestation increased to 1.1% per year (Abdallah and Monela 2007; GOT 2009a; GOT 2006; GOT 2010c; LEAT 2009; Mongabay 2010; IUCN 2008).

The most vulnerable forests are the 17 million hectares of forests on general land. The central and local district governments are responsible for managing general forestland and issuing concessions for general land. Communities, NGOs and private individuals and entities can seek rights from the government to use and manage forests on general land. In most areas, however, general forestland is not subject to concessions or authorized management agreements. Local enforcement of forest rules is often weak, and forests on general land are often treated as an open-access resource; rights to forest products are obtained through harvesting. General forest users tend to operate individually and are less likely to conserve forest resources or engage in sustainable harvesting practices. When compared with forests subject to community or local forest department control, general forests tend to have less diversity of species and more signs of degradation and deforestation (LEAT 2009; Abdallah and Monela 2007; IUCN 2008; Alden Wily and Mbaya 2001).

The southeastern miombo woodlands generally have poor soil and low nutrient vegetation. The tsetse fly, which thrives on wild game, is prevalent in the region and carries trypanosome, a parasite that causes sleeping sickness in humans and domestic livestock. The tsetse fly has kept the human population low in miombo woodlands, and this has put pressure on other land for cultivation and livestock grazing. The tsetse fly has not, however, protected the miombo woodlands from deforestation and degradation. Fires are set to force wildlife into hunting areas and to clear the woodland for agriculture. The area has also been degraded as a result of mining operations and

harvesting of prized species, such as the African blackwood tree, which is used to make musical instruments and traditional carvings (Pollack 1996; WWF 2001; GOT 2009a).

LEGAL FRAMEWORK

Tanzania's Forest Act (2002): classifies the country's forests; establishes forest governance bodies; outlines requirements for the creation and conversion of forest reserves and granting of forest concessions and licenses; and sets the foundation for participatory forest management (PFM) by local communities. Communities living in or adjacent to forests work with local forest department officials to create agreements regarding the sustainable management of forestland. PFM can be applied to forests under full protection, production forests or mixed purpose forests. Village governance bodies (e.g., village councils and natural resource committees) are responsible for establishing a plan to manage village forest reserves in a sustainable fashion. The Forest Act does not define sustainability nor provide for external monitoring and review of forest management plans or joint forest management agreements (GOT Forest Act 2002a; GOT 2009a).

The Forest Act provides that all biological resources of the forest and their intangible products, including all genetic material, are the property of the government and shall be preserved and used for the benefit of the people of Tanzania. The Forest Act grants the government the authority to enforce the provisions of the Act and assess fines and penalties for noncompliance (GOT Forest Act 2002a).

The Local Government Act (1982) and Local Government Finance Act (1982) empower Local Councils to enact bylaws to collect taxes from forested areas and assess taxes on forest produce in their jurisdictions (Dallu n.d.).

In Zanzibar the primary forest legislation is the Forest Resources Management and Conservation Act (1996). The Act promotes the protection, conservation and development of forest resources for the social, economic and environmental benefit of present and future generations of the people of Zanzibar. The Act is designed: (1) to support the engagement of local communities in the sustainable planning, management, use and conservation of forest resources; (2) to preserve and enhance the environmental functions of forest resources; and (3) to meet Zanzibar's demands for forest produce within the framework of sustainable forest management (Dallu n.d.),

TENURE ISSUES

Tanzania's forests include forest reserves and private forests. Forest reserves include: (1) national parks and game reserves and central government forest reserves (about 16 million hectares); (2) local government authority forest reserves (11 million hectares); and (3) village land forest reserves (20 million hectares of village forestland, of which about 3.6 million hectares classified as reserves). Forest reserves have varying restrictions on the use of forestland and resources. The highest category of protected area, national parks, permit no extractive use and require parliamentary action to de-gazette. Nature reserves do not allow human consumptive activities, but the government and communities may enter into joint agreements for special purposes (e.g., traditional or sacred uses). Other categories of reserves include protective and productive forest reserves and can be the subject of participatory forest management arrangements between the government and local communities. Central Government Forest Reserves are the largest category of land used as production forest. Private forests are under lease and management by a private individual or entity and are often used for plantations or game farms. During 2004–2009, the government leased an estimated 28,000 hectares of forestland to a private investor for teak plantation development (GOT 2009a; FAO 2005b; World Bank 2010a).

The government can grant concessions in forest reserves (subject to their restrictions) and on general land. Forest concessions are granted subject to exploitation and management plans, and larger concessions require an environmental impact assessment. Local government authorities can grant forest concessions for parcels of 200 hectares and under; concessions over 200 hectares are subject to approval by the minister (GOT Forest Act 2002a).

Licenses and permits govern the legal harvest, transport, sale and export of timber and timber products in Tanzania. Licenses for harvesting and transporting forest products are normally issued by authorized forest officers stationed in the districts. To control legal trade on flora and fauna, checkpoints are normally established at strategic administrative boundaries for monitoring timber trade and collecting revenue. Checkpoint workers are

supposed to ensure that the transported products match the accompanying license, and that fees are paid for any products exceeding the license. In practice, the license system is often ignored, and by some estimates the majority of logging undertaken in the reserves is illegal. Small-scale poachers, responding to the demands of urbanization and tourism development, engage in illegal extraction of timber, and illegal trade in firewood and charcoal is a significant problem. The primary causes of the continued illegal activity are insufficient human capacity to enforce the laws, lack of knowledge of the laws among enforcement officers, and corruption. Local entrepreneurs can obtain substantially higher profits by avoiding formal marketing channels (Dallu n.d.; FAO 2005b).

Tanzania's legal framework supports participatory forest management (PFM). PFM began in Tanzania in the mid-1990s with a small number of pilot projects and has grown to hundreds of projects in 53 districts and covering 4.1 million hectares. The law recognizes two types of PFM: joint forest-management (JFM) and community-based forest management (CBFM). In JFM arrangements, the community enters into an agreement to undertake some management functions of a preexisting local or central government forest reserve. The parties to the agreement share the responsibilities and the benefits accruing from the forest activities. JFM is the mechanism used when the government seeks to maintain the highest level of control over forest management and attendant forest benefits. CBFM programs are used by local communities when there is no existing forest reserve. Local communities declare an area of village land to be a forest reserve and set rules for the protection and use of forest resources (GOT 2009a; IUCN 2008; Abdallah and Monela 2007).

Some studies in Tanzania have found that PFM forests tend to be healthier and more sustainably used and managed than forests governed solely by the forest department. Nonetheless, only about 1% of Tanzania's forest reserves are under registered PFM agreements.

Constraints to more widespread adoption of PFM include:

Time and cost. The time to develop the required PFM management plan and obtain approval of the plan can take up to four years, and the process of conducting necessary inventories, obtaining technical advice and establishing community governance bodies can cost US \$50,00–100,000.

Loss of village council revenue. One main source of revenue for village councils in Tanzania is fines levied against illegal forest users. PFM plans require some measure of forest protection, which can reduce illegal forest use and thus reduce village council revenues – a disincentive for local communities to take up PFM.

Erosion of local institutional authority to manage forests. Over time, local governance bodies created to manage forests in PFM programs (such as forest committees) often lose authority. Local bodies are created to support goals of decentralization and participatory management of natural resources, but if the local communities and governance bodies lack legal rights over the natural resources, their authority may be lost to reassertion of control by the central government or less representative entities.

Elite capture and lack of representation. Local forest management bodies often tend to mirror existing social hierarchies. Although groups that are politically, economically and socially marginalized are often among the highest users of forest resources (e.g., women, landless, migrants), such groups often lack representation in the forest management bodies. Significant support from local NGOs and donors is often necessary to ensure that local governance bodies are well-designed and a representative structure is sustained.

Inadequate benefits to local communities. In some areas, PFM programs have not provided local communities with benefits sufficient to offset those lost under the programs. The PFM program, which began in 1999 in the Udzungwa Mountain Forests in Iringa and extended to 60 villages in 2005, required forest preservation to preserve catchment values, and banned wood-resource extraction. The communities received few economic incentives from the management program, and the forest department questioned the program's sustainability (Massao 2005; Abdallah and Monela 2007; Meghji 2003).

GOVERNMENT ADMINISTRATION AND INSTITUTIONS

Tanzania's Ministry of Natural Resources and Tourism, and especially its Division of Forestry and Beekeeping (DFB), is responsible for the management and administration of the country's forests and forest resources. The

DFB has four divisions: (1) Forest Development; (2) Forest Utilization and Extension; (3) Forest Research, Training & Statistics; and (4) Beekeeping Development. At the central level, the Forestry Division manages about 650 protected areas and other reserves, an increasing number of which are managed with some degree of community participation. The Tanzania National Parks Agency, a separate parastatal, manages forests and woodland within 14 national parks. The Ngorongoro Conservation Area Authority is a separate parastatal that manages 829,000 hectares of forest reserve (GOT Forest Act 2002; GOT 2009a).

District government offices manage a network of forest reserves that passed to the districts as part of the process of decentralization in the 1970s. The district forests include about 11 million hectares of land in 400 reserves. District authorities can issue licenses for timber harvesting in district forest reserves and for non-reserved forests and woodlands. Tanzania issued moratoriums on commercial logging at various times in the 1990s but enforcement of the bans has been erratic and illegal harvesting is a persistent problem. District forest officers responsible for enforcement report to local district authorities as opposed to the central level DFB. In many areas, local forest officers are pressured to ignore illegal logging and other violations. Under the Local Government (District) Authorities Act, 1982, district authorities are responsible for maintenance of forests and for the prevention of soil erosion and desertification (GOT Forest Act 2002a; GOT 2009a; Dallu n.d.).

Village land forest reserves are designated by village councils and managed by a village governance body such as the village council or natural resources committee. Village land forest reserves can be protected forest, productive forest or a mix of these. Under the Local Government (District) Authorities Act, 1982, the village council's responsibilities include: planning and coordinating forest activities; rendering assistance and advice to the residents of the village; and encouraging village residents to undertake and participate in communal forest and other enterprises (GOT Forest Act 2002a; GOT 2009a; Dallu n.d.).

Overall, the performance of all levels of forest administration has been weak. Problems include outdated legislation, fragmented administration, lack of extension services, lack of stakeholder engagement and poor resource databases (GOT 2010e).

GOVERNMENT REFORMS, INTERVENTIONS AND INVESTMENTS

Tanzania launched its national REDD (Reduced Emissions from Deforestation and Forest Degradation) initiative in 2009 and is in the process of qualifying for the UN-REDD Program and Forest Carbon Partnership Facility funding. The process requires Tanzania to prepare a series of analyses regarding patterns of deforestation and threats to forest health and a socioeconomic assessment of local communities and forest-dependent populations. As part of the readiness process, the government is preparing REDD strategy options (i.e., a set of actions to reduce deforestation and forest degradation that addresses the drivers of deforestation and degradation) and a REDD institutional and legal implementation framework necessary to realize these options. The Government of Norway has pledged US \$100 million in assistance over five years to help Tanzania develop its REDD framework (GOT 2009a; GOT 2010c).

Tanzania has been an active participant in regional environmental programs such as the Lake Tanganyika Biodiversity Programme and Lake Victoria Environmental Management Programme. The government emphasized environmental protection and the promotion of sustainable practices in its initial National Strategy for Growth and Reduction of Poverty 2005–2010 (*Mkakati Wa Kukuza Uchumi na Kupunguza Umaskini Tanzania, Mkukuta I*). As part of its national strategy, the government adopted a Strategy for Urgent Actions on Land Degradation to address the problems of environmental degradation caused by agriculture and animal husbandry in water catchment areas, and by excessive tree-cutting for firewood, charcoal and other uses (GOT 2005; UNDP 2010).

With funding from the Government of Finland and technical assistance from Food and Agriculture Organization (FAO), the government adopted the National Forest Programme (2001–2010), which was designed to increase the sector's contribution to the national economy and support the reduction of poverty. Priority activities have included the National Forestry Resources Monitoring and Assessment (NAFORMA)'s creation of a database to support monitoring and assessment of national forestry resources and the national policy processes, such as preparation of outlook strategies for the forestry sector and forest policy review (Dallu n.d.; FAO 2010b).

DONOR INTERVENTIONS AND INVESTMENTS

USAID's FY11 programming includes assistance to bring approximately 500,000 hectares of biologically significant land under improved community-based management. The additional land will bring the total extent of protected land to over 7.2 million hectares. USAID continues to implement the Wildlife Management Areas program, which is facilitating the development and sustainability of five Wildlife Management Areas (WMAs), home to over 250,000 people in 70 communities in buffer zones and wildlife corridor areas. The program will lay the foundation for expansion to develop an additional 8–12 WMAs, involving close to one million people. USAID is also supporting the development of conservation business enterprises, such as sustainable forestry and clean energy production, within WMAs (USDOS 2010b).

During 2004–2010 the World Bank funded the Lower Kihansi Environmental Management Support project to help the government's efforts to: (1) mitigate the loss of habitat and improve conservation of the Kihansi gorge ecosystem and its upstream catchment, and (2) establish a legal and institutional framework for environmental and water resource management. As of late 2009, the project had made progress in the proposed reintroduction of the Kihansi Spray Toad (KST). In 2009, the captive population of KSTs in the US (Toledo and Bronx zoos) had reached 1840, a 76% increase from October 2008. The project created a captive breeding facility at the University of Dar es Salaam to receive the first batch of toads. The International Union for the Conservation of Nature and Natural Resources (IUCN) has been engaged to supervise the KST reintroduction process (World Bank 2009b).

The Wildlife Conservation Society (WCS) has been active in Tanzania since the 1960s, funding over 140 projects to help the government and communities conserve the country's wildlife and forests. WCS is concentrating on four globally important conservation landscapes: (1) the Southern Highlands Conservation Programme is helping conserve upland habitats between Lake Nyasa and Tanganyika; (2) the Tarangire Ecosystem Project is active in Tarangire National Park in the northeastern part of the country (south of Arusha); (3) the Ruaha Landscape Programme is working in Wildlife Management Areas around Ruaha National Park in south-central Tanzania; and (4) the Zanzibar Forest Conservation Project is working with the government to help develop management strategies for Zanzibar's forests and forest corridors. Activities include: conducting surveys and inventories; providing environmental education; working with district authorities and communities to establish indigenous tree nurseries; operating a small grant program to support local community projects; and helping establish conservation easements and national parks (WCS 2010).

The Jane Goodall Institute (JGI) supports the world's oldest continuous wildlife research project, the Gombe Stream Research Center, established in Tanzania's Gombe Game Reserve in 1965. JGI has helped establish Village Land use Planning Committees and provides them with the data and guidance to develop systems, frameworks and by-laws that support coordinated land use management and sustainable management of forest reserves. The committees work to integrate planning activities across the targeted landscape, advocate for collective village interests with regional and national authorities, and seek funding for multi-village initiatives. JGI's demonstration forest-management project at Kitwe provides a living classroom on agroforestry and water-source protection and shows the potential for recovery of degraded miombo woodland (JGI 2010).

4. MINERALS

RESOURCE QUANTITY, QUALITY, USE AND DISTRIBUTION

After tourism, mining is Tanzania's second-fastest-growing sector. The country is one of the top four gold producers in Africa (behind South Africa and Ghana, and periodically trading places with Mali for third and fourth place). Tanzania also ranks among the top producers of diamonds globally. The country has a wide variety of gemstones and is the only place in the world that tanzanite, a commercially valuable blue-purple gemstone, is found. The country also has deposits of coal, uranium, natural gas and various industrial minerals such as soda, kaolin, tin, gypsum, phosphate and dimension stone in sufficient quantities to support exploitation. The sector's growth has fluctuated wildly in recent years: during 2004–2006, the sector averaged about 15% annual growth, but the growth rate dropped to 2.5% in 2008 and to 1% in 2009 due to declining exports of diamonds and declining gold production (which was in turn due to serious infrastructure problems with the country's largest gold mine). Industry experts predict steadier growth in the 2011–2015 period, with increased production planned

for existing operations and the development of new projects (*African Economic Outlook 2009; Business Monitor 2010; Yager 2010; GOT 2010d; Tanzania Invest 2010*).

Tanzania's gold is found in greenstone belts located in the eastern and southern regions of Lake Victoria, in the rock formations in southern and southwestern of the country. Six large-scale gold mines – at Nzega, Geita, Bulyanhulu, North Mara, Buhemba and Tulawaka – became operational during 1998–2008, and annual production of gold increased from 1 to 50 tons during that period. Gold exports have steadily increased in recent years, rising from US \$788 million in 2007 to US \$932 million in 2008, and to US \$1 billion in 2009. In 2008, gold comprised 34% of total exports (*Tanzania Invest 2010; GOT 2009b; Yager 2010*).

Small-scale and artisanal miners were the major producers of minerals in Tanzania from 1987 to 1997. Approximately 600,000–1,000,000 people are currently employed in small-scale and artisanal mining, accounting for most of the country's colored gemstone, crushed stone, diamond and gold production. The sector often operates outside the ambit of government authority and regulation. Some challenges in the subsector are: safety problems created by unprotected and unreclaimed trenches and pits left after mining has ceased; environmental and health problems caused by the uncontrolled use of reagents used to recover gold; poor recovery of minerals due to use of inadequate techniques for crushing and milling the extracted material; and lack of environmental awareness, leading to contamination and pollution of soil and surface and underground water in artisanal and small-scale mining areas (*Yager 2010; GOT 2009b; GOT 2010d*).

Local communities in various parts of Tanzania have raised concerns about pollution of water and soil caused by mining operations. Toxic tailing dumps and the use of mercury for gold processing contaminate water and soil. Communities served by the Tigithe River in the Tarime district in the north of Tanzania allege that gold mining operations have contaminated the river, leading to loss of crops and death of livestock. A 2009 study of the area around the North Mara Gold Mine found concentrations of heavy metal exceeding WHO standards (*LEAT 2009; Mkuula 1993; Gyuse 2009; SARW 2009*).

In some areas, the presence of minerals and mining activities has created conflicts or intensified existing disputes with existing users. Farmers, pastoralists and miners often assert conflicting rights to land, water and other natural resources. For example, in the Kwimba District, conflict among competing users of natural resources intensified as the population grew. Mining operations increased the pressure on land, resulting in conflicts between farmers, miners and pastoralists (*Madulu 2002*).

LEGAL FRAMEWORK

In 2009, Tanzania adopted a Mineral Policy. The policy will: (1) improve the economic environment in order to attract and sustain local and international private investment; (2) promote economic integration between the sector and other sectors of the economy; (3) support and promote development of small-scale mining to increase its contribution to the economy; (4) promote and facilitate value-added activities to increase income and employment opportunities; (5) promote research development and training required in the mineral sector and encourage its utilization; and (6) develop locally based technical capacity (*GOT 2010f*).

In April 2010, Tanzania's Parliament passed a new Mining Act, which requires Presidential approval before becoming law. The 2010 Act includes new provisions as well as revisions to existing provisions in the 1998 Mining Law intended to strengthen the government's rights and capture some benefits of the exploitation of minerals for the country's population. Specifically, the 2010 Act: (1) gives the government a stake in all future mining projects (the percentage to be determined on a case-by-case basis); (2) increases royalty rates; and (3) requires companies operating to Tanzania to be listed on the local stock exchange. The 2010 Act also prohibits the issuance of any new gemstone mining licenses to foreign companies and calls for the government to set aside specific areas for artisanal mining (*Business Monitor 2010*).

Until the 2010 Mining Act is approved by the President, the Mining Act of 1998 remains the governing law. The 1998 Mining Act establishes state ownership of the country's minerals and sets out the conditions under which foreign and national individuals and entities can explore for and exploit minerals. The 1998 Mining Act grants mining rights on a "first come, first served" principle. Seven different licenses are available:

1. Prospecting Licenses are available for three years (two years for gemstones), with a 50% reduction in area with each renewal. The maximum area for a preliminary reconnaissance period is 5000 square kilometers (10 square kilometers for gemstones).
2. Retention Licenses are available to holders of prospecting licenses for 5-year renewable periods. Retention licenses are granted when an exploration program and feasibility study identifies the existence of significant deposits that cannot be immediately developed due to adverse market conditions.
3. Special Mining Licenses are granted for 25-year periods, with one renewal, for the development and production stages of a large mining operation. Applications for a Special Mining License must be accompanied by a proposal of mining operations, an Environmental Management Plan (EMP), a plan for employment of Tanzanian citizens, and an Environmental Impact Assessment (EIA).
4. Mining Licenses may be granted for 10-year renewable periods or the estimated life of the deposit. Applications must include a feasibility study setting out the proposed program and must be accompanied by an EMP and an EIA.
5. Gemstone Mining Licenses are granted for 10-year renewable periods. Non-citizens cannot obtain Gemstone Mining Licenses unless they are held by an entity in which a Tanzanian citizen has at least a 25% ownership share.
6. Primary Prospecting Licenses are 1-year renewable licenses to prospect for minerals within a selected zone set by the Mines Officer. Primary Prospecting Licenses are only available to Tanzanian citizens.
7. Primary Mining Licenses are 5-year renewable rights to engage in mining in a specific zone. Primary Mining Licenses are only available to Tanzanian citizens.

The government may terminate mining rights when the rights-holder violates the law or breaches the conditions of the right. The rights-holder is entitled to notice of termination and due process of law (GOT Mining Act 1998).

TENURE ISSUES

The 1998 Mining Act requires recognition of granted or customary rights of occupancy. Mining operations are required to obtain consent from landholders, and if mining operations interfere with the occupancy right, the holder of the occupancy right must be compensated. In practice, however, the rights of landholders are often disregarded. Land records are out of date, and the central-level Commissioner of Minerals often has no record of village land, land occupants or existing rights to natural resources. In some cases, the Commissioner may have notice of existing rights but chooses to ignore them or suggests that holders of conflicting rights reach an agreement. The Commissioner has granted mining concessions on land that is occupied and on which artisanal and small-scale miners are operating under licenses. Conflicts have been relatively common. Large-scale operations may not have been informed of the presence of other rights-holders in the concession and, absent that notice, often believe they have no obligation to consult with or compensate landholders (Lange 2008).

Artisanal and small-scale miners often operate in areas where large mineral deposits are located and where extraction requires large mining operations. The Mining Commission has made an effort to support the rights of small-scale and artisanal miners by encouraging (but not requiring) the large operations to work with the small-scale miners through partnerships and other business arrangements. In many cases, no negotiation has taken place, and small-scale miners have been forced off the concession land and paid inadequate compensation. However, where the small-scale miners have had the means to assert their claim in court, they have often received compensation for the loss of their rights. Afrika Mashariki Gold Mines, for example, settled a claim brought by small-scale miners in 2007 by granting them 1% of the proceeds. Perhaps in response to such settlements, or simply recognizing the benefits of working with local communities, De Beers and nine villages formed the Mwadui Community Diamond Partnership, which supports the development of small-scale mining into a profitable and organized enterprise (Lange 2008).

Illegal mining is relatively common. Landholders often receive no compensation for loss of use of their land when mining licenses are issued by government. In an effort to benefit from the extraction of minerals, landholders may sell small- and medium-scale miners rights to operate on their land without a mining license (Madulu 2002).

GOVERNMENT ADMINISTRATION AND INSTITUTIONS

The Ministry of Energy and Minerals and the Office of the Commissioner of Minerals within the Ministry have responsibility for setting policy, enforcing the legislative framework governing mineral resources, and supporting sector development. The Tanzania Investment Center promotes, coordinates and facilitates investment in the development of mineral resources, including foreign investments (Yager 2010; LEAT 2009).

Local authorities have a minimal role in mineral regulation, which often leaves local communities without local support for their rights to land and other natural resources. In 2003, a Kenyan mining company received a prospecting license to a 10-square-kilometer tract that included rangeland and a natural water-source used by 40,000 head of cattle. The Mining Law protected the local community rights to the land and water-source but community members were unable to enforce their rights because the village government and district council supported the mining company. In this case, the pastoralists had the benefit of an educated leader who brought claims of corruption against the mining company and formed four water associations to protect their land and water rights. Absent such leadership, however, local communities are forced to assert their rights before the Commissioner of Mining. Many local communities believe the Commissioner is biased in favor of large mining companies, and they simply forego their rights or resort to self-help and violence rather than pursuing relief through the formal process (Lange 2008).

GOVERNMENT REFORMS, INTERVENTIONS AND INVESTMENTS

The government recognizes the role that the mineral sector can play in economic growth and socioeconomic development and has committed to addressing the challenges facing the sector. Challenges include the need for increased technical and institutional capacity, weak linkages between the sector and local supply chains, limited multiplier effects and employment creation, and environmental conflicts. *Mkukuta II* (2011–2015) outlines the government's plan to address these challenges with programs that will: (1) promote domestic value-adding activities to increase earnings and create employment and wider linkages to the rest of the economy; (2) empower artisanal miners to acquire geological information, title deeds, equipment, skills and start-up capital; (3) promote joint ventures between large foreign mining companies and landowners, small-scale miners and communities; (4) improve the fiscal regime to increase government revenue from mining activities; (5) enforce security and adherence to the laws, regulations and environmental considerations; (6) improve infrastructure; (7) ensure sustainable extraction; (8) maintain health and safety standards; (9) ensure equitable distribution of proceeds to local stakeholders; and (10) address potentially conflicting policies related to mining and natural resources management (GOT 2010f).

In recent years, the government has undertaken the reform of the legal framework governing the minerals sector and created a Mining Cadastre Information Management System to improve clarity, transparency and tenure security in mineral-rights licensing activities. The government has committed to a global compact, the Extractive Industries Transparency Initiative (EITI), which requires countries to meet standards of transparency and accountability in managing extractive industry revenue. Tanzania is also a signatory to the Kimberly Process Certification Scheme, which tracks and records diamonds to reduce trade in conflict diamonds (Yager 2010; World Bank 2009d; GOT 2009d).

Recognizing the potential for growth and development of local enterprises and employment in the artisanal and small-scale mining subsector, in 2006 the Ministry of Energy and Minerals formulated a strategy aimed at developing small-scale mining. The strategy includes the following interventions: (1) improvement of information and statistics on artisanal and small-scale mining; (2) identification and allocation of exclusive areas for small-scale mining; (3) provision of training and extension services; (4) facilitation of geological investigations in small-scale mining areas; (5) improved credit and financing for small-scale operations; and (6) attention to cross-cutting issues such as environment, health and safety, gender, HIV/AIDS and social responsibility. The 2010 Mining Act includes the allocation of areas for exclusive use by artisanal and small-scale miners. The progress made on other components of the strategy is unknown (GOT 2009b).

Investors and mining companies generally rate Tanzania as a favorable environment for mining. Although some mining companies responded negatively to the increased royalties and government interest in mining operations that are part of the pending 2010 Mining Law, overall, Tanzania was ranked the third-best mining environment in

Africa and 23rd among 51 countries globally. Ranking countries based on factors such as political stability, security, community relations, attitude towards mining and regulatory environment, 70% ranked Tanzania favorably. New projects have become operational in 2010, and the number of exploration permits issued is increasing (McMahon and Cervantes 2010; *Business Monitor* 2010).

DONOR INTERVENTIONS AND INVESTMENTS

The World Bank funds the 9-year, US \$296 million Songo Songo Gas Development and Power Generation project, which was completed in 2010. The project was designed to develop natural gas from the Songo Songo gas field (in the Lindi Region in the southeastern part of the country) to produce least-cost power-generation for domestic and industrial use and promote increased energy access by the poor. As of the end of 2009, the project had achieved its objective of developing Tanzania's natural gas reserves to produce least-cost power-generation in an environmentally sustainable and efficient manner. The weighted average energy cost for power generated for domestic and industrial use has fallen from US \$0.13/kilowatt hour to US \$0.092. The volume of domestic gas consumption for electricity and production has increased above the original target of 30 million cubic feet per day to 60–70 million cubic feet per day average monthly demand. The project subcomponent that would convert the Independent Power Tanzania Ltd. Plant (IPTL) to natural gas firing cannot be accomplished within the current validity period, and the government has asked that the subcomponent be dropped. The project has met the target of increasing private investment by US \$5 million since 2004. The project planned to meet the objective of encouraging increased access of the poor to electricity supply by developing financially and institutionally sustainable rural power schemes to underserved areas along the corridor of the gas pipeline (World Bank 2009b; World Bank 2001).

The World Bank is funding the 5-year (2009–2014), US \$55 million Sustainable Management of Mineral Resources Project, whose objective is to strengthen the government's capacity to manage the mineral sector to improve the socioeconomic impacts of large- and small-scale mining for Tanzania and Tanzanians, and enhance private local and foreign investment. The project has four components: (1) improving the benefits of the mineral sector for Tanzania through support for artisanal and small-scale mining, local economic development and skills development; (2) strengthening governance and transparency; (3) stimulating mineral-sector investment; and (4) project coordination and management. Specific activities will include: (1) strengthening the geological survey of Tanzania; (2) updating, maintaining and developing geoscientific data and products; (3) financing a strategic assessment of the State Mining Corporation (STAMICO); and (4) strengthening mineral resources promotion, statistics development and communication (World Bank 2009c).

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