Mozambique Country Handbook

This handbook provides basic reference information on Mozambique, including its geography, history, government, military forces, and communications and transportation networks. This information is intended to familiarize military personnel with local customs and area knowledge to assist them during their assignment to Mozambique.

The Marine Corps Intelligence Activity is the community coordinator for the Country Handbook Program. This product reflects the coordinated U.S. Defense Intelligence Community position on Mozambique.

CONTENTS

APPENDICES

ILLUSTRATIONS


28°
32°
36°
40°
12°
16°
20°
24°
TANZANIA
DROC
ZAMBIA
MALAWI
(to Malawi)
Lake Malawi
LILONGWE
LUSAKA
ZIMBABWE
HARARE
BOTSWANA
SOUTH AFRICA
PRETORIA
MAPUTO
MBABANE
SWAZILAND
Kamba Dam
Furancungo
Fingoe
Zumbo
Cabora Bassa Dam
Cabora Bassa
Tete
Moatize
Changara
Vila de Sena
Catandica
Chimoio
Dombe
Espungabera
Chicualacuala
Massingir
Chokue
Manhica
Xai-Xai
Inharrime
Inhambane
Vilanculos
Inhassoro
Nova Mambone
Beira
Dondo
Mozambique Channel
Indian Ocean
Metangula
Lichinga
Catur
Marrupa
Mueda
Pemba
Montepuez
Cuamba
Lago Chilwa
Milange
Alto Molocue
Nampula
Nacala
Lumbo
Mocambique
Angoche
Quelimane
Pebane
Inhaminga
MOZAMBIQUE
National capital
City
International border
Road
0 100 200 km
0 50 100 150 mi

Mozambique

KEY FACTS

Country Name. Mozambique.
Official Name. Republic of Mozambique.
Local Long Form. Republica de Mocambique.
Local Short Form. Mocambique.

Head of State. President Armando Guebuza (2 February 2005).

Capital. Maputo.

National Flag. Three equal horizontal bands of green (top), black, and yellow with a red triangle based on the hoist side; the black band is edged in white; centered in the triangle is a yellow star bearing a crossed rifle and hoe superimposed on an open book.

Time Zone. UTC (formerly GMT)+ 2 hours.

Telephone Country Code. 258.

Population. 21,669,278 (July 2009).

Primary Languages. Portuguese 8.8% (official; spoken by 27% of population as a second language), Emakhuwa 26.1%, Xichangana 11.3%, Elomwe 7.6%, Cisena 6.8%, Echuwabo 5.8%.

National Flag

Currency. Meticais (MZM).

Credit/Debit Card Use. Accepted in Maputo; Visa cards are increasingly accepted throughout Mozambique in major cities; MasterCard and American Express are not widely accepted.

ATM Availability. Available in all major towns.

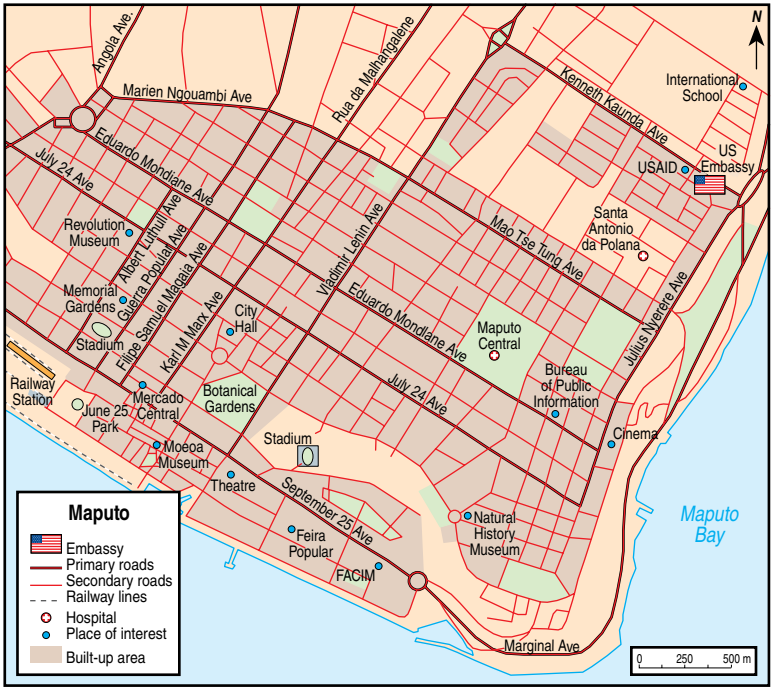
Calendar. Gregorian.

EMBASSY/CONSULATE

U.S. Embassy

The Embassy is in the southeastern portion of Maputo, just northeast of the main downtown area. The Embassy is in what is considered a middle to upper class area. The German, Brazil, and Indian embassies are on the same street. Avenida Kenneth Kaunda runs directly north of the Embassy.

Location	Maputo, Mozambique
Mailing Address	Maputo, Mozambique Avenida Kenneth Kaunda, 193 Caixa Postal, 783
Telephone	258 21 49 27 97
Fax	258 21 49 01 14
E-mail	maputoirc@state.gov
Internet Address	http://maputo.usembassy.gov
Hours	Monday to Thursday 0730 to 1200 and 1300 to 1730; Friday 0730 to 1130. The Embassy is closed on U.S. federal holidays and on Mozambique's national holidays.



U.S. Embassy

U.S. Consulate

Mailing Address	Maputo, Mozambique Av. Kenneth Kaunda, 193 Caixa Postal, 783
Telephone	258 21 49 27 97; emergency: 258 21 49 07 23
Fax	258 21 49 04 48
E-mail	consularmaputo@state.gov
Internet Address	maputo.usembassy.gov/consular_section.html
Hours	Monday to Thursday 0800 to 1130 and 1400 to 1600; Friday 0800 to 1100.

U.S. Military Facilities

There are no U.S. military facilities in Mozambique. The nearest U.S. military facility is located in Djibouti at Camp Lemonier (1132N, 04308E), which is part of the Combined Joint Task Force – Horn of Africa (CJTF-HOA).

Camp Lemonier has approximately 2,000 personnel from the Army, Navy, Air Force, Marine Corps, and DoD contractors.

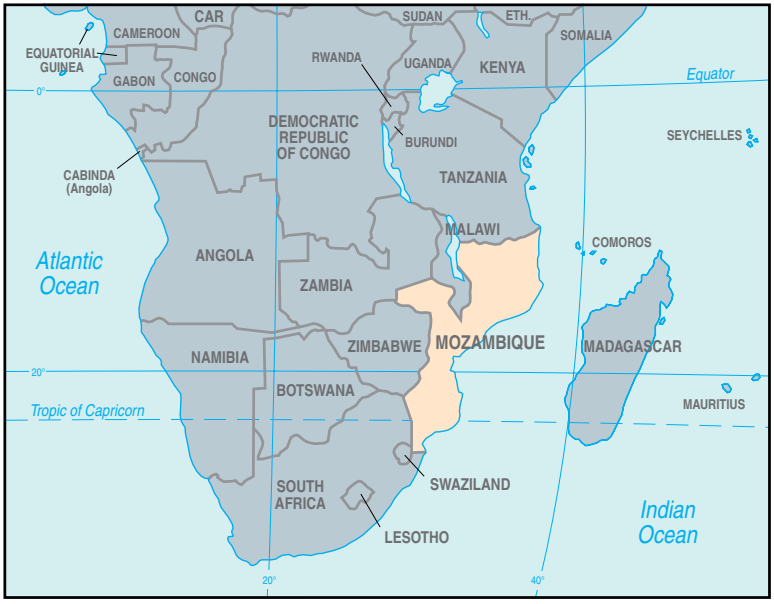
GEOGRAPHY AND CLIMATE

Geography

Mozambique is located on the southeastern coast of Africa. It covers 801,590 square kilometers (309,494 square miles) and has 2,470 kilometers (1,535 miles) of coastline along the Mozambique Channel and the Indian Ocean. The country rises from the eastern coastal plains to lower and middle plateaus and mountainous areas in the west. Madagascar lies across the Mozambique Channel.

Land Statistics

Total Area	801,590 square kilometers (309,494 sq. miles)
Water Area	17,500 square kilometers (6,756 sq. miles)
Coastline	2,470 kilometers (1,535 miles)
Central Coordinates	1815S, 03500E
Land Usage	Cultivated: 0.3 percent (permanent crops) Urban Settlements: Less than 1 percent



Southern Africa

Borders

Mozambique is bordered by Tanzania in the north, Malawi and Zambia in the northwest, Zimbabwe in the west, and Swaziland and South Africa in the south.

Direction	Country	Length kilometers (miles)
North	Tanzania	756 (470)
Northwest	Malawi	1,569 (975)
Northwest	Zambia	419 (260)
West	Zimbabwe	1,231 (765)
South	South Africa	491 (305)
South	Swaziland	105 (65)
Total		4,571 (2,840)

Border Disputes

In late 1971, rival African groups working for African-majority rule in European-controlled Rhodesia (Zimbabwe) formed the Front for the Liberation of Zimbabwe, which became a joint guerrilla effort to overthrow the government. The guerrillas operated from bases in Zambia and Mozambique and made periodic raids into Rhodesia.

On 3 March 1976, Mozambique closed its border with Rhodesia, severed rail and communication links, and nationalized Rhodesian-owned property. During this period, Rhodesian forces conducted land and air raids into Mozambique to punish African nationalist guerrillas based there. These raids ended, and the border was reopened in 1980, following the agreement that transformed Rhodesia into Zimbabwe.

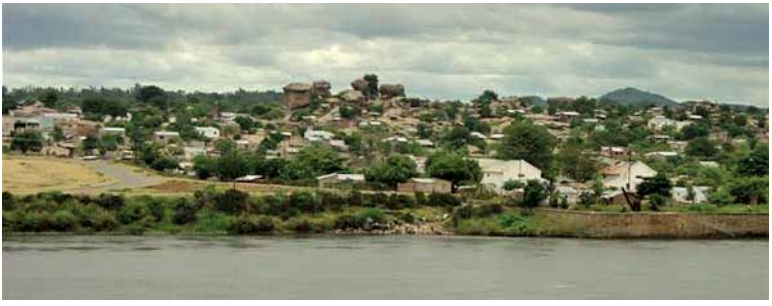
Bodies of Water

Mozambique has a dense river network and is divided in half by its largest river, the Zambezi River.

Lakes

Mozambique has three large, natural lakes: Lake Malawi (500 meters [1,640 feet] elevation), Lake Chilwa (622 meters [2,040 feet] elevation), and Lake Chiuta (632 meters [2073 feet] elevation).

Mozambique's largest lake is Lake Malawi (also called Lake Niassa) at 560 kilometers (348 miles) long and 75 kilometers (47 miles) wide at its widest point. Its greatest depth is 706 meters (2,316 feet) near the western shore 45 kilometers (28 miles) north of Nkhata Bay. The mean depth is 292 meters (958 feet). Lake Malawi forms part of the border between northern Mozambique and Malawi and is the eighth-largest lake in the world at 29,600



Village of Tete on Lake Malawi Shore

square kilometers (11,429 square miles). It is the southernmost of the Great Rift Valley lakes.

Lake Chilwa is a shallow lake with a maximum depth of 2.7 meters (8.8 feet) covering 1,750 square kilometers (676 square miles) at an altitude of 620 meters (2,034 feet). It lies south of Lake Malawi. Lake Chiuta covers 200 square kilometers (77 square miles). It is a source of fresh water, food, transportation, and fertile soil through annual flooding. Lake Chiuta is a shallow lake, with mean depth of 5 meters (16.4 feet). It is shared with Malawi.

Rivers

Mozambique's rivers begin in the western highlands and flow east toward the Indian Ocean. Water levels vary; flooding occurs during the rainy season, and water levels drop or dry up completely during the dry season. Shallow rivers and streams are often affected by silt and may change course.

The Zambezi and the Limpopo rivers are the largest rivers. The Zambezi River begins in northwestern Zambia and flows 3,540 kilometers (2,200 miles) southeastward through central

Mozambique for 805 kilometers (500 miles). It forms a large delta upon reaching the Indian Ocean just south of Quelimane.

The Cahora Bassa Dam, built between 1968 and 1976, is located on the upper Zambezi and produces electricity for Mozambique, South Africa, and Zimbabwe. Leaving the reservoir, the Zambezi flows southeastward and receives water from its last great tributary, the Shire River. The Shire drains Lake Malawi (also called Lake Niassa) about 450 kilometers (280 miles) to the north. The Limpopo River begins in central, southern Africa and flows 1,700 kilometers (1,056 miles) southeast from the borders with South Africa and Zimbabwe across southern Mozambique to Xai-Xai on the Indian Ocean. Once a perennial river, it can be dry for up to 8 months each year.

Cahora Bassa Dam

There is one major man-made reservoir on the Zambezi River: Lake Cahora Bassa formed by the construction of the Cahora Bassa Dam, which is Africa's largest hydroelectric scheme. The lake covers 2,739 square kilometers (1,058 square miles) and has a mean depth of 21 meters (69 feet). It is 250 kilometers (155 miles) long.

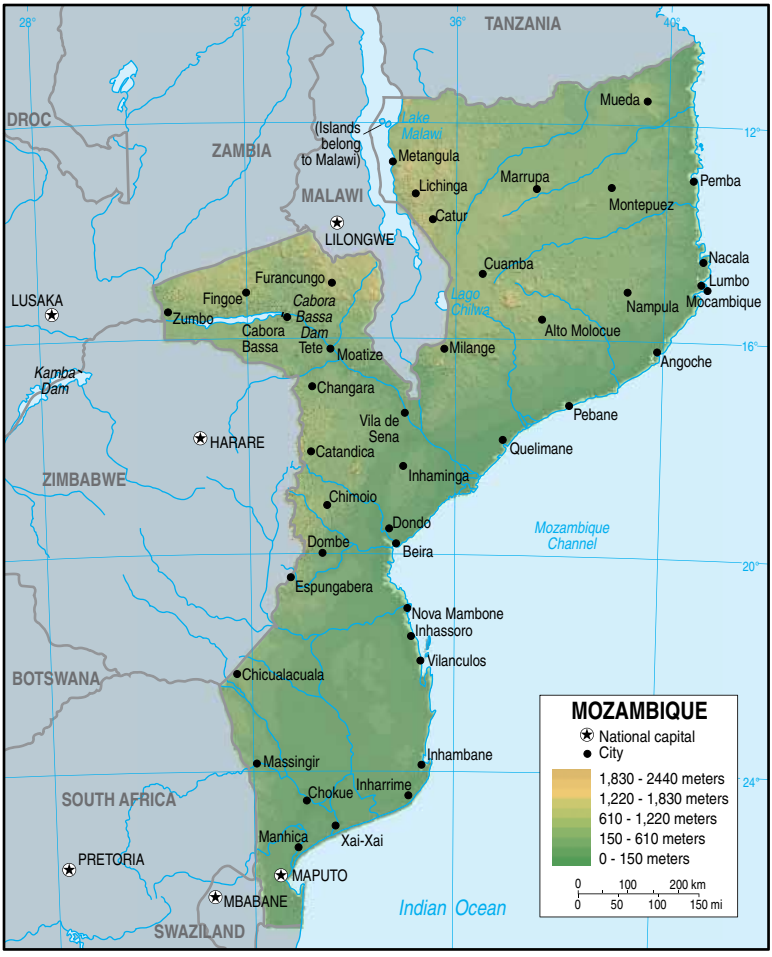
The Ruvuma and Lugenda rivers in the north are significant sources of irrigation water. Significant rivers in the south include the following rivers: Pungwe, Save, Limpopo, and Komati. Many rivers are navigable only by canoe. Larger vessels can only navigate in the deeper waters of the Zambezi for 460 kilometers (286 miles) from Tete to the Indian Ocean; the Zambezi is the country's only river considered navigable for a significant distance.

Topography

Mozambique is divided into roughly two regions by the Zambezi River. The northern region consists of a large plateau 500 meters (1,640 feet) in elevation, which rises to as much as 1,500 meters (4,921 feet). Most of the land in the southern region lies below 200 meters (656 feet) and has scattered lakes and swamplands. Coastal plains extend into the interior and cover nearly 40 percent of the land area. North of the Zambezi River, the plains are between 60 and 100 kilometers (37 and 62 miles) wide. South of the Zambezi River, the plains are up to 100 kilometers (62 miles) wide.

Extending inland there are two tiers of plateaus. The lower middle plateaus cover 30 percent of the land area and extend from the plains to an elevation of 500 meters (1,640 feet). The largest plateau is located in the north of the country. The middle plateau (500 to 1,000 meters [1,640 to 3,280 feet]) covers nearly 25 percent of the land area and is located in the western part of northern and middle Mozambique. Mountains (above 1,000 meters [3,280 feet]) cover the

remaining 5 percent of the land. The highest point in Mozambique is Monte Binga at 2,436 meters (7,992 feet) in Manica Province on the Zimbabwe border. The lowest point is the Indian Ocean.



Topography

Vegetation

Most of Mozambique is covered by *miombo* woodland, a type of savanna. Mozambique's woodlands are much denser, and the trees are taller, than those of neighboring countries. Drier parts of the country transition to *mopane* woodlands. The *mopane* can be a shrub or a tall tree up to 30 meters (98 feet) in the northern part of its range, depending on soil conditions and water availability. It has a tall, narrow crown and grows in hot, dry, low-lying areas, 200 to 1,150 meters (656 to 3,773 feet). Acacia trees grow in southern Mozambique and along the rivers of the north.

Beach vegetation consists of dense scrub brush and palm groves. Floodplains and marshes (particularly the Zambezi delta) are covered with thick alluvial grasslands and stands of palm trees. Rain forests occupy the slopes of Mount Gorongosa and the highlands of western Zambezia. Dry lowland forests of Cabo Delgado and Dondo are the only true forests left in Mozambique.

Miombo Woodland

Vegetation in Gorongosa National Park

Soil

With the exception of alluvial soils deposited along river valleys, the soils of Mozambique vary from moderate to low fertility. Soils along rivers such as the Zambezi, Limpopo, Incomati, and Umbeluzi are fertile and have good agriculture potential. Soils of the northwest are primarily clay or a mixture of clay, sand, and silt. Fertility is low to moderate. Soils of central and southern Mozambique, particularly along the low-lying coastal plain in the south and along the coastal belt, are sandy with low fertility. The inability to hold water, combined with erratic and low rainfall, increases the risk of drought.

Soils of southern coastal Mozambique are of two general types: peat soils and sandy soils. These soils occur in swampy coast-

al plains and lagoons. Their proximity to the sea often means that they contain marine sediments and have a high salt content. Hydromorphic sandy soils are relatively common and occur in swales, swampy depressions, lower and flat areas between beach ridges, and degraded beach plains along the coast.

Cross-country Movement

Mozambique has significant variations in terrain. In addition to increases in elevation from east to west, large rivers cross virtually all regions of the country and can be obstacles to avenues of approach or lines of communication. The single greatest problem is the widespread use of landmines and explosive remnants of war (ERW) during nearly 30 years of conflict that ended in 1992. In June 2008, the Mozambique armed forces visited and

Typical Bridge

cleared 146 of the more than 500 known ERW and individual mine sites. However, 57 additional contaminated areas were identified, leaving hundreds of mined areas across 5 provinces still to be cleared.

Travel outside Maputo often requires a four-wheel-drive vehicle, which creates an additional security risk since these vehicles are high-theft items. Four-wheel-drive vehicles are needed to travel through thick sand and dense bush in coastal areas. Wet sand may not prevent heavy vehicles from sinking. Mozambique is also subject to storms, floods, and wildfires.

With the war for independence from Portugal in the 1970s and the civil war starting after Mozambique gained independence and lasting until 1992, the countryside of Mozambique had been riddled with landmines and weapon caches. The known mine fields that still need to be cleared are in the southern portion of the country. Extreme care should be taken whenever traveling off-road.

Urban Geography

Much of Mozambique's urban infrastructure consists of what is left over from the Portuguese colonial era. In Maputo, the architecture is Mediterranean, and the streets are wide and tree lined. The downtown area is a busy port and commercial center where Portuguese-style buildings (with balconies and wrought iron balustrades) stand beside plain apartment blocks. Maputo has an international airport, railway, and harbor and is connected with South Africa and Swaziland by national roads. Both sides in the colonial and civil wars considered Maputo neutral territory, so the city remained free of damage; however, government mismanagement of funds, little investment, and a lack of skilled workers have lead to a dereliction of infrastructure.

Maputo is also the only Mozambican city with a population over 1 million people. It is the largest urban center in Mozambique and is divided into seven urban districts, including Catembe (about 10 minutes by boat from the city) and the Island of Inhaka (about one hour by boat from the city). There are 49 run-down neighborhoods (*bairros*) in the five urban districts that cover 466 square kilometers (180 square miles) and have an estimated population of 1.3 million as of 2007 and an estimated population density of 2,790 inhabitants per square kilometer (1,077 per square mile). Most of the formal structures (aka cement city) are located in the southern part of the city. The other districts contain a mix of semi-formal and informal *bairros* consisting of informal settlements, shantytowns, and slums.

Residential areas in urban centers have no basic urbanization, ambiguous land tenure rights, high population density, poor environmental conditions, poor building quality, and high crime rates. These conditions resulted from a lack of urban planning. When rural people migrated to urban areas, they settled in areas unintended for urbanization. There was no access to clean water or sanitation. Housing was meant to be temporary and was built out of cane, wood, or corrugated iron. Early attempts at urban planning were outpaced and overwhelmed by the rate of urbanization due to an influx of refugees and internally displaced people (1980 to 1991). Despite the large number of cities with populations above 100,000, nearly 70 percent of Mozambicans live in rural areas.

Climate

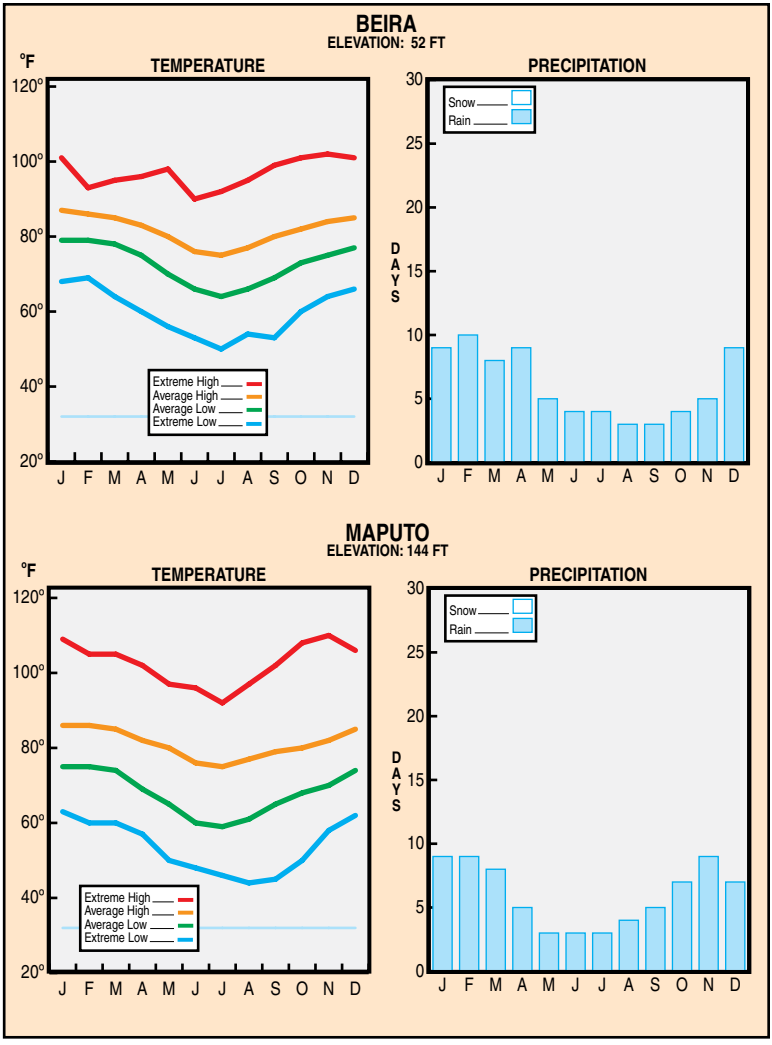
Patterns

Mozambique has a warm, tropical climate, with an average temperature of 28°C (82.4°F) and an average of 7 to 9 hours of sunshine per day. Due to its geographical location, only two seasons

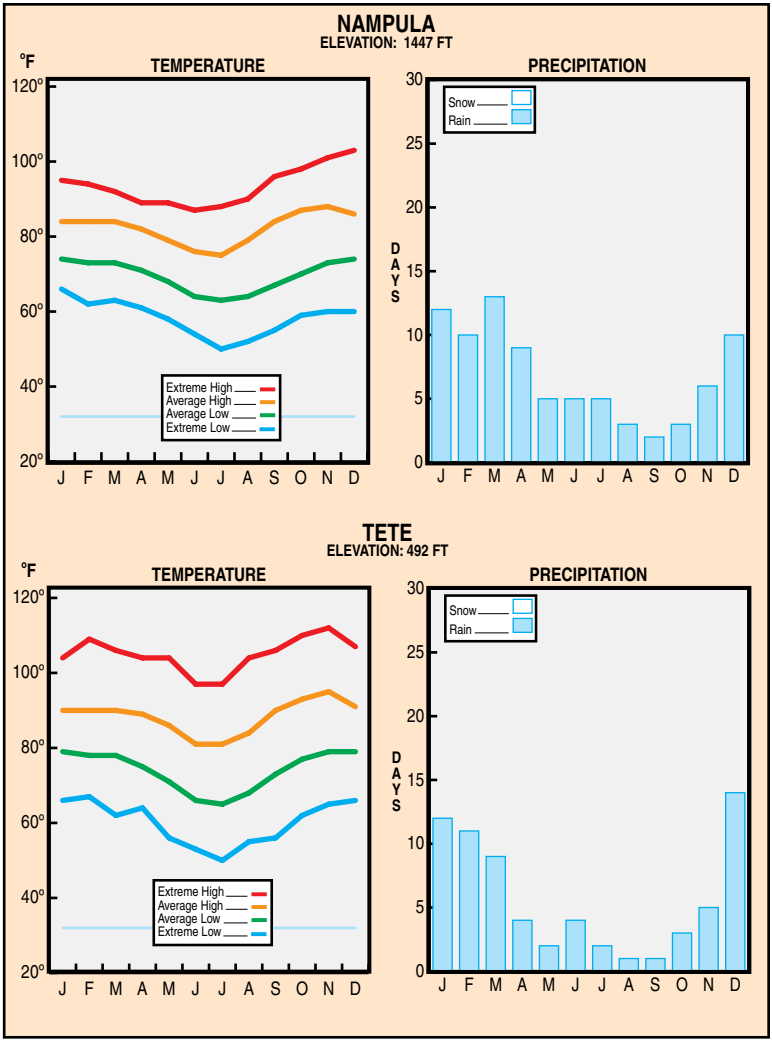
occur: winter and summer. Summer (October to April) is rainy, humid, and very hot. Winter (April to September) is cooler and drier. The warm Mozambique current, which flows southward along the coast, influences the climate. Temperatures and rainfall vary by region. Eighty percent of Mozambique's rainfall occurs during the summer season. During summer, the winds blow from the Indian Ocean; during the winter season, the winds blow from the opposite direction. The weather along the coast and some lowlands is sunny and warm year round, but can be oppressively hot and humid, particularly during the rainy season.

The northeastern coast is the hottest and most humid area. The high-altitude regions in the Nampula and Niassa provinces are the coolest. At night, the temperature drops , and humidity is lower. The interior plateau and the hills along the border with Malawi and Zimbabwe are mild to warm even in the cooler dry season from April to September.

The northern part of the country receives nearly twice as much rainfall as the southern provinces, where severe and prolonged droughts have occurred. The rainy season runs from October to March in the south, but it starts and ends about 6 weeks later north of the Zambezi River. The wettest regions are the highlands along the borders with Malawi and Zimbabwe and the southeast coast between Beira and Maputo. These regions are more exposed to the southeast trade winds, and annual rainfall is between 1,000 millimeters (39 inches) and 1,500 millimeters (60 inches). The driest areas are the lowlands of the Zambezi Valley, with between 500 to 750 millimeters (20 to 30 inches) of rain. In some places, the annual rainfall is as low as 375 millimeters (15 inches). Rainfall over the coastal lowlands is low because the moist southeast trade winds are blocked by the mountains of Madagascar.



Beira and Maputo Weather



Nampula and Tete Weather

Weather is strongly affected by the southeast trade winds, the Intertropical Convergence Zone, high and low pressure systems, and cyclones. The coast of northern Mozambique is occasionally affected by tropical cyclones in the Indian Ocean that move south between Madagascar and the mainland. These cyclones bring heavy rain and strong winds that can cause extensive damage.

Phenomena

The extreme weather events affecting Mozambique include floods, droughts, and cyclones. Droughts are more common in the southern region, and floods are frequent in the central and northern region. Tropical cyclones can impact the entire country.

Between 2000 and 2008, Mozambique experienced 40 natural disasters, including droughts, earthquakes, extreme temperatures, floods, insect infestations, storms, volcanic eruptions, landslides, wildfires, and epidemics.

Environment

A long civil war and recurrent drought have resulted in increased migration of the population to urban and coastal areas, causing desertification and pollution of surface and coastal waters.

Comprehensive air quality studies have not been conducted, and little information is available. Air pollution results from vegetation fires, biomass burning, traffic, open burning of municipal waste, and industrial waste. An environmental law was passed in 1997 that requires an environmental impact assessment for all projects likely to impact the environment. However, because of the lack of resources devoted to the actual enforcement of this legislation it has had little effect in curbing pollution and deforestation.

Deforestation is caused by slash-and-burn farming, logging, and chopping trees for firewood or charcoal. Most of the rural population and the poor living in urban areas rely on wood biomass as the principal source of energy for cooking and heating.

The annual deforestation rate in the country is estimated at about 219,000 hectares (541,161 acres) per year, equivalent to a change of 0.6 percent annually. Local differences in deforestation rates are considerable. Rates in coastal areas and along urban corridors are much higher, particularly around Maputo (20 percent) and Nampula (10 percent). Deforestation of mangrove forests used to average only 3.6 percent, but in many of the areas around the major coastal cities, where population levels are high, mangrove forests have been almost completely destroyed or severely depleted.

INFRASTRUCTURE

Transportation

Roads are the main means of transport in Mozambique and provide access to the other transport modes: rail, air, and coastal shipping. The country's transport infrastructure is vital to its economy and serves as a significant transit corridor to the landlocked countries of Swaziland, Zimbabwe, and Malawi. The railways are the best-developed sector, with rail links between major Mozambique ports and neighboring countries. Internal north-south transport links are poorly developed. Improved north-south road connections and roads to remote rural areas form a major part of the government's strategy for reducing poverty. Public transportation is limited and often has poor safety standards.

Roads

Mozambique's main road network consists of 29,341 kilometers (18,231 miles) of roads. Twenty percent are primary roads (5,870 kilometers [3,647 miles]) and link provincial capitals, main ports, and major border posts. The main south-north highway (EN1), the Beira corridor, and the toll highway connecting Maputo with the South Africa border (EN4) are among the best roads. Secondary roads cover 16 percent of the network (4,792 kilometers [2,977 miles]) and link primary roads with border posts, sea and river ports, and significant economic centers. Tertiary and local roads cover the remaining 64 percent of the network (18,679 kilometers [11,606 miles]) and link secondary roads and administrative, district, and population centers.

In addition to the main roads, there are 4,990 kilometers (3,100 miles) of roads that are not classified. Only 5,324 kilometers (3,308 miles) of road are made of asphalt, 7,578 kilometers (4,708 miles) are engineered gravel roads, and the remainder are earth roads.

Most main roads are paved. More than half are in good condition; 20 percent are in fair condition, but may have many potholes and other obstacles. The main roads have been cleared of landmines; however, with regular mud slides there is always a possibility of mines or unexploded ordnance being washed back onto cleared roads. The main areas of concern are the rural roads and northern roads, which (due to lack of regular traffic) are not regularly cleared. Only half of the unpaved network is in good to fair condition, while the rest is poor to impassable due to lack of maintenance and flooding.

In Mozambique, drivers drive on the left side of the road. In urban areas, road maintenance may be poor, and roads may be crowded.

Outside major cities, road travel can be dangerous, and driving at night is not advisable due to poor road conditions, loose livestock, lack of emergency services, vehicles without headlights, and the

Transportation Network

***Chapa*, or Combi Buses are Common Transportation**

increased potential for vehicle hijacking. Outside the cities, driving in a convoy is recommended, as is carrying a cell phone. However, cell phone coverage does not extend into the rural area. Bring a satellite phone rather than a GSM cell phone. Drivers should be vigilant when driving on the main roads connecting Mozambique and South Africa, as incidents of vehicle theft, including assault and robbery, have been reported. Extremely large potholes, drunk or reckless drivers, and careless pedestrians all pose hazards. Off the major roads, conditions often require a four-wheel-drive vehicle. Landmines in rural and remote areas pose a danger to drivers. Other hazards include large branches or stones laid across roads to warn of broken-down vehicles. These obstacles can cause accidents, particularly at night. Traffic law enforcement is generally

inadequate in Mozambique. Travelers are advised to carry proper documents and an emergency triangle, obey traffic rules, and keep their vehicles in good working order, because traffic police have a reputation of extracting bribes for real or even false problems with vehicles. Outside cities and villages, the speed limit is usually 120 kilometers per hour (75 miles per hour). In towns and villages, the speed limit is generally 50 kilometers per hour (31 miles per hour). Fuel stations are common in and around cities, but spaced more rare to the north.

The rainy season occurs in the southern provinces from October to March, and from mid-November to May in the northern provinces, with the heaviest rains in January and February. Travelers are advised to seek advice about road conditions before traveling cross country. Many roads in the Gaza and Inhambane provinces and parts of Sofala, Zambezia, and Tete provinces, including the north-south road, are subject to flooding and damage in the

Flooded Roads are Common During Rainy Seasons

rainy season. Many main roads in the Maputo, Gaza, Inhambane, Sofala, Manica, and Tete provinces have been, or are being, upgraded. Roads are less developed in Zambezia, Nampula, Niassa, and Cabo Delgado provinces. Only 14 percent of rural areas in Niassa and Cabo Delgado have all-weather access to main roads.

Bridge types in Mozambique include truss, girder, dam, and suspension bridges. Most bridges built in recent years are prefabricated metal bridges. However, the numerous road rehabilitation projects underway include plans to make greater use of local resources, progressively replacing the metal bridges. The metal bridges will continue to be used on tertiary roads.

The major form of public transportation is the bus-like *chapa*, often converted minivans or pickup trucks, which can be overcrowded and/or in poor condition. Buses operate between major towns. Travelers are advised to bring sufficient water in case of lengthy delays. The available space for passenger train travel is very limited, and the demand is high, creating crowding. There is no rail connection between Maputo and the major port city of Beira. There is regular ferry service between Maputo and Catembe. Ferry services can also be found elsewhere along the coast, as well as across rivers. On the northern coast there are regular services operating between Quelimane and Beira, and Quelimane, Nacala, and Pemba.

Car rental is available in most major towns and can be booked through major hotels, travel agents, or at major airports. An international driver's license, as well as a home country license, are required to drive in Mozambique.

Rail

Mozambique's railway system has been damaged by civil war sabotage, weather, and years of neglect. Cargo traffic grew by 1.1 per-

cent in 2006 and then declined 5 percent in 2007. Mozambique is upgrading its railways with the help of foreign aid. Rehabilitation plans included the purchase of 20 diesel locomotives in 2009. Mozambique has 3,123 kilometers (1,941 miles) of 1,067-millimeter (3-foot, 6-inch–) narrow gauge track, which is compatible with rail systems in neighboring countries, and 140 kilometers (87 miles) of narrow gauge 762-millimeter (30-inch) track. In 2006, Mozambique had 19 diesel locomotives in service and some 1,300 wagons.

The rail sector has continued to under perform, after having declined by nearly 1 percent in the 5-year period from 2001 to 2005. Conversely, demand for rail travel has increased rapidly, rising more than sevenfold in 2006, largely owing to the opening of new commuter rail services in the Maputo area. However, commuter rail services have not expanded into the rural area. Passenger-service trains run three times a week between Maputo and Johannesburg during the day, and there is also an overnight route operated by Spoornet. Other popular routes are between Beira and Manhica and Nacala and Nampula. The passenger train network is known to be slow and prone to breakdowns. First-, second-, and third-class services all technically exist, but several operators no longer offer first or second class. Women riding alone in first or second class are usually seated in a females-only car.

The rail system is owned by the government's Portos e Caminhos de Ferro de Mozambique (CFM-Mozambique Ports and Railways). In an effort to attract foreign investment to rebuild Mozambique's infrastructure, the government has established public-private partnerships in the port and rail sectors. Under concession agreements, asset ownership remains with Mozambique, while management of the lines has been transferred to private companies on 15- to 25-year concessions.

CFM-Norte

The line is operated by the privately managed *Corredor de Desenvolvimento do Norte* (CDN-Northern Development Corridor), under a concession agreement with the CFM. The CDN operates in what is also called the Nacala Corridor, consisting of the Port of Nacala in Mozambique, the CFM-run Northern Railway network of Mozambique, and the Central East African Railway (CEAR) railway system of Malawi, which interconnects with the Mozambique system. CDN runs 872 kilometers (542 miles) of track. In 2007, the line operated six diesel locomotives and 194 wagons, carrying 290,000 tons of freight annually. The principal commodities carried were cereals, fuel, fertilizer, tobacco, and sugar.

CFM Centro

As the Beira Railroad Corporation (CCFB), the Beira railway is leased from CFM to the Indian RITES Ltd. and IRCON International consortium. A 314-kilometer (195-mile) line serves the Indian Ocean port of Beira, running west to Zimbabwe, forming the shortest rail route from Zimbabwe to the coast. The 545-kilometer (339-mile) Sena Line, was badly damaged during the civil war. Rehabilitation, which will lead to a resumption of coal and sugar shipments from the interior, was scheduled for completion in 2010. Fuel, agricultural products, cement, and fertilizer are among other commodities carried by the railway.

CFM Sul

The CFM southern railway runs three major international routes, carrying freight from the port of Maputo to the Swaziland border at Goba (74 kilometers [46 miles]); to the South Africa border at

Ressano Garcia (88 kilometers [55 miles]); and the Limpopo line to the Zimbabwe border at Chicualacuala (534 kilometers [332 miles]).

Infrastructure improvements and increased availability of rolling stock contributed to a sharp increase in passengers/kilometer of 20.7 percent in 2006. Some 60 percent of this increase traveled with CFM Sul, which operates commuter services on the Maputo-Matola and Maputo-Marracuene routes. There were 2.1 million passenger journeys in 2006, and 4 million tons of freight carried.

CFM Zambezia

The CFM Zambezia is an isolated line that runs from the coastal town of Quelimane to Mocuba that reopened to traffic in 1992. Rehabilitation was in progress in 2007. The route length is 145 kilometers (90 miles). Mozambique's severe weather can disrupt railroad traffic, particularly in the southern and central parts of the country, where flooding has caused rail damage. The Ministry of Transport is responsible for rail safety.

Air

Mozambique has 111 airports, 23 with paved runways. There are no direct flights between the United States and Mozambique. The following runways can accommodate C-5 aircraft.

Primary Airfields

Airport/ Coords.	Elevation	Runway Length x Width	Runway Surface	Operating Cond.
Beira/ 1947S 03454E	10 m (33 ft)	2,400 x 45 m (7,874 x 148 ft)	Asphalt	24-hour Ops, Good

Chimoio/ 1909S 03325E	697 m (2,287 ft)	2,400 x 45 m (7,874 x 148 ft)	Asphalt	Daylight Ops, Good
Lichinga/ 1316S 03515E	1,373 m (4,505 ft)	2,530 x 45 m (8,300 x 148 ft)	Asphalt	24-hour Ops, Good
Maputo/ 2555S 03234E	44 m (145 ft)	3,660 x 45 m (12,008 x 148 ft)	Asphalt	24-hour Ops, Good
		1,700 x 45 m (5,577 x 148 ft)	Asphalt	
Marrupa/ 1313S 03733E	756 m (2,480 ft)	1,725 x 30 m (5,660 x 98 ft)	Asphalt	Daylight Ops, Good
Mocimboa Da Praia/ 1121S 04021E	27 m (89 ft)	2,000 x 27 m (6,562 x 88 ft)	Asphalt	Daylight Ops, Good
Mueda/ 1140S 03933E	850 m (2,789 ft)	2,351 x 30 m (7,714 x 98 ft)	Asphalt	Daylight Ops, Good
Nacala/ 1429S 04042E	125 m (410 ft)	2,500 x 45 m (8,202 x 148 ft)	Asphalt	Daylight Ops, Good
Nampula/ 1506S 03916E	440 m (1,444 ft)	2,000 x 45 m (6,562 x 148 ft)	Asphalt	24-hour Ops, Good
		1,565 x 45 m (5,135 x 148 ft)	Gravel	
Pemba/ 1259S 04031E	101 m (331 ft)	800 x 30 m (2,625 x 98 ft)	Asphalt	Daylight Ops, Good
		1,800 x 45 m (5,905 x 148 ft)	Asphalt	

Quelimane/ 1751S 03652E	11 m (36 ft)	908 x 30 m (2,980 x 98 ft)	Gravel	24-hour Ops, Good
		1,800 x 45 m (5,905 x 148 ft)	Asphalt	
Tete Chingodzi/ 1606S 03338E	160 m (525 ft)	2,507 x 45 m (8,225 x 148 ft)	Asphalt	24-hour Ops, Good
Ulongwe/ 1442S 03421E	1,300 m (4,265 ft)	1,798 x 30 m (5,900 x 98 ft)	Asphalt	Daylight Ops, Good
Via Franca do Save/ 2109S 03433E	30 m (98 ft)	1,000 x 23 m (3,280 x 75 ft)	Bituminous tar or asphalt mixed in place, oiled	Daylight Ops, Good

The Directorate of Civil Aviation is the airport regulating authority in Mozambique.

Mozambique is a signatory of the Convention on Civil Aviation Safety, but the U.S. Federal Aviation Administration (FAA) has not assessed Mozambique's civil aviation authority for compliance with International Civil Aviation Organization (ICAO) aviation safety standards. However, the International Air Transport Association (IATA) certified the publicly owned Mozambique Airlines (LAM) as a company fully compliant with all operational safety requirements in October 2008. Mozambique's heavy rains and cyclones can hamper air travel. Bird strikes are also an aviation hazard.

Mozambique signed a US$75 million contract with China's Anhui Foreign Economic Construction Group to renovate Maputo International Airport. The renovations will add a new internation-

al terminal and bring airport security up to international standards in time for the World Cup in neighboring South Africa in 2010. Guards patrol the airport, but petty crime is common in the public areas, particularly after dark.

Maritime

Mozambique has three principal seaports at Maputo, Beira, and Nacala. Smaller ports are used mainly for internal coastal shipping. Mozambique has embarked on a large-scale project of dredging its harbors, beginning with Beira, and spending millions, along with foreign investors and donor nations, to upgrade port facilities.

Commodities shipped through Mozambique's ports include coal, steel, petrochemicals, ores, fish products, sugar, general cargo, grains, fruit, construction material, and vehicles.

Primary Ports

Port/ Coords.	Vessel Berthing Length	Metric Ton Capacity	Anchor Depth m (ft)	Pier Depth, m (ft)	Channel Depth; Remarks
Angoche/ 1614S 03954E	Up to 45 m (148 ft)	17,885 per year	7.5 (24.6)	7 (23)	No plans to expand
Beira/ 1950S 03450E	Up to 140 m (459 ft)	1,379,700 per year	7 to 13 (23 to 42.7)	8 to 12 (26 to 39)	4.9 to 6.1 m (16 to 20 ft); Roll on/Roll off facility
Cahora Bassa/ 1534S 03250E	Small fishing vessels	UNK	12 (39)	12 (39)	Fishing port on the Zambezi River east of Cahora Bassa Dam

Port/ Coords.	Vessel Berthing Length	Metric Ton Capacity	Anchor Depth m (ft)	Pier Depth, m (ft)	Channel Depth; Remarks
Chinde/ 1834S 03630E	Up to 152 m (500 ft)	UNK	4.9 to 6.1 (16 to 20)	UNK	1.8 to 3.0 m (6 to 10 ft)
Ibo/ 1220S 04037E	Small vessels only.	0	11 to 12.2 (36 to 40	UNK	9.4 to 10.7 m (31 to 35 ft); Small port, cannot support large vessels
Inhambane/ 2355S 03522E	Up to 115 m (380 ft)	132,860 per year	11 to 12.2 (36 to 40)	7 to 8 (23 to 26.2)	3.4 to 4.8 m (11 to 15 ft); Primarily a fishing port
Maputo/ 2558S 03233 E	Up to 152 m (500 ft)	4,215,750 per year	4.9 to 6.1 (16 to 20)	8 to 12.5 (26.2 to 41)	4 channels w/ depths from 8 to 10 m (26.2 to 32.8 ft); Roll on/ Roll off facility
Nacala/ 1432S 04040E	More than 152 m (500 ft)	1,711,850 per year	9.4 to 10.7 (31 to 35)	6.4 to 7.6 (21 to 25)	More than 23.2 m (76 ft)
Pebane/ 1716S 03809E	Up to 152 m (500 ft) in length	UNK	11 to 12.2 (36 to 40)	7.9 to 9.1 (26 to 30)	7.9 to 9.1 m (26 to 30 ft); Small port; cannot support large vessels
Pemba/ 1258S 04029E	Up to 182 m (600 ft)	303,680 per year	15.5 to 16.8 (51 to 55)	6.4 to 7.6 (21 to 25)	More than 23.2 m (over 76 ft)
Porto Belo/ 1742S 03711E	Up to 152 m (500 ft)	33,215 per year	11 to 12.2 (36 to 40)	3 (9.8)	3. 4 to 4.6 m (11 to 15 ft)

Port/ Coords.	Vessel Berthing Length	Metric Ton Capacity	Anchor Depth m (ft)	Pier Depth, m (ft)	Channel Depth; Remarks
Quelimane/ 1753S 03653E	Up to 152 m (500 ft)	43,435 per year	7.9 to 9.1 (26 to 30)	4.9 to 6.1 (16 to 20)	3.4 to 4.6 m (11 to 15 ft)
Vilanculo/ 2158S 03519E	Small fishing vessels	UNK	UNK	UNK	Small fishing port

The major fishing ports are located at Beira, Maputo, and Quelimane. There are also fishing ports at Cahora Bassa, Inhambane, Angoche, and Vilanculo.

The Mozambique Channel along the Indian Ocean coast has been plagued by piracy. Robberies and attempted boarding of cargo ships in port have also occurred. The United States has provided patrol boats and training to the Mozambique Navy to increase its capacity to provide coastal security. Unlicensed fishing vessels are a safety hazard. Mozambique's transport minister announced a reorganization of the country's maritime safety authority and new investment in safety-related equipment and systems in 2007, in response to fatalities attributed to negligence and carelessness.

The Zambezi River is navigable for 460 kilometers (286 miles) from Tete to the Indian Ocean and is Mozambique's only river considered navigable for a significant distance.

Utilities

Electrical

Mozambique's electricity capacity is 2,300 megawatts, of which approximately 2,200 is hydroelectricity. Peak load is 350 megawatts.

Hydroelectric resources include the Cahora Bassa Dam on the Zambezi River, one of the largest hydropower installations in Africa. The dam was completed in 1974 and was owned by Portugal until 2007 when Mozambique took it over. The dam is now operating at full capacity. The dam's 2,075 megawatts is divided among South Africa, Zimbabwe, and Mozambique.

Other dams include Massingir, finished in 1977 on the Elephantes River, with a maximum capacity of 25 megawatts; the Pequenos Limbobos dams; Chicamba and Mavuzi, completed in 1968 on the Revue River with a capacity of 34 megawatts and 48 megawatts, respectively; and Corumana, with a capacity of 16.6 megawatts, completed in 1988 on the Sabie River. *Electricidade de Mozambique* (EDM) estimates that the country has potential for 13,000 megawatts of hydropower.

EDM operates a backup coal-powered station in Maputo, but the country's coal industry is in its early stages of development. The government is in the process of building a coal-fired thermal power plant with a total capacity of 2,400 megawatts, as well as planning a combined cycle natural gas-fired thermal power plant with a capacity of 750 to 1,000 megawatts, to be commissioned in 2010.

Mozambique's energy infrastructure sustained considerable damage during the civil war. The government plans to upgrade Cahora Bassa Dam, but is hampered by financing issues. The project will modernize the dam and the substation, and the company will build a new power station on the northern bank of the Zambezi river, as well as a new dam downstream called Mphanda Nkuwa.

Access to electrical service is low — 14 percent — but the government intends to increase access, aiming for full coverage by 2015. Those without access to electricity rely on diesel-powered

generators or solar panels and wood or charcoal, which contribute to indoor air pollution.

Electricity is 220V, 50Hz with C, F, and M plugs. Type C is round and ungrounded with two round prongs. Type F is similar to C, but has two grounding clips on either side of the plug. Type M has three round prongs in a triangle shape with the largest at the top and is more common near Maputo and South Africa.

Water

Rural water access is low, at 27 percent, compared to Africa's average of 46.5 percent. Spending on water supply for cities and large towns has exceeded that for small towns and rural areas. Coverage in the urban areas is 65 percent. Potable water comes from rivers and groundwater and is accessed through pumps and wells.

Tap water is typically not safe to drink. Unimproved water sources, particularly in rural areas, are more likely to have microbiological contamination than improved sources. Few people have water piped into their homes. Most urban residents and some suburban residents get water from communal fountains, pumps, or tank trucks. Others get water from unprotected wells, rivers, and swamps. Most people do not treat their water, but those who do may boil it, add bleach or chlorine, or use a water filter. Treatment is not always effective.

More than a third of the population has access to improved sanitation facilities (which includes flush toilets and connection to public infrastructure). This amounts to 51 percent of urban residents and 15 percent of rural residents. Access to basic sanitation (unventilated latrines, etc) is 33 percent for urban as well as for rural areas, while the target rate of sanitation coverage is 50 percent (45 percent for urban, 60 percent for rural). The rest of the population uses open defecation, shallow holes in the ground, pit latrines, and

soak away septic tanks, which can pollute the soil and groundwater. Sanitation in both urban and rural areas remains limited to household initiatives.

The government is finalizing a strategy for rural water supply and sanitation through 2015. The sewage system is particularly critical for the more heavily populated areas such as Maputo, Beira, and Nampula, where access to sanitation facilities has improved only marginally since 2000.

The 1995 National Water Policy encouraged legislative reform of the water system and increased private sector involvement in order to improve infrastructure in urban areas. The Water Regulatory Council is in charge of the water supply in Mozambique. The council is currently updating, improving, and further regulating water supply systems in every province except Niassa.

Communication

Mozambique's communication infrastructure includes radio, television, internet, print publications, fixed and mobile telephony, and post offices. Public and private radio stations are the most widely used media. Television, the print media, the internet, and telephones have low usage.

The constitution and laws provide for freedom of speech and freedom of the press; however, in practice, there are some restrictions on these rights. While the law allows individuals to criticize the government publicly or privately without reprisal, there were a few cases where such criticism resulted in punishment. There were reports that police and local officials harassed journalists, and journalists admitted that self-censorship was common. In general, the media faced increasing harassment from the courts, prosecutors, and district administrators, particularly outside Maputo Province.

Radio

Almost half of all households own a radio, and two-thirds of adults say they get most of their news from radio. State-run Radio Mozambique (RM) is the nation's largest radio broadcaster. It dominates the airwaves with more than two dozen AM/FM transmitters and stations throughout the country, including specialty youth and sports networks. RM broadcasts in Portuguese, English, Afrikaans, and local languages.

In addition to RM, there are dozens of community radio and television stations funded by the government and civil society organizations, independent (primarily church-supported) radio stations — many using local languages in addition to Portuguese, and commercial stations.

Among international stations, Voice of America broadcasts news and information in Beira (Radio Pax 103 FM), Maputo (K-FM 88.3 FM), Nampula (Radio Encontro 101.9 FM), Quelimane (Nova Radio Paz 105.7 FM), and on nine shortwave frequencies. BBC World Service broadcasts news and information in Beira (88.5 FM), Maputo (95.5 FM), and Nampula (88.3 FM). French radio, RFI1 Afrique/RFI2 broadcasts on 105.0 FM and Portuguese radio is heard on RTP (94.8 FM [Beira], 89.2 FM [Maputo], and 89.0 FM [Quelimane]).

Primary Radio Stations		
Station	**Frequency**	**Programming (Language)**
Radio Corredor da Beira (Beira)	92.4 FM	News, Music, Sports, Local Interest (Portuguese and indigenous languages)

Radio Mozambique/ Antena Nacional/ Cidade FM (Maputo)	87.6 FM, 88.1 FM, 88.6 FM, 88.9 FM, 89.0 FM, 96.8 FM, 98.6 FM, 99.2 FM, 100.9 FM	News, Music, Sports, Local Interest (state-run; broadcasts in Portuguese, English, and indigenous languages)
RM Desporto (Maputo)	93.1 FM	Sports (Portuguese)
MCR-Maputo Corridor Radio (Maputo)	105.9 FM	News, Information, Music (English)
Radio Maria Mozambique (Matola, Maputo, Xai-Xai, Chokwe, Quissico, Maxixe, Vilanculos, New Mambone)	101.4 FM, 102 FM, 103.1 FM, 104 FM, 106 FM	Religious (Portuguese)
Radio-Televisao Klint (RTK)	88.3 FM	News, Music, Sports, Local Interest (Portuguese and indigenous languages)

Television

Television ownership is not widespread. Only 6 percent of households have televisions. In an Afrodata study of those with televisions, 16 percent watched television news every day, and 8 percent watched a few times a week. There are four over-the-air broadcasters offering news and commentary, entertainment, cultural, sports, and educational programming. State-run Televisao de Mozambique (TVM) is the most watched network in Mozambique, providing coverage in provincial capitals and Maputo.

Foreign-based Radio Televisao Portuguesa Africa (RTP-Africa), which is a Portuguese government-owned station for Portuguese-

speaking countries in Africa, and Radio Televisao Miramar, which is owned by the Brazilian Universal Church of the Kingdom of God, are also seen in Maputo and broadcast by satellite. The privately owned SOICO-TV (STV) broadcasts to the cities of Maputo, Xai-Xai, Inhambane, Chimoio, and Beira. A cable system, TV Cabo, has 15,000 customers in Maputo.

Telecommunication

Mozambique is experiencing a rapid increase in the number of telephones. The number of telephone subscribers per 100 inhabitants was 20.6 in 2008. Fixed-line telephone service has been replaced by a rapid increase in the use of mobile phones in Mozambique. In 2008, there were 78,000 fixed telephone lines and 3 million mobile users. Fixed lines are provided by the state-owned Telecom SA Mozambique (TDM). The telephone service in the main urban centers is generally good, while the telephone network outside the main provincial towns remains limited. Public telephone boxes are available in the main centers and at the local offices of the national telephone company in smaller towns.

M-Cell (a publicly owned subsidiary of TDM) is the major company operating mobile telephones in Mozambique, with 60 percent of users. It operates on the GSM 900/1800 bands and with advanced 3G technology on the 2100 band. Vodacom (GSM 900/1800), a privately owned South African firm, is the only other mobile competitor in the market. Mobile-cellular coverage includes all the main cities and key roads, including those from Maputo to the South Africa and Swaziland borders, the national highway through Gaza and Inhambane provinces, the Beira corridor, and from Nampula to Nacala.

The main telecommunication infrastructure in the country is a fiber-optic grid, which was to be completed in 2009, with the cables reaching the two northernmost provincial capitals, Pemba and

GSM/Cell Phone Coverage

Lichinga. Also expected in 2009 was the linking of Mozambique to a digital submarine cable connecting three continents and designed to replace expensive satellite relay service for internet and voice connections.

Mozambique Telecommunication Statistics (2008)

Total telephone subscribers	3.1 million
Telephone subscribers per 100 inhabitants	20.6
Main telephone lines	78,000
Main telephone lines per 100 inhabitants	0.4
Mobile users	3 million

Internet

There are 200,000 internet users and 22,532 internet hosts in Mozambique. The internet is available in cities, including in provincial capitals, and is largely unregulated, with internet service providers able to bring in their own bandwidth. State-owned TDM introduced ADSL (asymmetric digital subscriber line) access in Maputo, Beira, and Nampula and has announced plans to expand to all provincial capital cities in the next few years.

There are more than 20 internet providers supplying internet access through cable and satellite technology. The cable firm, TV Cabo, advertises high-speed broadband in Maputo, with speeds up to 2 megabytes. While few Mozambicans own computers, internet cafes are available in Maputo and other cities and towns, particularly where there is tourism. There are no reports of government restrictions on access to the internet, although opposition party members reported that government intelligence agents monitored e-mail. Individuals and groups engage in the peaceful expression of views through the internet, including by e-mail.

Mozambique Internet Statistics

Total internet hosts	22,532 (2008)
Hosts per 10,000 inhabitants	10.4
Users	200,000 (2007)
Users per 100 inhabitants	0.9 (2007)
Total number of Personal Computers (PCs)	294,000 (2006)
PCs per 100 inhabitants	1.4 (2006)
Internet broadband per 100 inhabitants	Not Available

Newspapers and Magazines

There are state-owned and independent publications in Mozambique. However, Mozambique has a literacy rate of less than 50 percent, and a survey by Afrobarometer suggests few people outside urban areas have access to newspapers, and just 13 percent of the population regularly reads the press. Nevertheless, there are two daily national newspapers and several weeklies and magazines, including publications distributed by fax or the internet. There is also a state-owned news agency, *Agencia de Informacao de Mozambique* (AIM), distributed by print, e-mail, and the internet. The following are all Portuguese publications.

Primary Newspapers

Publication	Politics	Type	Web Address
AIM – Mozambique News Agency	State-owned	Daily	www.poptel.org.uk/mozambique-news/ NOTE: Also published in English
Canal de Mocambique	Private; Independent	Internet	www.canalmoz.com

Demos (newspaper)	Private; Independent	Weekly	N/A
Desafio (newspaper)	State-owned; Sports paper	Weekly	N/A
Diario de Mocambique (newspaper)	State-owned	Daily	N/A
Diario de Noticias (fax/e-mail newspaper)	Private; Independent	Daily	diariodenoticias@tvcabo.co.mz
Domingo (newspaper)	Private; Pro-government	Weekly	N/A
Faisca (fax newspaper)	Private; Independent	Daily	faiscacoop_jornal@yahoo.com.br
Fim de Semana (newspaper)	Private; Independent	Weekly	www.fimdesemana.co.mz/
Imparcial (fax)	Private; Pro-RENAMO	Daily	imparcial@emilmoz.com
Mediafax (fax)	Private; Independent	Weekly	mediafax@tvcabo.co.mz
Noticias (newspaper)	State-owned	Daily	www.jornalnoticias.co.mz/pls/notimz2/getxml
Savana (magazine)	Private; Independent	Weekly	N/A
Vertical (fax)	Private; Independent	N/A	vertical@tropical.co.mz
Wamphula Fax (fax newspaper)	Private; Independent	Daily	wamphula.teledata.mz
Zambeze (newspaper)	Private; Independent	Weekly	N/A

Postal Service

Mozambique's postal service is the Correios de Mozambique, E. P. Post offices are located in the main urban centers. Services include stamps, regular mail, "Blue Mail" priority service, post office boxes, contractual pick-up and home delivery service, facsimile, e-mail services, and money orders. Postal service is slow and unreliable. Express mail is available through DHL, EMS, and through the Mozambique postal service and UPS. There were 108 permanent post offices as of 2006, each covering more than 7,400 square kilometers (2,857 square miles) and serving an average of 194,000 patrons. The average number of deliveries per working day in urban areas is two.

Satellites

Mozambique has five Intelsat satellite earth stations (two Atlantic Ocean and three Indian Ocean), but does not have satellites of its own. Commercial mobile satellite services such as INMARSAT, Iridium, and Thuraya also provide voice and data communication services to Mozambique. Teleport facilities in Maputo provide telecommunication services, including voice and data networks across the country and the continent.

CULTURE

Statistics

Population	21,669,278 (2009 estimates)
Population Growth Rate	1.8%
Birth Rate	37.9 per 1,000 population
Death Rate	20.07 per 1,000 population

Net Migration Rate	N/A
Life Expectancy at Birth	
Total population	41.2 years
Male	41.8 years
Female	40.5 years
Population Age Structure	
0–14 years	44.3% (male 4,829,272/female 4,773,209)
15–64 years	52.8% (male 5,605,227/female 5,842,679)
65 years and older	2.9% (male 257,119/female 361,772)
Male to Female Ratio	
At birth	1.02 male(s)/female
Under 15 years	1.01 male(s)/female
15 to 64 years	0.96 male(s)/female
65 years and older	0.71 male(s)/female
Total population	0.97 male(s)/female (2009 est.)
Date of the Last Census	2007

Population Patterns

According to the 2007 census, the most populated provinces in Mozambique are the northern provinces of Nampula, Zambezia, Tete, and Sofala. These provinces are also among the largest in terms of land area. Only Niassa and Gaza are larger, representing 16 percent and 9.5 percent of land area respectively. All other provinces have 8 percent or less of the population. Maputo prov-

ince, exclusive of Maputo city, is the smallest at 1.3 million people. Maputo city has 1.1 million people (5.4 percent) and is less than one percent of the land area.

City/Town Estimated Population (2007)		
City	**Population**	**Coordinates**
Maputo	1,100,000	2552S 03234E
Matola	600,000	2557S 03227E
Beira	542,226	1950S 03450E
Nampula	413,929	1507S 03915E
Chimoio	233,492	1808S 03429E
Nacala	215,936	1516S 03914E
Quelimane	201,319	1752S 03653E
Mocuba	167,167	1709S 03639E
Tete	137,771	1554S 03309E
Xai-Xai	135,693	2503S 03338E

Population distribution is uneven. The greatest concentrations of people are in urban and coastal areas, due primarily to migration spurred by civil war and flooding. Mozambique has seen a general increase in urbanization. The 1997 census cited an annual rate of 20 percent, and the National Household Survey of 2002/2003 quoted 32 percent.

More than 60 percent of household heads in Maputo came from outside the city from the provinces of Maputo, Gaza, and Inhambane. More than 60 percent of these households have changed *bairros* since arriving.

Migrants with friends or relatives in the city look for employment opportunities in Maputo first. Those who can afford homes move to surrounding areas where land and housing are cheaper, as do

migrants without personal contacts in the city. Thirty percent of the population is urban. Projections estimate that 50 percent of the population will live in cities and towns by 2025.

Population Density

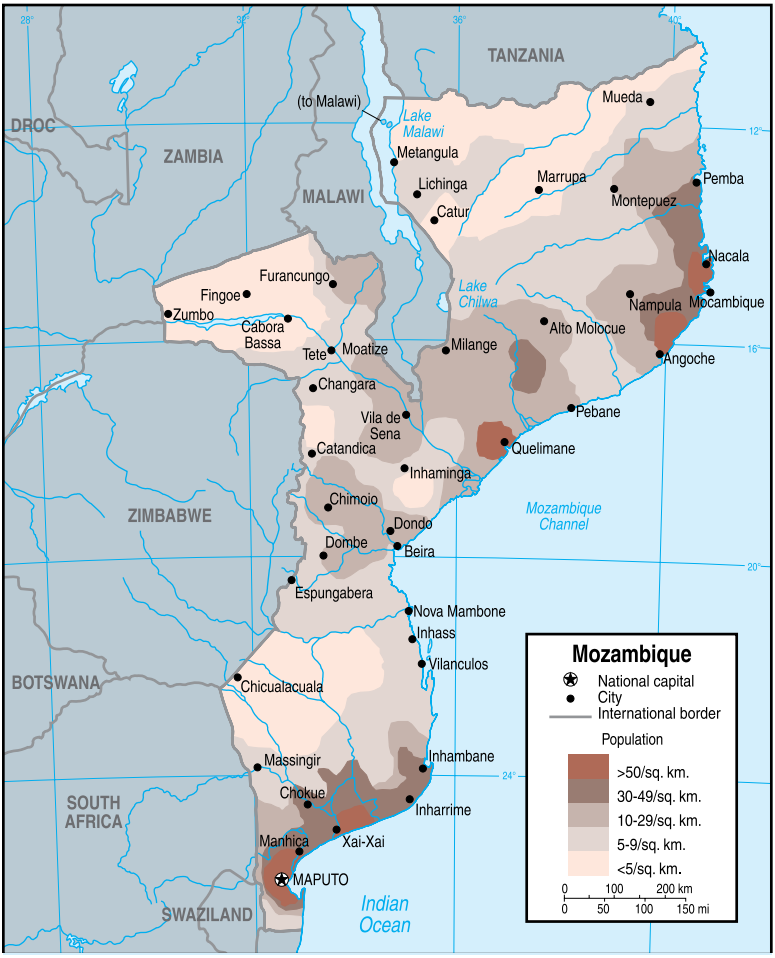
Nearly all Mozambicans are African (99.7 percent). The remaining 0.3 percent consists of Europeans, Euro-Africans, and Indians. There are several major African ethnic groups — the largest of which are the Makua and the Tsonga. An estimated 4 million Makua live in the north central provinces of Zambezia, Cabo Delgado, Niassa, and Nampula and represent nearly 40 percent of the population. The Sena and Ndau are prominent in the Zambezi Valley, and 1.5 million Tsonga live in southern Mozambique.

The Shona-carangas live between the Zambezi and Save rivers and represent 9 percent of the population. Smaller groups include the Shangana, Chope, Manyika, and Sena; the Maravi in Tete; the Nguni in the south; the Makonde in the far north; and the Asians and Europeans, who control the formal economy. Data from the 2007 census for Maputo City shows that Africans make up more than 95 percent of the population, mestizos make up nearly 3 percent, Caucasians and Indians make up less than one percent each, and other groups make up 1.76 percent.

Society

Mozambicans identify primarily with a tribe or linguistic group. Colonialism tied them to a common language (Portuguese) and to a common religion (Catholicism). The independence movement was also a strong unifying factor. There is little conflict between ethnic groups. The greatest cultural differences are those between the northern and southern regions. Northern groups are matrilineal,

semi-nomadic, and less influenced by the Portuguese. Southern groups are patrilineal, and many have adopted Portuguese dress, language, and religion.



Population Density

Portuguese landowners held the highest status during the colonial era, followed by the mestizos, those of mixed African and Portuguese descent; and Africans. Ethnicity had no effect on social status. Most Portuguese left the country after Mozambique attained independence from Portugal. Today, there are two classes: the small ruling class and the poor. Social and economic standing is often reflected in dress and language. Urban residents and young people wear Western-style clothing. Rural women wear traditional clothing. Men wear pants with T-shirts and dashikis (brightly colored pullover shirts). Northern Muslims wear traditional robes and head coverings. The wealthy speak Portuguese, which is rarely spoken outside of cities.

A 2003 survey indicated that Mozambicans feel they have more rights and freedoms now than they did under the one-party regime, even though most believe that elected representatives are not looking out for the interests of their constituents. Two-thirds of Mozambicans think the country is a full democracy and capable of solving most of the country's problems. More than 60 percent of Mozambicans feel that unemployment is the most significant issue, followed by health care, education, poverty, and AIDS.

Despite the low penetration rate of television and cinema, most Mozambicans have formed their preconceived notions about the United States, and U.S. citizens in general, from television shows or movies. Most Mozambicans think U.S. citizens are wealthy, Caucasian, blond haired, blue eyed, and sexually promiscuous. Non-Caucasian Americans may not be considered truly American by rural Mozambicans because of their skin color. Specifically, African-Americans may be expected to know, or at least pick up more quickly, the local language, and may be treated according to local customs as an indigenous African, as opposed to a visitor from another culture. Asian-Americans will likely be ex-

pected to know martial arts, or display other stereotypical traits found in movies. Hispanics are typically referred to as Cubanos or Mexicanos.

Western women may attract unwanted attention while in Mozambique, usually in the form of spontaneous marriage proposals and/or sometimes aggressive sexual advances. Women who live alone or who drink alone in bars are likely to develop a reputation among rural Mozambicans as being sad, lonely, and/or promiscuous.

Homosexuality is legal in Mozambique after the age of consent (14 years), but homosexuality is not widely accepted or practiced outside Maputo.

The United States represents economic and political opportunity to many Africans who get their information from the media and from family and friends living in the United States. U.S. television programs and pop culture are also major influences.

People

Diversity is a large part of Mozambique's culture. There are many indigenous groups, immigrants, and migrant workers. Dozens of ethnic groups are represented along with different languages. Almost half of the population holds traditional African beliefs.

Ethnic Groups

Muslims live mainly in the north and Christians live mainly in the south. The two groups tolerate each other, and there are no reports of clashes between the country's many ethnic groups. Northerners have displayed some animosity toward the southern region because all of Mozambique's presidents since the country gained its independence have come from that region, and many Mozambicans feel the region has benefited as a result. Most of the population, wealth, and government institutions are located near Maputo.

The south is more developed and has much better infrastructure than the north. The south's proximity to South Africa has made it more prosperous than the north and given it a stronger voice in national and regional development. There is some tension between the north and the south over these issues. In addition, most of the Front for the Liberation of Mozambique (FRELIMO)'s support comes from the south and from Cabo Delgado.

Southerners refer to northerners as *shingondo,* a derogatory term from one of the local languages. The Mozambican National Resistance (RENAMO) and FRELIMO supporters, particularly those in rural areas distrust each other, primarily because the two groups formed in these areas. Makua-Lomwe is the largest ethnic group, at nearly half of the population, while the Tsonga is the second-largest ethnic group, comprising 23 percent of the population. Mozambique is settled in regions almost exclusively by ethnic group. The Makua-Lomwe have settled the north (Nampula, Zambezia, Niassa, and Cabo Delgado provinces); the Sena/Senga have settled the western region (Tete and Sofala provinces); the Shona have settled the central region (Manica and southern Sofala provinces); and the Tsonga have settled the south (Maputo, Gaza, and Inhambane provinces). Most people of non-Bantu descent live in the cities.

Family

The family is a biological, social, and economic unit. Society places a high value on marriage and on having children. Family structure defines roles based on age and gender. Extended families are large and often live together for mutual support. Men are the head of the family and provide financial support. When a father dies, the oldest son takes over. Women raise children and oversee their education, although children may be disciplined by any adult family member. Women also maintain the household and

the garden. Girls help with household chores, and boys tend cattle. Polygamy, when practiced, requires that each wife has her own hut. Several wives may live close together and share household duties. The emancipation age for men and women is 18 years. The legal age for marriage is 14 for women and 16 for men.

Roles of Men and Women

The status of women in Mozambique is extremely low. Education and literacy levels are much lower for women than for men. Women remain discriminated against in terms of access to land and other

Farm Woman with her Children

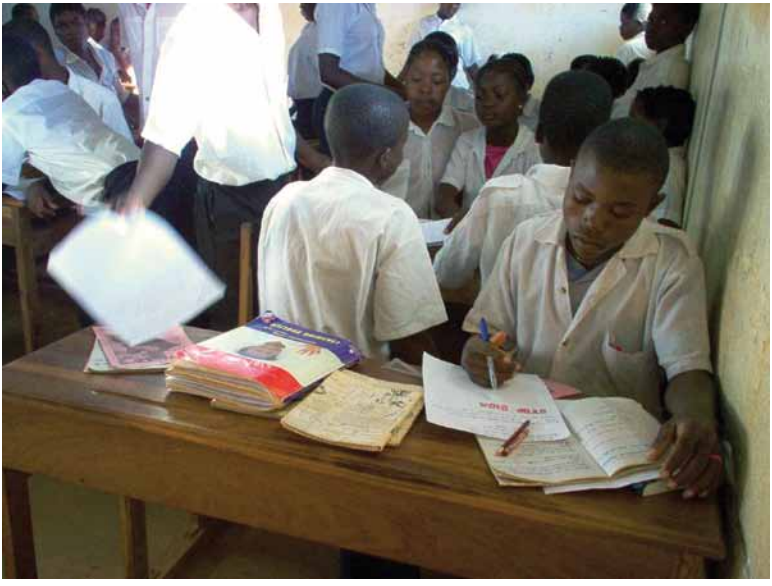
natural resources, regardless of matrilineal or patrilineal lineage. Access to land and other natural resources is still granted by the husband or by the family. Mozambique's constitution states that land is state property and cannot be sold; however, some still illegally charge large sums for a piece of land.

Men carry the dominant government positions, although women are making inroads. As of the December 2004 election, women held 87 of 250 seats (34.8 percent) in the lower house. Major obstacles for Mozambican women wanting to enter politics include a lack of party support, little media attention, and discrimination. Women generally have less education and have greater family responsibilities than do men. Nonetheless, 30 percent of the national Assembly seats are held by women. Luisa Dias Diogo became prime minister in 2004. Other women ministers include Virgilia Matabele, minister of women and social action since 2000; Helena Taipo, minister of labor since 2005; Isabel Manuel Nkavandeka, minister in the presidency for parliamentary affairs since 2005; and Maria Benvida Levy, minister of justice since 2008.

Several new laws affecting gender relations have been passed, such as the Land Law (1997), Labor Law (1998), Family Law (2005), and Commercial Code (2005). Three new laws on child abuse and trafficking were passed in 2008.

Education and Literacy

School fees were abolished in 2004, and a program of direct support to schools has been introduced, allowing more children to attend school. The 2007 literacy rate for those older than 15 years is 47.8 percent (male 63.5 percent / female 32.7 percent). Primary education is compulsory and lasts for 7 years (from age 6 to age 13). Secondary education lasts for 3 years (from age 13



Crowded School Conditions

to age 16) and is offered in secondary, technical, and agricultural schools. Ten percent of students from primary education go on to this level of education. The best students follow a 5-year general secondary program divided into two cycles (3-year and 2-year). Students take a national exam between the first and the second cycle. Students study mathematics, physics, chemistry, biology, Portuguese, geography, history, physical education, and English. The dropout rate is high; only an estimated 5 percent finish secondary school. Students who complete the program receive a Secondary School Leaving Certificate. To obtain admission to a university, students first must pass a university admission exam. They are then eligible for admission to a five-year bachelor's degree program offered by the particular university where they took the entry exam.

School-age Population (2009)		
Females	Primary entry age 6	344,000
	6–12	2,179,000
	13–17	1,276,000
Males	Primary entry age 6	347,000
	6–12	2,188,000
	13–17	1,275,000

Technical and professional education takes place in technical schools and institutes. Basic technical education trains skilled workers; mid-level technical education trains technicians. Higher education is provided by public and private universities and is the responsibility of the Ministry of Education and Culture. Higher education is funded by the State, but universities have a high degree of autonomy and coordinate their actions with the Higher Education Council.

Education is seen as essential to national development and key to social well-being and poverty reduction. Mozambicans see education as a way to improve their lives and their children's lives.

Writers emerged and began to flourish after Mozambique gained independence. The Mozambique Writer's Association was created in 1982 and is active in publishing contemporary as well as indigenous literature, including books and poetry. Much of Mozambique's literature is written in Portuguese. Early writers focused on nationalist themes with poems and short stories reflecting the struggle for independence.

Language

Portuguese is Mozambique's official language and is used in government, education, and business. English is also used in business.

Most people speak their native languages, and many speak more than one language. Native languages include the following:

- Emakhuwa - 26.1 percent
- Xichangana - 11.3 percent
- Portuguese - 8.8 percent (official; spoken by 27 percent of population as a second language)
- Elomwe - 7.6 percent
- Cisena - 6.8 percent
- Echuwabo - 5.8 percent
- Other Mozambican languages - 32 percent
- Other foreign languages - 0.3 percent
- Unspecified - 1.3 percent

Religion

The constitution and law provide for freedom of religion, and the government generally respects this right. The constitution and the law governing political parties specifically forbid political parties from directly affiliating with a religion or church and from sponsoring religious propaganda as threats to national unity.

According to the 2007 census, 23.8 percent of Mozambicans are Catholic, 17.8 percent are Muslim, 17.5 percent are Zionist Christian, 17.8 percent are other religions, and 23.1 percent do not profess a religion or belief; however, religious leaders believe that many practice traditional indigenous religions. Major Christian groups include Anglicans, Baptists, Mormons, Methodists, Presbyterians, Jehovah's Witnesses, Roman Catholics, and Seventh-day Adventists. There are also small Jewish, Hindu, and Baha'i groups. Of the many Islamic organizations in Mozambique, there are three principal Islamic organizations: Mohammedan Community, Islamic Congress, and Islamic Council.

Church in Mozambique

The northern provinces are predominantly Muslim, particularly along the coast, while areas of the northern interior have a stronger concentration of Christian communities. Christians are generally more numerous in the southern and central regions, but Muslims are also present in these areas. Differences between Sunni and Shi'a Muslims are not particularly important for many local Muslims, who are much more likely to identify themselves as followers of local religious leaders than as Sunni or Shi'a.

Mozambique does not have a state religion; however, Muslim leaders claim discrimination based on observance of National Family Day, a holiday that is observed on 25 December. The Muslim community believes Eid al fitr should be made a national holiday if Christmas is observed de facto under the guise of family unification. Tensions arise over the public recognition by the government of certain religious holidays such as National Family Day, which is celebrated on 25 December, but not others, such as Eid al Fitr. These tensions are not expressed in violence, but do create division. The government in response has not officially recognized any religious holidays as official government holidays. However, there are provisions in the constitution that allow groups to declare holidays for themselves.

Recreation

Soccer is the most popular sport in Mozambique, followed by volleyball and basketball. Most people play soccer informally or in community-based leagues. Most people also enjoy the beach. Dancing and social drinking are popular in urban areas. Women particularly enjoy singing, and traditional dancing competitions. Wealthy residents tend to swim or play tennis. Some play roller hockey. Larger cities have restaurants and nightclubs. Maputo has live theater, museums, and movie theaters.

Customs and Courtesies

Common gestures include the following:

- Hissing to get someone's attention
- Placing the hand palm-side out and moving the fingers in a scratching motion to beckon
- Covering one's fist with one's other hand to indicate "enough"

- Using the left or both hands to give or receive something
- Greeting or saying good-bye with the thumbs-up gesture
- Extend the arm and turn the palm upward to indicate the height of a person; turn the palm downward to indicate an animal's height
- Nodding to agree and shaking the head to disagree
- Holding hands with a friend while talking or walking

The following conduct is generally impolite:

- Using the index finger for pointing
- Pocketing hands or looking elsewhere during conversation
- Speaking to seated adults while standing
- Displaying affection in public

Men greet each other with a handshake using the right hand. Both hands may also be used, or the left hand may support the upper right arm. Good friends may hug or pat each other on the shoulder. Men with a close friendship may walk holding hands. Women greet each other by shaking hands and with verbal greetings, nods, or kisses on the cheek. Men and women greet each other with a nod or a handshake.

In formal settings, people greet one another with one of the following Portuguese expressions: *Bom dia* (Good day), *Boa tarde* (Good afternoon), and *Boa noite* (Good evening). People address each other as either *Senhor* (Mr.) or *Senhora* (Mrs./Miss). Elders are greeted more respectfully with *Bom dia mama fulana* (Good morning, dear Mother) or *Bom dia papa fulano* (Good morning, dear Father). Peers call each other by first name or nickname. Superiors are often not introduced until both parties are present in appropriate quarters. For example, an introduction to a minister will not occur in a parking lot; most likely the introduction will need to take place in his or her office inside a building.

Social status is significant in communities that are still influenced by traditional local officials and elders. Leaders always sit at the center of a table, and no one eats until the elders have started. When walking juniors walk behind the leaders, and juniors look downward when addressed by seniors, as a sign of respect.

In business situations, it is essential to be clean and to wear clean, neat clothing. Men usually wear either a suit or dress pants with a collared shirt. Ties are worn in most business situations. Women wear either a suit or a dress with a blazer.

Families commonly visit each other on weekends. Visits may be unannounced, but guests may give the host time to prepare by sending a message ahead of time. In rural areas, visitors call out their arrival and are greeted by the host. In cities, visitors knock on the door or ring the doorbell. Hosts offer refreshments when possible. Guests bring gifts only for birthdays, a new baby, or some other special occasion. Gift giving is appreciated and most times consists of food items.

Tipping is not customary in Mozambique, although in tourist areas a tip of 10 percent is expected. When eating a meal in a restaurant, the tipping standard is usually 10 percent of the bill. Bargaining for local handicrafts is commonplace.

Cultural Considerations

Socializing is a significant part of Mozambican society, and Mozambicans freely give their time to social interaction. They enjoy visiting and spending time together. Departing a home without having something to eat or drink is very rude. People speak directly in most situations, but are wary of offending others and may not always voice their true opinions. In many rural areas, visitors will use the eldest male in the home as the interlocutor for their visit.

He will sit and chat with guests as the others in the house provide service or sit quietly in a different part of the room.

Personal space is smaller than that of other countries, about an arm's length, but touching someone that you do not know well is rare. Good friends of the same gender may hold hands or touch each other's arm or back lightly. Contact between men and women who do not know each other is restricted to a handshake. Direct eye contact is made only between those of the same gender and social status; those who are younger or of lower status look downward out of respect.

Punctuality is not expected in informal situations, but is expected in business dealings. Business meetings rarely begin on time, but foreigners are expected to be punctual. In meetings, those who are more senior are greeted first. Small talk always precedes any formal conversations and normally includes inquiries about health and family. Discussions are started by the person who called the meeting. Meetings are closed by the most senior person in the room. Formal negotiations can take a long time because there is often a lot of compromise.

Titles carry significance, particularly in government, and should be used with the surname. Do not use first names unless invited to do so. The most common titles are *Senhor* (Mr.) and *Senhora* (Mrs./Miss). Business cards should be presented and received with the right hand.

Business hours are usually 0730 or 0800 to 1230, and 1400 to 1730 Monday through Friday.

Government offices are open Monday to Friday 0730 to 1530. Banks are open Monday to Friday 0730 to 1500; some are open on Saturday from 0900 until 1300. Shops are open Monday to

Friday 0830 to 1200 and 1400 to 1830 as well as Saturday until 1330. Some shopping centers are also open later during the week, on Saturday and on Sunday morning. Expect to bargain with local shop owners. When bargaining, remain calm. The best strategy is to pretend not to be interested and walk away until the merchant calls you back.

MEDICAL ASSESSMENT

The quality of most medical facilities in Mozambique falls well below U.S. standards. Health care facilities frequently lack electricity, water, medical supplies, and equipment. In addition, there are severe shortages of medical personnel. The northern provinces have the most difficulty providing health care, as the population is so widely spread while areas around Maputo and Beira are somewhat better. Private medical facilities offer the country's best medical care.

Portuguese is spoken by about a quarter of the population as a second language; consequently, local medical personnel are unlikely to speak English.

Mozambique has a national blood transfusion service that is attempting to improve the safety of the blood supply by establishing registered centers and providing adequate testing of blood and blood products. These steps have caused shortages in Maputo and Beira because more blood is considered unsuitable for transfusion. Blood drives and blood donation education programs are being conducted to increase the number of units donated.

Mozambique has one domestic pharmaceutical manufacturer. Its production is limited to basic cough syrups and analgesics. All medical equipment and supplies and most pharmaceuticals are imported from South Africa or Europe.

Mozambique has few medical evacuation assets. Air evacuation is the preferred evacuation means because of insufficient ground infrastructure. The National Disaster Management Institute, with international assistance, has been training and testing national disaster response capabilities. Mozambique will continue to develop its response capability through international and regional partnerships.

Disease Risks to Deployed Personnel

The National Center for Medical Intelligence (NCMI) assesses Mozambique as a very high risk for infectious diseases, with an overall risk among the worst in the world. Without force health protection measures, mission effectiveness will be seriously jeopardized. The following is a summary of the infectious disease risks in Mozambique. Risk varies greatly depending on location, individual exposures, and other factors. More detailed information can be obtained online at http://www.ncmi.detrick.army.mil.

Food- or Water-borne Diseases

Sanitation is extremely poor throughout the country, including major urban areas. Local food and water sources (including ice) are heavily contaminated with pathogenic bacteria, parasites, and viruses to which most U.S. service members have little or no natural immunity. Effective disease surveillance does not exist within the country. Only a fraction of diseases are identified or reported. If local food, water, or ice is consumed, diarrheal diseases can be expected to temporarily incapacitate a very high percentage of personnel within days. Hepatitis A and typhoid fever can cause prolonged illness in a smaller percentage of personnel. In addition, viral gastroenteritis (e.g., norovirus) and food poisoning (e.g., *Bacillus cereus*, *Clostridium perfringens*, and *Staphylococcus*) may cause significant outbreaks.

Vector-borne Diseases

The climate and ecological habitat support large populations of arthropod vectors, including mosquitoes, ticks, and tsetse flies. Significant disease transmission is sustained year-round and countrywide, including in urban areas. Serious diseases may not be recognized or reported due to the lack of surveillance and diagnostic capability. Malaria, the major vector-borne risk in Mozambique, is capable of debilitating a high percentage of personnel for up to a week or more. Plague also can cause a significant number of cases. In addition, a variety of other vector-borne diseases occur at low or unknown levels; as a group, these diseases constitute a potentially serious operational risk. Previously undiscovered or uncharacterized arboviral diseases also may be present. Personnel exposed to mosquitoes, ticks, tsetse flies, or other biting vectors are at high risk during day or night in both urban and rural areas.

Sexually Transmitted Diseases

Sub-Saharan Africa has the most widespread HIV/AIDS epidemic in the world, affecting all segments of the population, particularly prostitutes, a high-risk group for sexually transmitted disease worldwide. Heterosexual contact is the predominant mode of transmission. Carrier rates for hepatitis B are also high.

Although the immediate impact of these diseases on an operation is limited, the long-term health impact on individuals is substantial. Gonorrhea, chlamydia, and other infections (including chancroid, herpes, syphilis, and venereal warts) also are extremely common and may affect a high percentage of personnel who have sexual contact.

Respiratory Diseases

Meningococcal meningitis and tuberculosis rates are high among the local population. Prolonged contact with the local population may result in high tuberculosis skin test conversion rates well above the U.S. military baseline.

In addition to meningococcal meningitis, deployed U.S. forces may be exposed to a wide variety of common respiratory infections in the local population. These include influenza, pertussis, viral upper respiratory infections, viral and bacterial pneumonia, and others. U.S. military populations living in close-quarter conditions are at risk for substantial person-to-person spread of respiratory pathogens. Influenza is of particular concern because of its ability to debilitate large numbers of unvaccinated personnel for several days.

Water-contact Diseases

Operations or activities that involve extensive freshwater contact (lakes, rivers, streams, or other surface water) may result in personnel being temporarily debilitated with schistosomiasis and leptospirosis. In addition, bodies of surface water are likely to be contaminated with human and animal waste. Activities such as wading or swimming may result in exposures to enteric diseases such as diarrhea and hepatitis via incidental ingestion of water. Prolonged water contact also may lead to the development of a variety of potentially debilitating skin conditions such as bacterial or fungal dermatitis.

Animal-contact Diseases

NCMI assesses rabies risk in Mozambique is well above that in the United States because of ineffective control programs; dogs

are the main rabies reservoir. Personnel bitten or scratched by animals are at high risk of developing rabies in the absence of appropriate treatment. Rare cases of anthrax could occur among personnel exposed to animals, animal products, or undercooked meat. Also, rare cases of Q fever could occur among personnel exposed to aerosols from infected animals. More cases are possible in situations where personnel experience prolonged exposure to barnyards or other areas where animals are housed.

Medical Capabilities

Key Medical Facilities

Maputo Military Hospital

Coordinates	255726000S 0323532000E
Location	Rua Samuel Dabula Nikumbula, Maputo
Type	Military
Services	Medical – General medicine Surgical – General surgery Ancillary – Ambulance, blood bank, laboratory, operating room, X-ray

Maputo Central Hospital

Coordinates	255808000S 0323519000E
City	Maputo
Type	Public, Civilian
Services	Medical – General medicine, pediatrics, radiology. Surgical – General surgery, neurosurgery, obstetrics/gynecology, orthopedic surgery, pediatric surgery, plastic surgery Ancillary – Ambulance, blood bank, intensive care unit (ICU), laboratory,

Services (cont.)	operating room, pharmacy, X-ray, computed tomography (CT) scanner
Comments	Mozambique's largest and best-equipped public facility; built in 1960. Teaching hospital. Has tuberculosis-specialized laboratory. Extremely crowded; poor sanitation and hygiene. Shortages of medical supplies and basic pharmaceuticals. Equipment lacks spare parts. Quality of care is below U.S. standards. Located in the Palano Cimentro B district of the city.

Sommerschield Clinic

Coordinates	255732000S 0323542000E
City	Maputo
Type	Private, Civilian
Services	Medical – General medicine, general internal medicine, family medicine, pediatrics, cardiology. Surgical – General surgery, neurosurgery, obstetrics/gynecology, ophthalmology, orthopedic surgery, otorhinolaryngology (ENT) Equipment: cardiac monitors, defibrillator, oxygen, X-ray, Ancillary: Ambulance, ER, ICU, laboratory, OR, pharmacy, X-ray
Comments	Facility has modern equipment and is clean and well equipped. Recommended by U.S. Embassy. Private clinic-hospital. Run by principal owner, Mrs. Maria Natividade. She also owns Natair, a medical evacuation company.

Cruz Azul Clinic Hospital

Coordinates	255813000S 0323415000E
City	Maputo

Type	Private, Civilian
Services	Medical – General medicine, general internal medicine, family medicine, pediatrics, dermatology. Surgical – General surgery, neurosurgery, obstetrics/gynecology, ophthalmology, orthopedic surgery, ENT Equipment – Electrocardiogram (ECG), X-ray, Ancillary – Emergency room, ICU, laboratory, operating room, pharmacy, X-ray
Comments	Clean and well equipped. Recommended by U.S. Embassy.

HISTORY

The earliest known inhabitants of Mozambique date back to the Stone Age. The San people were hunter-gatherers. The Khoikhoi were pastoral and raised sheep, goats, and cattle. Both groups were displaced by Bantu-speaking people migrating from the north and west between 100 and 400 A.D. The Bantu brought agricultural, cattle raising, and iron working skills. Those who settled along the coast of the Indian Ocean came into contact with Arab (Muslim), Asian, and Persian traders along the Zambezi River as early as the 8th century. The Bantu traded gold, palm oil, amber, skins, and ivory for ceramics, glass, cloth, beads, salt, and metal goods.

Muslim trade posts connected coastal Mozambique to the Mediterranean and to ports in India and Asia. Other Muslim settlements developed north of Sofala, and many coastal towns were controlled by Arab sultans. As the Bantu expanded, the Shona Empire (now Zimbabwe) was established between the Zambezi and Limpopo rivers. The empire's economy was based on cattle herding and gold mining. The city of Sofala, located near the mouth of the Buzi River in central Mozambique, became a major trade port.

News of the gold trade brought Vasco da Gama, the first Portuguese explorer, to Mozambique in 1498. By 1505, Portugal occupied Sofala, established a fort, and seized several other coastal trade posts, forcing Muslim traders to relocate. The fort was ultimately moved to Mozambique Island. Portugal continued to expand into the interior during the 16th and 17th centuries, but with little result. Despite the presence of an army and establishment of garrisons and trade posts at Sena and Tete, Portugal had little control over the country. Local resistance to Portugal was strong. The Portuguese attempted to spread Christianity and justified violence in the name of conversion.

The Portuguese crown continued to grant land to Portuguese settlers through the *prazo system*. This system gave landowners (*prazeros*) total control over the indigenous peoples, who were drafted into private armies. Mozambique became a series of small, independent kingdoms headed by Portuguese descendants and formally became a Portuguese colony in 1752. Portugal struggled to maintain its foothold. Other European nations were interested in Mozambique, and in 1781, Portugal drove out Dutch and Austrian traders from Delagoa Bay (modern Maputo).

The gold trade declined during the 18th century and was replaced by the slave trade. By 1800, Mozambique was one of the largest slave trade centers in the world. As many as 25,000 slaves per year were shipped to the East Indies, West Indies, Brazil, and the United States. Slavery was officially abolished in 1842, but continued until 1900.

In the "Scramble for Africa," Portugal hoped to gain more territory, but was disappointed when large tracts of land were granted to Great Britain at the Berlin Conference (1884 to 1885). In response, Portugal increased colonial activity in the territory over the next

two decades. Indigenous people resisted and took advantage of a series of droughts in the late 18th and early 19th centuries to reclaim land abandoned by *prazeros*. In addition, *prazeros*, Arab, and Portuguese traders struggled for power and position. Arab traders reclaimed much of the Indian Ocean trade, and Great Britain and France became more involved in the region. Mozambique's official political borders were drawn up in the late 19th century by Portugal and Great Britain.

Portugal continued its attempts to unify the country by making Lourenco Marques (modern Maputo) the colonial capital in 1902 and granting large land concessions to charter companies, which established the *chibalo* system of forced labor. The Mozambique Company, the Zambezia Company, and the British-financed Niassa Company were tasked with starting sugar cane and cotton plantations. Mozambicans were forced to work on plantations and on public works projects such as railroads. They were not paid, and those who refused were punished. Many fled to neighboring colonies. Active resistance to colonialism started during World War I, when the Portuguese forced many Mozambicans to fight in the army. The Zambezi Rebellion of 1917 was followed by several smaller uprisings in the 1920s; however, all resistance attempts were put down.

A 1926 revolution brought Antonio de Oliveira Salazar to power. Salazar's dictatorship and his plan for the economy increased production of rice and cotton between 1930 and 1950. Portugal remained neutral during World War II, and exports of food and raw materials brought in significant revenues, but did little to better the lives of Mozambicans. His rule included new economic restrictions on native Mozambicans. Workers were still forced to labor on public works projects. The only ways to escape the new restrictions or forced labor were to either work in another country such as

South Africa or to become *assimilado* (assimilated, or accepted). *Assimilados* were promised equality with Portuguese settlers, but the status was almost impossible to achieve — despite little access to education or employment, they were required to speak and write Portuguese fluently and maintain a European lifestyle. During this period, charter companies and the *prazo* system were disbanded. Investment in the colony increased in the 1950s, however. By this time, the colony was called a province of Portugal, and Salazar offered land and livestock to attract settlers. The economy expanded, and thousands of Portuguese came to Mozambique.

The first major rumblings of a movement for independence began in 1962 with the formation of the Front for the Liberation of Mozambique (FRELIMO) led by U.S.-educated Eduardo Mondlane. Upon Portugal's refusal to negotiate independence, FRELIMO engaged in guerrilla warfare and took control of much of the north by 1964. Portugal retaliated with military power. Mondlane was assassinated in 1969 and replaced by Samora Machel in May 1970. Machel continued with guerrilla tactics, including the disruption of work on the Cahora Bassa Dam.

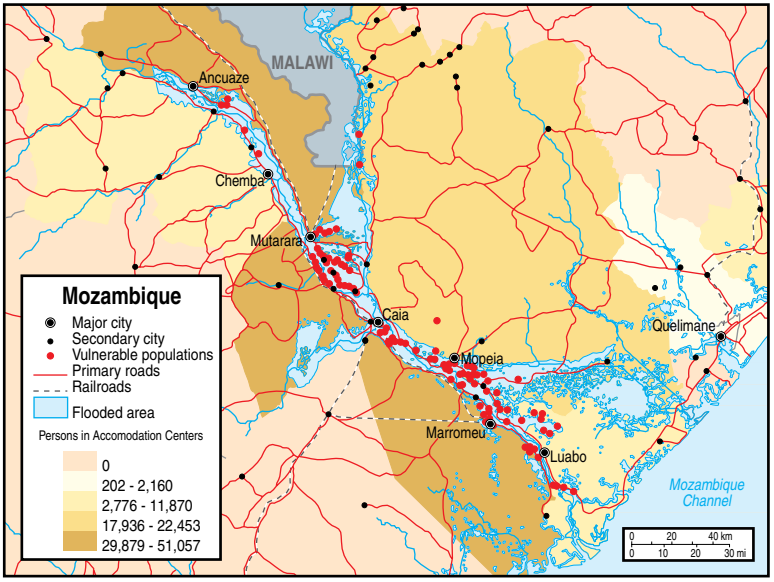
Salazar's health failed in 1968, and a struggle for control ended in a military coup in 1974. The new government supported independence for the colony, and the Lusaka Accord was signed, granting independence to Mozambique and establishing a transitional government. Mozambique became fully independent in 1975 under a single-party (FRELIMO) system with Samora Machel as president. Most Portuguese settlers fled virtually overnight.

Machel was president from 1975 until his death in 1986. During that time, he tried to establish a Marxist form of government. He also supported liberation movements by Africans in Rhodesia (Zimbabwe) and South Africa. As a result, the Rhodesia and South

Africa governments financed and armed an anti-FRELIMO rebel force named the Mozambican National Resistance (RENAMO). RENAMO launched a civil war (1977) that lasted for 16 years, destroying much of the country's infrastructure, including schools, railroads, factories, and government buildings. Agriculture was disrupted, and the country suffered a severe economic depression. Thousands of people were killed. More than a million fled the country, and a million more were displaced. With the country in ruins and control insecure, Machel asked to meet with the presidents of Zimbabwe and Zambia in 1986. Machel was killed in a plane crash on the return trip and was succeeded by Joachim Chissano, the foreign minister.

Chissano gradually drew FRELIMO away from Marxism toward more socialist policies. A 1990 agreement between RENAMO and FRELIMO resulted in a change in the constitution allowing for a multi-party system and democratic elections. The civil war continued for 2 more years until 1992, when a peace agreement was signed between President Chissano and RENAMO leader Afonso Dhlakama, and severe drought required cooperation on humanitarian assistance. A UN peacekeeping force oversaw the 2-year transition to multi-party elections.

Chissano was reelected in 1994 and 1999. FRELIMO also held most Assembly seats. RENAMO accused FRELIMO of electoral fraud, but the Supreme Court ruled in FRELIMO's favor, which resulted in violent clashes in 2000. Mozambique suffered additional hardship as floods swept through the southern part of the country. Flooding continued in 2001, displacing thousands in the Zambezi Valley. In 2002, Chissano declined to run for a third term and chose Armando Guebuza as the candidate for the 2004 presidential election. Guebuza also defeated Dhlakama.



Significant Flood Zones

Reducing corruption was key to President Guebuza's political platform in 2004, and he sent a strong message by appointing Augusto Paulino as the new attorney general in August 2007. Paulino, a former judge, presided over the trial of six men accused of the murder of investigative journalist Carlos Cardoso in 2000. They were sentenced to long prison terms. New constitutional amendments created an independent ombudsman position to investigate allegations of abuse by state officials, and a Central Office for the Combat of Corruption replaced the Anti-Corruption unit.

Mozambique saw impressive economic growth after the war, due largely to political stability and monetary policies that brought increased aid and investment in mega projects. Work began on the Unity Bridge over the Ruvuma River on the border between

Mozambique and Tanzania and was a starting point for regional integration. Other bridges and thousands of miles of new roads were also built.

Economic advances were offset by a series of natural disasters, however. The southern region suffered a drought during the 2006 season, which reduced the cereal harvest by 30 percent and left nearly 500,000 people in need of food assistance. A magnitude 7.0 earthquake in February 2006 damaged buildings and caused significant ground displacement throughout Manica, Sofala, and Maputo provinces. Regional droughts led to a decline in cotton production in 2007, while flooding on the Zambezi River and heavy rains from Cyclone Favio killed dozens and affected hundreds of thousands of others. Flooding in early 2008 and early 2009 left many at risk for disease and food shortages.

May 2008 saw a rise of violence against immigrants in South Africa, many of whom were Mozambican. Housing shortages, poverty, high crime rates, and job losses were blamed on foreigners. Thousands of legal Mozambican workers fled the country. Protesters in Maputo demanded that South Africa compensate the victims in the attacks.

Municipal elections in 2008 went smoothly, but RENAMO candidates suffered universal defeat. The election saw the dawn of a new political party. Former members of RENAMO launched the Democratic Movement of Mozambique (MDM) led by Beira mayor Daviz Simango. MDM ran against incumbent President Guebuza of FRELIMO in 2009, and while it failed to unseat him, the MDM did pick up 8 seats in the National Assembly. RENAMO saw its representation cut nearly in half, from 90 seats to 48.

Chronology of Key Events

1498	Vasco da Gama arrives in Mozambique.
1752	Mozambique becomes Portuguese colony.
1800	Mozambique becomes one of the largest slave trade centers in the world.
1842	Slave trade officially ends.
1902	Lourenco Marques (modern Maputo) becomes the capital.
1926	Antonio de Oliveira Salazar comes to power.
1962	Front for the Liberation of Mozambique (FRELIMO) led by Eduardo Mondlane forms.
1969	Mondlane assassinated
1974	Military coup forms new government.
1975	Mozambique becomes independent; Samora Machel becomes president.
1977	RENAMO launches a civil war.
1977 to 1984	Mozambique supports rebel groups in Rhodesia and South Africa (Nkomati Accord in 1984 officially ended this support).
1986	Joachim Chissano becomes president after Machel dies in a plane crash (19 October 1986).
1990 to 1992	FRELIMO and RENAMO sign agreement to end civil war, UN oversees transition.
1990s	Chissano reelected twice; RENAMO claims election fraud.
2004	Chissano declines to run for another term; Armando Guebuza selected as the candidate for the 2004 presidential election.
2005	Guebuza elected president.
2006	Drought and earthquake cause extensive damage.

2007 Regional droughts, heavy rainfall, and Cyclone Favio affect thousands.

2008 Seasonal flooding leaves many at risk of disease and food shortage.

2008 Violence in South Africa forces thousands of Mozambicans to return home.

2009 Seasonal floods affect many; Democratic Movement of Mozambique created from former RENAMO members.

GOVERNMENT AND POLITICS

Government

Mozambique is a republic, and the current constitution has been in place since 2004. During the colonial period, Mozambique was ruled as a province of Portugal. FRELIMO, a guerrilla resistance group, began fighting a war for independence in 1964 and became the sole political party in a one-party system when Mozambique gained independence in 1975. The party — and therefore the country — became Marxist in 1977, but renounced the doctrine in 1989 as a precursor to major political changes. The country officially adopted a multi-party political system in 1990 in order to end the civil war with RENAMO, a guerrilla resistance group founded in 1976. With the 1990 constitution, RENAMO became a political party. Several dozen other parties have formed since then.

National Level

The government has three branches — executive, legislative, and judicial — that are separate but interdependent. The president is elected by popular vote, as are members of the unicameral Assembly of the Republic. The prime minister and other ministers

are appointed by the president, as are most judges. Most officials serve 5-year terms. The president is eligible for a second term, but there are no term limits on deputies to the Assembly.

President Armando Guebuza

The executive branch can propose laws to the Assembly, which decides whether or not to pass them. The president can veto a law that the Assembly has passed and dissolve an Assembly. The Council of Ministers is also part of the executive branch and is responsible for executing laws. The judicial branch is responsible for ensuring the constitutionality of and compliance with the laws.

The country is divided into 10 provinces, 33 municipalities, and many districts. Provincial governments are the representatives of the national government in the provinces, and local governments support the interests of local populations.

Executive Branch

The president is the head of state, head of government, and commander in chief, and is elected by direct universal suffrage for a 5-year term with one possible reelection. Candidates must be at least 35 years old, native Mozambicans, legally able to vote, and

must have been proposed by at least 10,000 voters. The winning candidate must have a majority of votes; if no candidate achieves this, a run-off election takes place between the top two candidates.

The president can dissolve the Assembly of the Republic on a one-time basis if the Assembly does not approve the program of the government. The president can also decide to hold referenda on constitutional matters or matters of fundamental interest to the nation, call general elections, and grant pardons and commute sentences. The president also has the power to declare a state of war and its termination, state of siege or emergency, make treaties, decree general or partial mobilization, and guide foreign policy. The president is advised by the Council of State, consisting of the president of the Assembly, the prime minister, the president of the Constitutional Council, former presidents of the Republic and Assembly who were not dismissed from office, the runner-up of the presidential election, and other significant figures in the country.

The Council of Ministers is responsible for securing the administration of the country, guaranteeing its territorial integrity, safeguarding public order, promoting economic development, implementing the State's social program, and carrying out foreign policy. The council has the power to draft bills to be submitted to the Assembly, draft the budget, promote and regulate economic activity, and direct labor, social security, education, housing, and health policies. The prime minister is the head of the Council of Ministers. The National Defense and Security Council is a consultative body under the president. Its function is to advise on defense and security matters.

The president appoints (and can dismiss) the prime minister, ministers, and deputy ministers, and also appoints and can dismiss the chief of general staff of the military, the general commander of the police, the commanders of various wings of the armed forces, and other officers of the defense and security forces.

Legislative Branch

The Assembly of the Republic consists of 250 deputies with 5-year terms. Members of the Assembly are elected by popular vote and proportional representation. The president and vice president of the Assembly are elected by deputies of the Assembly. The Assembly can pass constitutional laws, define the borders of the Republic and territorial subdivisions, pass laws, propose referenda, ratify the suspension of constitutional guarantees, and appoint heads of the major courts. It also approves the budget, defines defense and security policy, ratifies and terminates treaties, grants pardons, and authorizes presidential travel abroad.

The governing board of the Assembly is composed of the president of the Assembly and deputies elected by the Assembly from its members. It coordinates the activities of the commissions of the Assembly, conducts relations between the Assembly and equivalent institutions in other countries, and prepares and organizes sessions of the Assembly.

Judicial Branch

Courts include the Supreme Court, Administrative Court, and courts of justice. Other types of courts may be established by law. Military courts may be established during times of war.

The courts are independent, but managed and overseen by the Superior Council of the Judiciary, which is made up of the president and vice president of the Supreme Court. The courts can review the actions of the president for crimes committed both and in and outside the performance of duty.

The Supreme Court is the court of final appeal. Judges are nominated by the president upon the recommendation of the Superior

Council of the Judiciary. Candidates must be at least 35 years of age and have at least 10 years of experience. Judges cannot be removed, transferred, suspended, retired, or dismissed, except in the cases established by law. The Constitutional Council has jurisdiction on legal questions arising from or related to the constitution.

The Administrative Court determines the legality of the activities of public administration. This includes public expenditures and enforcement of liability for financial infractions. Judges of the Administrative Court are nominated by the president of the Republic on the recommendation of the Superior Council of the Administrative Judiciary. Judges must be at least 35 years of age.

The court settles administrative disputes, appeals against the State and its agents, and hears appeals lodged against other administrative, fiscal, and customs courts. The courts of justice have common jurisdiction in civil and criminal matters and exercise their jurisdiction over all areas not assigned to other jurisdictional orders.

The president appoints the president and deputy president of the Supreme Court, the president of the Constitutional Council, and the president of the Administrative Court. Judges cannot be removed, except in very specific cases defined by the constitution.

Local Level

Provincial governments implement national government policies at the local level. Each province has a governor who is the senior official and interacts with the Provincial Assembly. Members of provincial governments are appointed centrally, and members of the Provincial Assembly are elected for 5-year terms with no term limits.

Local governments engage the citizens in solving local and community problems. Executive offices of local government ensure

that economic, cultural and social programs, and obligations of local interest are carried out.

Administrative Divisions

There is a directly elected municipal assembly with decision-making powers and an executive municipal council. The mayor is the chief executive at the local level. All elected municipal officials serve 5-year terms. Community courts deal with non-criminal issues using equity, common sense, and local values. Their judges are elected by local communities.

Key Government Officials

Government officials below prime minister include the following:

- Minister of Foreign Affairs and Cooperation - Oldemiro Baloi
- Minister of Finance - Manuel Chang
- Minister of the Interior - Jose Pacheco
- Minister of Industry and Commerce - Antonio Fernando

Political Parties

Party interests often outweigh state interests; politicians may support their parties to the detriment of the citizens. There are two major political parties and 50 smaller ones, 10 of which formed a coalition with the opposition to obtain representation in the Assembly.

Party Name	Description
Mozambique Liberation Front (FRELIMO)	Founded in 1962; party aims to combat poverty and reduce social imbalances, fight corruption, and increase national unity.
Mozambique National Resistance (RENAMO)	Founded in 1976; became a political party in 1992; supports democracy; main opposition to FRELIMO. Supports reform of public administration, equal opportunity, return of traditional authority, infrastructure

Mozambique National Resistance (RENAMO) (cont.)	modernization, strengthening economy, technological innovation, and attracting foreign investment. Support decreased in recent years.
Mozambique Democratic Movement (MDM)	Founded in 2009; supports dialogue and encourages transparency by introducing more parties with influence into the system; generally moderate policies for the country's development.

FRELIMO tends to be more popular in urban areas and in the north and south of the country. RENAMO's traditional stronghold is Beira, in the province of Sofala; most of RENAMO's support is based in the central and coastal provinces of Manica, Sofala, Zambezia, and Nampula. The MDM was founded by Beira mayor Daviz Simango, a former RENAMO member, in 2009. Simango defeated the RENAMO candidate in the 2008 municipal election.

FRELIMO Poster

Elections

Voter participation in Mozambique tends to be low, with 2003 and 2004 turnout at 24 percent and 36 percent respectively. Voter turnout increased in the 2008 municipal elections to 46.4 percent of registered voters. National and municipal elections are held every 5 years. The last national election took place in November 2009. The last municipal election took place in 2008, and the next elections will take place in 2013. Citizens 18 years of age or older are eligible to vote.

Elections are typically open, and international observers have deemed them free and fair. Opposition parties sometimes have objections and make accusations. There are some reports of opposition members being intimidated by police officers. The National Election Commission (CNE) is responsible for the oversight of elections, but it is a highly politicized body.

Foreign Relations

Mozambique's foreign policy focuses on friendship and cooperation with surrounding states. Relations with other countries tend to be overwhelmingly positive. Mozambique is a member of many international organizations and accepts development aid from numerous different countries and organizations.

Mozambique receives much of its aid from its Programme Aid Partners (African Development Bank, Austria, Belgium, Canada, Denmark, the European Union, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the World Bank). According to the 2009 Memorandum of Understanding, these partners support the country's budget and fund the national action plan for poverty reduction and development. In return, Mozambique has

promised to continue to reduce poverty, increase democracy, and support human rights. The total budget support from the Programme Aid Partners was US$455 million for 2009, with a further US$361 million to fund various development projects over the next 5 years. The amount each country contributes is determined in bilateral agreements with Mozambique.

China has become increasingly involved with Mozambique in recent years, contributing millions of dollars in long-term loans. Mozambique also receives significant emergency aid from numerous countries through the United Nations and nonprofit organizations in the form of food and rebuilding assistance. Mozambique signed a 5-year, US$500 million compact with the Millennium Challenge Corporation in 2009 consisting of grants for specific programs to combat poverty and increase economic growth.

United States

Mozambique has positive relations with the United States, which is the largest donor country. Mozambique is a focus country for the Emergency Plan for AIDS Relief and the Malaria Initiative. USAID donated US$290 million in 2009. Mozambique and the United States signed a Trade and Investment Framework in 2005 that built upon previous trade agreements to expand trade and investment between the two countries and formed a United States-Mozambican Council on Trade and Investment to address trade and investment issues such as environmental and labor problems. The United States has contributed military aid to Mozambique. The two countries also have numerous treaties in force, including defense, economic and technical cooperation, employment, finance, the International Criminal Court, investment, and the Peace Corps.

Malawi

During the Mozambican civil war, Malawi accommodated more than a million refugees and harbored RENAMO fighters. However, Malawi's army also had a joint operation with FRELIMO forces beginning in 1987 to protect the Northern Mozambique Railway Line on the border from RENAMO bandits. Though relations have occasionally been strained, Mozambique and Malawi have good relations that are based on shared economic, cultural, and defense cooperation. The two countries signed a preferential trade agreement in 2006, and in 2009 began to work toward shared border posts. Both countries are members of the Commonwealth of Nations, Southern African Development Community, and African Union.

South Africa

Relations with South Africa were complicated in the 1980s, when South Africa supported RENAMO in its struggle against the FRELIMO government, and the FRELIMO government supported the African National Congress against South Africa. In 1984, however, the Nkomati Accord was signed, in which support of the African National Congress and RENAMO was withdrawn. Today, relations are cordial. Both nations are part of the Southern African Development Community and the Commonwealth of Nations, and South Africa regularly contributes emergency aid in the event of flooding in Mozambique. There are another 25 agreements in place. South Africa is Mozambique's largest trading partner, and the Maputo Development Corridor links the port of Maputo with major industrial areas in South Africa. The two countries created a Heads of State Bilateral Economic Forum to meet on a regular basis, and a Joint Permanent Commission for Cooperation was begun in 1994.

Tanzania

Tanzania and Mozambique have always had cordial relations, as FRELIMO was based in Dar es Salaam during the war for independence. Today, people on both sides of the border may cross freely without a visa, and the "Unity Bridge" is being built across the Ruvuma River. Tanzania is a member of the Spatial Development Initiative, along with Mozambique, Malawi, and Zambia; the Commonwealth of Nations; the Southern African Development Community; and the African Union.

Zambia

Zambia and Mozambique have had generally cordial relations. Zambia contributed peacekeepers after the civil war in the early 1990s. The two countries have numerous economic and military agreements. They are both members of the Commonwealth of Nations, the Southern African Development Community, and the AU.

Zimbabwe

Mozambique provided assistance to Zimbabwean independence fighters in the 1970s and 1980s, and relations are still positive. The two countries have formed the Zimbabwe-Mozambique Friendship Association, which specializes in cultural exchanges, which has produced significant trade. The two countries abolished visa requirements in 2007. President Guebuza promised not to compromise the sovereignty of Zimbabwe, but unofficial actions such as limiting the amount of food that Zimbabweans may import from Mozambique may have been taken in response to political issues in the country.

African Union

Mozambique joined the African Union in 2001 and is party to the Non-Aggression and Common Defense Pact, as well as an

Economic Partnership Agreement with the EU. The African Union will eventually increase the economic integration of the continent.

China

China began providing Mozambique with support during its war for independence from Portugal, and the assistance continued after Mozambique gained independence when China built numerous government buildings and other buildings free of charge. China has provided billions of dollars in long-term loans and increased investment dramatically. Mozambique believes that relations with China are beneficial, despite reports of mistreatment of Mozambican workers on Chinese projects in Mozambique, and both countries want to increase bilateral agreements in the coming years.

Portugal

Immediately after Mozambique gained independence, tension between Mozambique and Portugal caused many Portuguese settlers to flee to Mozambique. Since the late 1980s, relations have been much more cordial. In 2007, the government of Mozambique purchased the Cahora Bassa Dam from Portugal. Portugal has invested heavily in Mozambique, and in 2008 forgave millions of dollars in debt. Portugal granted Mozambique a new loan and technical assistance to develop better infrastructure. Both countries are members of the Community of Portuguese Language Countries.

International Organizations

Mozambique participates in these and other international organizations:

- African Development Bank
- African Union
- International Development Association
- International Finance Corporation

- International Labor Organization
- International Telecommunication Union
- Southern Africa Development Commission
- United Nations
- World Customs Organization
- World Trade Organization

Non-governmental Organizations

International non-governmental organizations (INGOs) in Mozambique include Africare, the Aga Khan Foundation, the Association of European Parliaments for Africa, Care International, Family Health International, Habitat for Humanity, Doctors Without Borders, Oxfam, the Red Cross, Save the Children, and the World Food Programme. Human rights groups generally operate without government restriction. After the flooding in 2007, Mozambique worked closely with INGOs to provide humanitarian assistance, and it frequently collaborates to assist victims of violence. However, INGOs must undergo thorough screenings to have their work permits renewed by the state on a regular basis.

Violent protests against Red Cross volunteers in Nampula began in early 2009 after rumors spread that health care workers were spreading cholera. During the violence, three Red Cross volunteers and two policemen were killed and several people were injured.

Corruption

Victims of corruption are often those without political power, such as the poor. Police officers are often corrupt, due to a lack of financial resources and training. Bribes and kickbacks are common in education, health, and public utility sectors. Mozambicans perceive corruption in contract negotiations among large infra-

structure and transport projects. President Guebuza has business interests in almost all areas of economic activity. Hiring decisions are often based on personal connections or nepotism. Whistle-blowers are rarely protected and can suffer negative consequences for reporting corruption.

Anti-corruption law in Mozambique provides for strict accountability and harsh penalties, but rule of law and enforcement are weak. The government is increasing transparency through new laws such as the 2004 Anti-Corruption Act. Since 2004, the Internal Audit Department has had its own budget line, which has resulted in increased funding. An Anti-Corruption Strategic Plan for the health, education, finance, police, and justice sectors was launched in 2006. The Administrative Tribunal, an independent body, ensures the legality of government spending, but its lack of resources and educated workers hampers its effectiveness.

Courts that are understaffed and influenced by the executive branch often refuse to prosecute corruption cases, and the legislature cannot win enough votes together to pass stronger laws or appoint an ombudsperson to oversee the executive branch. The Central Office for the Fight Against Corruption can investigate corruption, but cannot prosecute it.

ECONOMY

Overview

Mozambique was one of the poorest countries in the world when it gained independence in 1975. The situation was made worse by a 15-year civil war. Macroeconomic reforms by the government and increased political stability, donor assistance, and investment have improved the economic situation. Still, much of the population has

no access to clean water or electricity, and only 8 percent of the population over the age of 7 is employed in the formal economy — 75 percent work informally.

The government relies on development aid for half of its annual budget, and the country imports more than it exports. Other challenges include corruption and frequent natural disasters such as droughts and floods.

Economic Statistics

Gross Domestic Product	US$9.7 billion (2009 est.)
GDP Growth Rate	4.8%
Per Capita GDP	US$869
Inflation Rate	4.2%
Budget Revenues	US$2.4 billion
Budget Expenditures	US$3.3 billion
National Debt	US$2.5 billion
Unemployment Rate	21%
Total Value of Imports	US$3.5 billion
Import Commodities	Agricultural products: 15.2%; Fuels and mining products: 14.7%; Manufactures: 53% ; Other 17.1%
Import Partners	South Africa: 46.8%; Australia: 12.2%; China: 8.3%; U.S.: 6.9% ; Other: 25.8%
Total Value of Exports	US$2.7 billion
Export Commodities	Agricultural products: 24.8%; Fuels and mining products: 68.4%; Manufactures: 5.4%; Other 1.4%

Export Partners	South Africa: 15.3%; Italy: 13.2%; Spain: 10.1%; Belgium: 9.9%; Other: 51.5%
Labor Force Composition	Agriculture: 81%; Industry: 6%; Services: 13%

Economic Aid

Total official development aid (ODA) in Mozambique for 2008 was US$1.8 billion. The largest donors were the European Commission (US$224 million); World Bank (US$219 million); USAID (US$168 million); African Development Bank (US$164 million); United Nations (US$147 million); United Kingdom (US$117 million); and Sweden (US$115 million). Nearly US$800 million of this assistance goes toward infrastructure development, and US$400 million goes into the country's budget.

Mozambique receives much of its aid from Programme Aid Partners. They support the country's budget and fund development projects. In return, Mozambique works toward reducing poverty, increasing democracy, and improving human rights. The total budget support from the Programme Aid Partners is US$455 million for 2009, with a further US$361 million to fund various development projects over the next 5 years. The amount each country of the program contributes is determined in bilateral agreements with Mozambique.

China has become an increasingly significant donor in recent years, contributing millions of dollars in long-term loans. Mozambique also signed a 5-year, US$500 million compact with the Millennium Challenge Corporation in 2009, consisting of grants for specific programs to combat poverty and increase economic growth.

Market in Central Vilankulo

Mozambique was declared eligible for the Highly Indebted Poor Countries Initiative in 1998 to receive debt relief of US$4.3 billion. It qualified for the program in 2001.

Banking Services

There are 13 commercial banks, of which all are foreign owned, though the government retains shares in two: *Banco Internacional de Mocambique* and *Banco de Desenvolvimento e Comercio*. *Banco Internacional de Mocambique* controls 48 percent of the loan market, 52 percent of the deposit market, and 67 percent of all other banking operations.

The banking industry is highly regulated, and the central bank often changes rules without consulting others. Non-exporting companies must borrow in local currency rather than foreign exchange, which may result in higher and less stable interest rates and increased risk. The government pressures banks to set up branches in remote areas, however, the banks in these areas must often supply their own power and satellite links, resulting in smaller profits. Mobile banks, or armored vehicles equipped with fingerprint recognition, updated account information, and safes bring banking services to rural areas.

There are 55 microfinance institutions operating in 7 provinces. The insurance sector is dominated by a state-owned firm, and capital markets are very small. Foreign-owned commercial banks in Mozambique include the following:

- Millennium BIM
- Barclays Bank
- Standard Bank
- Banco Comercial e de Investimentos (Fomento)

- Banco Internacional de Comercio
- Banco de Desenvolvimento e Comércio (First National Bank)
- Mauritius Commercial Bank
- African Banking Corporation
- First National Bank
- Banco Mercantil e de Investimento
- Moza Banco

No U.S. banks operate in Mozambique, but Chase Manhattan and Citibank offer financial and lending services from South Africa.

Natural Resources

Energy resources in Mozambique include natural gas, coal, and running water for hydropower. Mineral resources include iron ore, salt, gemstones, gold, phosphate, tantalite, titanium, and bauxite.

Water pollution is the most significant environmental issue in Mozambique and comes from soil erosion, industrial — particularly mining — wastes, ship traffic, and inadequate sewage systems. Irrigation contributes to saline soil, which also occurs naturally in southern Mozambique. Other environmental issues include desertification, deforestation, and over fishing.

Industry

Major industries in Mozambique include mining, manufacturing, and tourism. Industry is heavily regulated; workers may not work long hours and are difficult to fire, investments must be screened, and the bureaucracy is complex and corrupt. Many labor, health, safety, and environmental regulations are not enforced, or are enforced irregularly to gain revenue from fines. Officials may attempt to enforce outdated regulation still on the books in attempt to gain favors or bribes.

Mining

Mozambique's mining sector has been growing rapidly. Since 2003, companies from South Africa, Russia, Brazil, India, and

Agriculture

other countries have been buying shares in Mozambique's mines. Despite the challenges of corruption and inadequate infrastructure, the government has been attempting to improve the industry's prospects by promoting its mineral exports and clarifying the license-granting process. Most minerals, including gold, copper, iron ore, lead, and bauxite, are found in the western part of the country along the Manhica Belt. Oil and gas exploration are taking place in the Ruvuma Basin.

The titanium mine in Moma City, owned by Kenmare Resources, opened in 2007 and expects to produce 800,000 tons of ilmenite — the main titanium-bearing mineral — as well as titanium dioxide and zircon per year for the next 20 years.

An open cast coal mine is being constructed in Moatize, in the province of Tete. The mine will be operated by Vale, a Brazilian company, and is expected to produce 11 million tons of coking and thermal coal per year. More than half will be used to supply electricity for Mozambique, and there will be a coal-fired power station near the mine. Other companies are building coal mines in the area, as well.

Manufacturing

Manufacturing accounted for 13 percent of Mozambique's GDP in 2007, but is dominated by mega projects such as the Mozal aluminum smelter outside Maputo. In 2007, aluminum exports were 60.8 percent of all exports. The smelter is operated by BHP Billiton and became operational in 2000. It produces standard aluminum ingots.

The Oilmoz oil refinery in Maputo is expected to be completed by 2013. It will cost about US$8 billion to build, and its total capacity will be about 350,000 barrels per day, most of which will be

exported to other southern African countries. The refinery will also include a 500 megawatt gas-fired power station. In Nacala, the Ayr Petro-Nacala oil refinery will have a capacity of 300,000 barrels per day. The project is budgeted at US$5 billion and will start producing in 2010.

Mozambique's industrial center is in the south, near Maputo, which has better infrastructure. Other manufacturing industries include cement, beverages, and tobacco processing. Food and tobacco processing centers are frequently located near ports, and the government has numerous incentives to promote the sector. Before the completion of the Mozal aluminum smelter, food and tobacco processing was the largest part of Mozambique's manufacturing industry. Apparel manufacturing is concentrated in Maputo and Beira, often in designated industrial zones, and employs about 1,400 people.

Tourism

Tourism, including ecotourism, and cultural tourism, is a major industry. It has been growing in recent years — 11.8 percent in 2007 — and employs more than 35,000 people. Tourist destinations generally include resorts and wildlife reserves. The industry has inadequate infrastructure, particularly in rural areas, and the government has provided tax rebates to private companies that establish their own infrastructure.

Foreign Investment

Foreign Direct Investment (FDI) in Mozambique was very low—under US$100 million—until 1998. Since then, it has averaged around US$200 million annually, and 2007 was a record year with US$430 million. China is a major investor in the country and has contributed many infrastructure improvements.

Investors are attracted to Mozambique's tourism potential and the funds provided to it by the Millennium Challenge Corporation. The government has been privatizing state-owned companies rapidly in recent years, opening the door to increased foreign investment. The government also offers tax incentives to foreign investors, particularly in the special economic zone surrounding the deepwater port of Nacala established in 2007 and designated Rapid Development Zones.

Challenges to FDI include weak property rights, widespread corruption, a shortage of educated workers, and an inefficient regulatory environment. Firing workers is expensive, and there are strict regulations on the number of work hours. The judiciary is weak, and contract enforcement cannot be assured. Poor infrastructure such as roads and power supplies also discourages investment.

In 2007, FDI in Mozambique was US$430 million, or 2 percent of the GDP. FDI is centered in the minerals, industry, tourism, services, agriculture, and agro-industry sectors. Mega projects include the Mozal aluminum smelter and the Sasol natural gas project.

The following countries invest in Mozambique:

- China
- United States
- Switzerland
- Mauritius
- South Africa
- United Kingdom
- Portugal

Outlook

Mozambique has strong potential for growth given its surplus of untapped natural resources, arable land, and labor. Mozambique recently had much of its debt canceled and receives nearly US$2 billion in ODA each year.

Investment is increasing, but the non-agricultural sectors of the economy are largely driven by mega projects such as the Mozal aluminum smelter and the Cahora Bassa Dam. New power sources and mines are being built, and the tourism industry holds much potential, though it is hampered by the lack of infrastructure.

Most of the labor force works in agriculture as subsistence farmers who have little money to invest and are particularly vulnerable to natural disasters such as flooding or drought. The situation is made worse by land policy that does not allow leaseholders to use land as collateral for loans. Consequently, agricultural efficiency is low, and much of the arable land is not being used. Mozambique's economic challenges include providing sufficient water and sanitation, health services, education, infrastructure, corruption, and strengthening the judiciary to increase investor confidence.

Growth may slow in the short term due to the decreasing value of Mozambique's exports on the world market and the effect of the 2009 global financial crisis on donors and investors. In the medium to long term, government reforms, mega projects, development, and numerous agricultural improvements will improve Mozambique's economy.

THREAT

Crime

Crime is prevalent in Maputo and consists mainly of carjacking, armed robberies, home invasions, petty theft, pocket picking, and scams. Violent crimes occur more often in urban areas and along major highways. Urban areas are particularly dangerous at night, although daytime attacks are common for joggers and pedestrians. In rural areas, crimes of opportunity are much more common; for example, petty theft, burglary, and pocket picking. U.S. citizens are not directly targeted; however, if a person appears to be wealthy, his or her chances of becoming a victim are greater than those of people who blend in with the crowd and do not open display their wealth.

Travel Security

Using the main highways and/or heavily traveled roads is paramount when traveling within Mozambique because several hundred thousand mines were planted throughout Mozambique during the last three decades of conflict. There have been ongoing mine clearing operations performed by the FADM and NGOs; however, it is still not safe to travel on infrequently travelled roads because weather phenomena, such as monsoons, cause landslides that can wash mines from uncleared areas into cleared areas. Conditions particular to the rest of southern Africa also apply to Mozambique, such as poorly maintained roads outside of major cities, loose livestock in rural areas, drunk drivers, and poor drivers.

Drug Trafficking

Mozambique is one of the largest drug trafficking hubs in Africa. Drug trafficking grew expansively during the 1990s when inter-

national drug dealers started to look for new, uncontrolled routes. Mozambique's long coastline, numerous ports, and many isolated islands were perfect locations. Drug dealers were able to bribe low paid state employees and police to ignore drug related activities.

Two significant transnational drug networks operate in Mozambique: a cocaine distribution network involving individuals from South America (Colombia and Brazil); and a heroin/marijuana/hashish/mandrax operation involving Pakistani and Mozambican citizens belonging to the local Pakistani community. The cocaine originates in Colombia and transported through Brazil. Heroin is transported from Pakistan to Dubai, then to Tanzania, and from there to Mozambique. Drugs from both operations are mostly for transshipment and warehoused prior to export.

Some cocaine is transported to other African countries such as Nigeria. Most of the onward trafficking of cocaine from Mozambique appears to be operated by Nigerian criminal networks; many of these criminal groups are well connected and are protected from prosecution by politicians. Heroin is shipped mainly to Europe while most of the hashish is rerouted to other countries within Africa. Mandrax use is mostly confined to South Africa. It is produced in and transported through Mozambique to the Western Cape province of South Africa; from there it is distributed to major northern markets including France, the UK, and the United States.

Indigenous drug production is limited to marijuana and a small, but growing number of mandrax laboratories. The local population mainly uses club drugs such as Ecstasy/MDMA, and marijuana; drug abuse has recently expanded to include mandrax and hashish.

Law Number 3/97 established the Central Cabinet for the Prevention and Fight against Drugs (GCPCD). It also defined

and established the juridical requirement concerning trafficking and consumption of narcotic drugs, psychotropic substances, and precursors. Mozambique's Anti-Drug Unit is part of the Criminal Investigation Directorate of the Commander-General of Police.

Foreign Intelligence Services

The State Information and Security Service (SISE) was established by Act No. 20/91 on 23 August 1991. The organization reports directly to the president of the Republic of Mozambique, but is overseen by the National Information Commission (COMINFO). SISE's purpose is to gather information and provide analysis for the president. The SISE has no law enforcement powers.

Forces responsible for internal security under the Ministry of Interior include the Criminal Investigation Police (PIC), the Mozambican National Police (PRM), and the Special Forces. The Special Forces consist of the Rapid Reaction Police (PIR), which is responsible for physical protection, providing border guards, and special task forces. The PIC is in charge of criminal investigations, including the anti-drug unit. Law 19/92 of 31 December 1992 created the PRM. PIC's responsibilities include ensuring law and order; maintaining public safety and security; protecting the people and their property; and preventing crime. The commander and deputy commander of the PRM are appointed by the president of the Republic of Mozambique; however, the PRM is overseen by the National Police Affairs Commission.

There are no confirmed external intelligence threats. A few countries share communications with Mozambique. The countries include the Scandinavian nations and European nations such as Italy, the Netherlands, and Portugal.

ARMED FORCES

After the protracted civil war ended in 1992, the government of Mozambique had the difficult task of combining FRELIMO soldiers and RENAMO rebels into a singular force called the Armed Forces for the Defense of Mozambique (FADM). The organization was expected to have between 30,000 and 35,000 personnel. The FADM has yet to meet this number, primarily because very few 18-year-olds actually register much less report when ordered. On average, over 90 percent of 18-year-olds refuse to register. While there are judicial mechanisms in place to punish those who fail to register, these young men and women are rarely prosecuted.

The FADM is increasingly engaged in peacekeeping operations and has provided military observers for several international peacekeeping missions and contributed troops for the African Union's peacekeeping operation in Burundi.

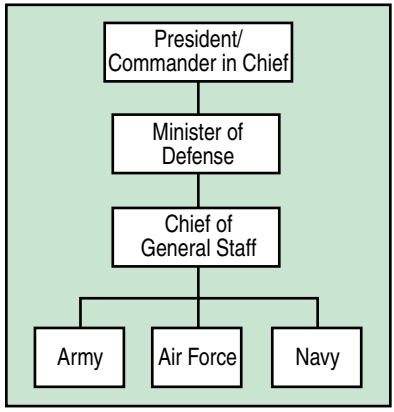
Mozambique is a member of the Southern African Development Community (SADC) and a signatory to its 2003 defense pact. Mozambique contributes forces to the African Union (AU) Standby Force SADC Brigade. The brigade will participate in peacekeeping operations and provide the AU a rapid intervention capability as one of five regional brigades on the African continent.

Mission of the Armed Forces

The mission of the FADM, as outlined in Article 59 of the constitution, specifies that the FADM will defend national independence, preserve the country's sovereignty and integrity, and guarantee normal functioning of institutions and the security of its citizens against any armed aggression.

Structure of the National Defense Organization

The president of Mozambique is the commander in chief of FADM and appoints the minister of defense and chief of the general staff. The president of Mozambique chairs the National Defense and Security Council and its members include the service chiefs of all the security forces: Army, Navy, Air Force, and national police. This council brings together all the security organs under one umbrella giving the president the ability to hold his service chiefs personally accountable.



Defense Structure

The minister of defense is accountable to parliament and the public while also chairing the defense council, which is composed of the chief of general staff, chief of the Army, chief of the Navy, and chief of the Air Force. This council only brings together the service chiefs of the armed forces; it does not include the police, which fall under the Ministry of Interior.

Personnel

Under the terms of the 1992 General Peace Agreement (GPA) ending Mozambique's civil war, the armed forces reorganized to integrate fighters from both sides of the conflict. The FADM is authorized 30,000 personnel, including 24,000 in the Army. Although more than 90,000 combatants demobilized into civil society, and

conscription has been reinstated, the underfunded FADM only numbers about half of its authorized strength.

The conscription law was amended in 1997 to include women. The FADM requires potential soldiers to be Mozambican citizens aged at least 18 years for voluntary service or 19 to 35 years for compulsory service for men and women.

Key Defense Personnel

President; Commander in Chief	Armando Guebuza
Minister of National Defense	Filipe Nhussi
Chief of General Staff	Gen. Paulino Jose Macaringue

Terms of Service

FADM members are expected to complete an initial 2 years of service. The military is not viewed as path for career advancement,

Minister of National Defense, Filipe Nhussi (left), and Chief of General Staff, Gen. Paulino Macaringue

and little is done to punish those who do not register when they are 18 years old or enlist when ordered. Women are allowed to serve in the FADM in either the officer or enlisted ranks. It is not known if women are restricted to non-combat roles.

Training

Training has been provided by the United Kingdom, China, Portugal, France, Spain, Zimbabwe (1990s), and the United States. Training appears to be completed by select unit formations as opposed to entire companies, which likely hampers any coherent tactical advantage gained.

In 1996, Mozambique signed a defense cooperation agreement with South Africa that covers joint training and field exercises, along with the exchange of military intelligence and cooperation between the country's medical services.

Mozambique signed a defense agreement with India in 2006 covering training of Mozambican personnel, with a specific emphasis on the training of Mozambique's Navy to protect the coastline.

Training Institutions

The FADM is constructing a peacekeeping training center at Moamba, about 60 kilometers northwest of Maputo. It will prepare military and civilian police personnel for peacekeeping duties. The facility was inaugurated in October 2008, and some peacekeeping training is being conducted there, but construction is not yet complete. The FADM also operates a logistics training center at the Ministry of Defense in Maputo, and an engineering school in Boguisso.

Officer

The FADM has an officer training base located in Nampula (located in northern Mozambique). The Nampula base is primarily used for basic, entry-level job training of soldiers before they join their unit for further, more in-depth training.

Enlisted

The Manhica training center, located north of Maputo, is responsible for training most conscripts. In the past, some have gone through basic training at the barracks in Montepuez (Cabo Delgado), though no further information is available as to why. It is assessed, however, officers and enlisted undergo the same types of basic training.

Capability Evaluation

The equipment the FADM currently owns has been poorly maintained and, in most cases, is non-functional. There is very little money for spare parts and maintenance. There are no indications that the government can fix this problem, because it relies heavily on donor support to fund the FADM and donors are very hesitant to directly finance the military.

Budgetary Expenditures

Since gaining its independence, Mozambique has seen its defense budget decline rapidly; currently, it rests at 0.8 percent of GDP (2008). The budget for the FADM is not expected to rise because of the lack of a perceived threat against the sovereignty of Mozambique and overarching economic problems throughout Mozambique's government.

Morale

Morale is low in the FADM due to the perceived lack of care given by the government; specifically, the lack of pay increases and slow equipment replacements. As an example of out-of-date equipment, the FADM is still using Soviet-era equipment from the civil war.

Hardware Conditions

There is little money to keep ammunition under controlled and safe conditions, which leads to occasional unintended explosions within FADM storage facilities. An explosion in 2007 in Maputo killed more than 100 people. Ammunition and explosives have been kept under poor conditions for several years, with the government unable to account for types or locations of ammunition since the civil war.

Parts Availability and Maintenance

Very little of the FADM's equipment remains serviceable. In fact, the overall FADM budget does not directly budget for maintenance. So, the FADM is entirely dependent on the local commanders to budget for their own maintenance needs. Consequently, most equipment is broken and/or derelict.

Army

Mission

The Mozambique Army defends the nation's sovereignty and integrity and defends its citizens against armed aggression. The Army may also assist the police to restore order during domestic emergencies. Because Mozambique faces no threat from its neighbors, the army focuses on support to civil authorities, primarily through humanitarian assistance and infrastructure development.

Organization

The Mozambique Army is believed to have the following units:

- 7 infantry battalions
- 3 Special Forces battalions
- 1 multiple rocket launcher battalion
- 2 artillery battalions
- 2 engineer battalions

The army's vehicle inventory suggests that it has mechanized units, but equipment readiness levels are very low, and those units are probably not mission capable.

Facilities

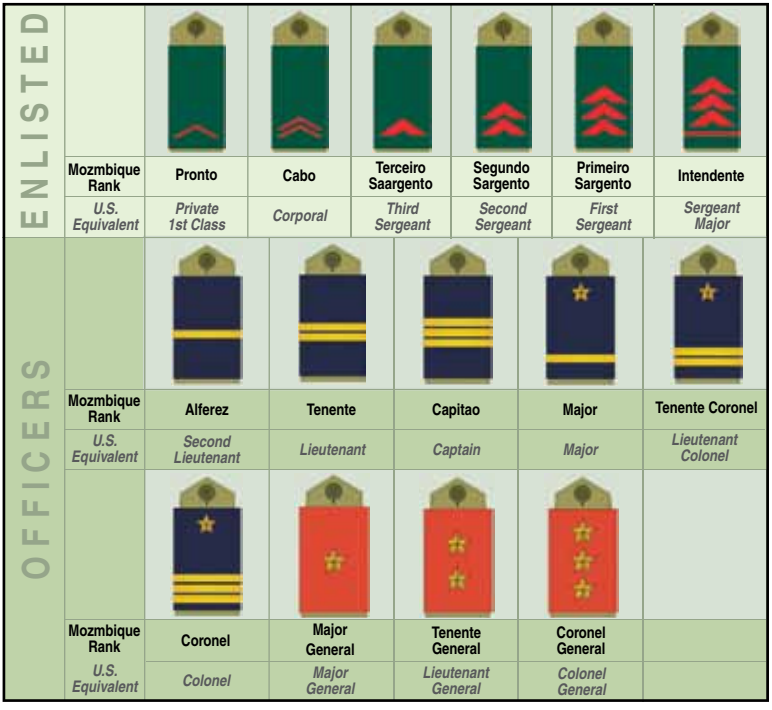
Army headquarters is located in Maputo. Units are stationed throughout the country, with major garrisons located in the provincial capitals. The military academy is located in Nampula, and recruit training centers are in Manhica and Montepuez. A new peacekeeping training center is being constructed at Moamba.

Personnel

The Army Chief of Staff is MGen Gracas Tomas Chongo.

Military service is compulsory, but only 1,000 Mozambicans are drafted annually. Soldiers suffer from poor living conditions, with inadequate housing and medical treatment, low pay, and food and water shortages. As a result, many Mozambicans refuse to register for the draft. The Army's high attrition rate and limited recruiting have resulted in a grossly top-heavy rank structure.

While the GPA directed an equal representation of former government and rebel forces, government loyalists continue to dominate



Army Rank Insignia

the leadership, rank and file. Partisanship and distrust characterize an army the GPA designed to symbolize national reconciliation.

Doctrine

The army has no capable doctrine. After undergoing major transitions from a people's liberation army to a conventional force patronized by the East, then the West, the army has incorporated former adversaries with diverse experiences and capabilities. Operating without a realistic threat; lacking funding, training, and equipment;

and serving a nation more in need of development and humanitarian assistance than war-fighting skills, the Army focuses on support to civilian authorities and conducts few military operations.

Training

Initial entry training is conducted at Montepuez and Manhica military training centers. Once soldiers graduate, they are put to work in humanitarian and infrastructure development tasks and seldom train again. Officers attend the Samora Machel Military Academy in Nampula for 4 years. Officers and noncommissioned officers have more opportunities to train in foreign schools than the few soldiers they lead.

Equipment

Equipment shortages and low readiness rates severely affect army capabilities. The Mozambique Army is largely a dismounted force with limited support from other branch.

Type	**Role**
T-55	Main Battle Tank
BTR-60	Armored Personnel Carrier
CASSPIR	Armored Personnel Carrier
BTR-152	Armored Personnel Carrier
BRDM-1/2	Reconnaissance Vehicle

Artillery

Type	**Role**
122-mm BM-21	Multiple Rocket Launcher
152-mm D-1	Howitzer
122-mm D-30	Howitzer

Type	Role
105-mm M101	Howitzer
130-mm M-46	Field Gun
100-mm BS-3	Field Gun
85-mm Type 56	Field Gun
85-mm D-44	Field Gun
76-mm ZIS-3 (M1942)	Field Gun
120-mm M-38/43	Mortar
82 mm M-43	Mortar

Air Defense

Type	Role
57-mm ZSU-57-2	Self-Propelled Air Defense Artillery
57-mm S-60	Air Defense Artillery
37-mm M1939	Air Defense Artillery
23-mm ZU-23	Air Defense Artillery
SA-3 GOA	Surface-to-Air Missile
9K31 Strela-1 (SA-9 'Gaskin')	Surface-to-Air Missile
Strela-2 (SA-7 'Grail')	MANPADS

Antitank

Type	Role
107-mm B-11	Recoilless Rifle
82-mm B-10	Recoilless Gun
85-mm D-48	Antitank Gun
9K11/9M14 Malyutka (AT-3)	Antitank Guided Missile
9K111/9M111 Fagot (AT-4)	Antitank Guided Missile

Trucks

Type	Role
UNIMOG 1100L (4 x 4)	Cargo Truck
SAMIL 20 (4 x 4)	Cargo Truck
SAMIL 50 (4 x 4)	Cargo Truck
Ural 375D (6 x 6)	Cargo Truck
M-35A2 (6 x 6)	Cargo Truck
Jonga (4 x 4)	Utility Truck
UAZ-469 (4 x 4)	Utility Truck

Infantry Weapons

Type	Role
9-mm Walther P-38	Pistol
9-mm FN 35	Pistol
9-mm Makarov	Pistol
9-mm Stechkin	Pistol
7.62-mm FN-FAL	Rifle
7.62-mm Model 58 (VZ58)	Assault Rifle
7.62-mm AK-Series	Assault Rifle
7.62-mm Model 61	Submachinegun
7.62-mm SKS	Carbine
7.62-mm RPK	Light Machinegun
7.62-mm PK-Series	General Purpose Machinegun
7.62-mm SGM	Medium Machinegun
12.7-mm DShK	Heavy Machinegun
30-mm AGS-17	Grenade Launcher

Helicopters

Type	Role
Mi-24/35 HIND	Attack
Mi-8T HIP	Utility

Air Force

The Mozambique Air Force is a force in name only. Severe flooding during 2000 exposed the Air Force's deficiencies when it was revealed Mozambique only had two helicopters, and neither was functional at the time. Moreover, as of November 2009, the Air Force had no operational combat aircraft. The end of the Cold War saw the withdrawal of Soviet bloc maintenance personnel deployed to Mozambique, which essentially ended repairs to Mozambique's aircraft, as the Mozambicans were rarely trained in maintenance/repair skills. The lack of an outside threat and no need to protect Mozambique's airspace from foreign or domestic enemies has led to significant funding shortages in Mozambique's budget.

Facilities

The Air Force operates bases in Maputo, Beira, Nampula, Nacala, and Tete. All air bases are considered non-operational, except for Maputo, where two MI-8 "Hip" utility helicopters were witnessed flying in March 2001, as are occasional flights by an An-26 transport aircraft.

Personnel

The Commander of the Air Force is MGen Jose Beca Chagua

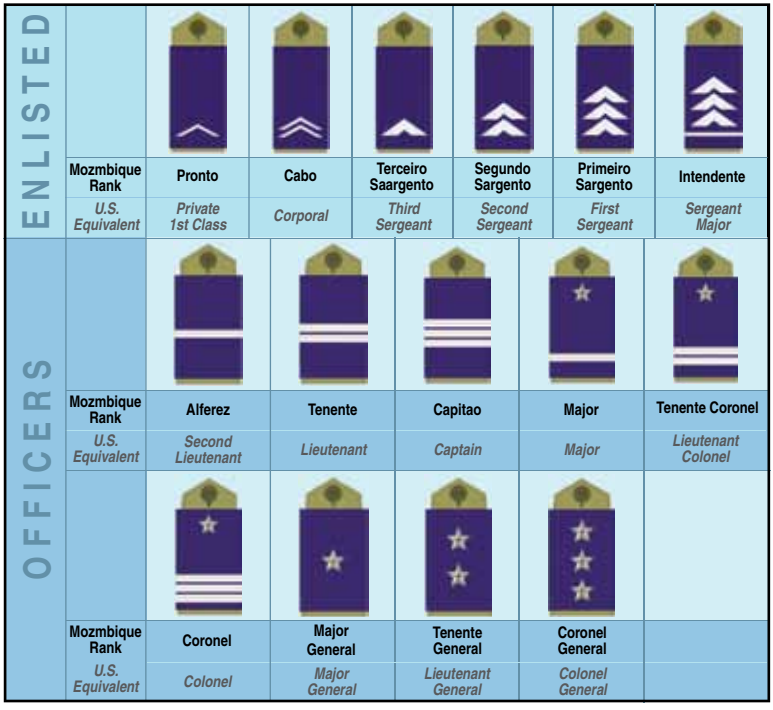
The Air Force consists of 1,000 personnel.

Doctrine

The Air Force has no comprehensible doctrine.

Training

While no official announcements have been made, it is assessed that Mozambique sends Air Force personnel out-of-country for



Air Force Rank Insignia

training to South Africa, Zimbabwe, Spain, Portugal, Angola, and Argentina. Consequently, few, if any, training areas exist in Mozambique for the Air Force.

Equipment

Since gaining its independence from Portugal in 1975, Mozambique has failed to maintain its aviation equipment. In 1977, the Soviets re-equipped Mozambique with aircraft and a ground-based radar early warning system covering Maputo and Beira. Operational ac-

tivity remained low even after this assistance, and the aircraft has fallen into disrepair.

Zimbabwe provided air force support to Mozambique during the 1978–1980 period of inaction. This was followed by a brief spike in operational activity by the Mozambique Air Force from 1981 to 1983, in response to a RENAMO insurgent campaign against Mozambique's government. Since then, there has been no real air force activity.

Navy

Though tasked to provide security within territorial waters, the Mozambique Navy effectively is a riverine force and does not have a blue water capability. In fact, the Mozambique Navy possesses only the ability to provide limited search-and-rescue services in localized areas, and would be unable to sustain coastal patrols or protect fisheries.

Mission

The Mozambique Navy is responsible for security within the country's territorial waters.

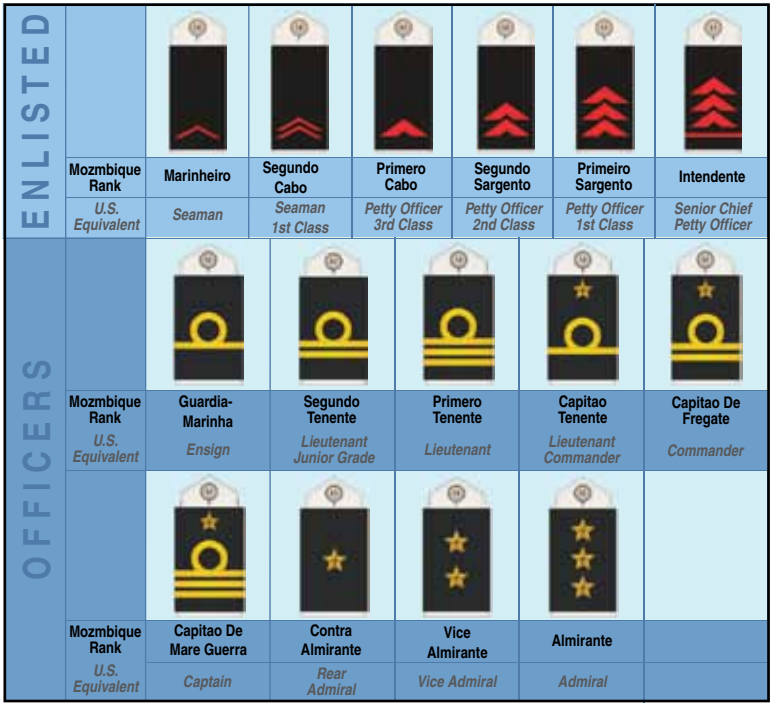
Facilities

There is a Marine Training Center in Catembe located on the Bay of Maputo. There are bases also located at Beira, Inhambane, Maputo (Naval HQ), Metangula, Nacala, Pemba, and Tete.

Personnel

The Commander of the Navy is Rear Admiral Patricio Jotamo.

The Mozambique Navy has an estimated 200 personnel and no known reserve units.



Navy Rank Insignia

Doctrine

The Mozambique Navy has no comprehensible doctrine of its own, but participated in the 1996 SADC discussions on the shaping of regional maritime cooperation and operations doctrine.

Training

The South Africa Navy provides an extensive amount of training to the Mozambique Navy in areas such as hydrographics and equipment recapitalization. In July 2003, the India Navy provided

maritime security and training for over 100 Mozambican sailors in concurrence with African Union Summit held in Maputo The U.S. Navy has provided VBSS, damage control, first aid, small boat operations, and small boat handling to more than 50 personnel from the Mozambique Navy from 2007 to 2009.

Equipment

Insufficient funding and poor maintenance practices have rendered the Navy's fleet inadequate, with a reported 12 patrol boats in the Navy's inventory.

Coastal protection capabilities improved with the delivery of an AIS system in 2008, provided by the U.S. government.

Naval Infantry

The Mozambique Naval Infantry is incapable of carrying out its primary mission. Like the rest of the FADM, it is experiencing many financial, personnel, and political issues. The Naval Infantry is slowly making improvements, but is unlikely to become a self-sustaining, mission-capable force in the next 5 to 10 years.

Mission

The Naval Infantry's mission is to provide security aboard naval vessels and conduct raids and search and seizure operations in accordance with the Navy's mission to protect the security and integrity of Mozambique's territorial waters.

Personnel

The Mozambique Naval Infantry is estimated to have approximately 150 to 250 personnel.

Marine Training Exercise

Coastal Defense

Since the end of the civil war, the main focus of the military budget has been the Army. As a result, the Navy's vessels have remained in port slowly rotting away. Those vessels and parts not destroyed by rust have been stolen, borrowed as a replacement on another vessel, or sold. There are only approximately 200 personnel assigned to the Navy. Considering the handful of ships the Navy maintains for coastal defense, it is assessed the vessels are sitting in port derelict or have been sold. Mozambique has had to sign defense cooperation agreements with South Africa and France, along with financial assistance by the World Wildlife Fund, to help secure Mozambique's 2,470-kilometer (1,535-mile) coastline. Mozambique cannot project a sustained presence over its own coastline.

National Police

The Police of the Republic of Mozambique (PRM) is considered a marginally effective law enforcement entity. There have been many incidents of excessive force and other human rights violations, particularly during election years, which has led much of the public to fear and distrust the PRM.

Corruption, poor equipment, and a lack of training have undermined the government's attempts to enact the 2004 strategic plan of action and modernization intended to make the force more professional and effective.

Mission

The constitutionally mandated mission of the Police of the Republic of Mozambique (PRM) is to provide internal security and enforce all national and local laws. The PRM's duties include guarding rail and major road routes in rural areas, protecting state facilities, controlling traffic, patrolling the borders, and providing basic law enforcement throughout the country.

Organization

The PRM is commanded by Commandant Gen Jorge Henrique da Costa Khalau, who is subordinate to the Minister of Interior, Jose Pacheco. The agency is responsible for national crime prevention and law enforcement. It consists of a general command, which includes 5 directorates (public order and security, criminal investigation, special forces, personnel and training, and logistics and finance) and the 11 provincial commands (128 district commands within provinces).

Capabilities

The PRM does not have a good reputation for responding to crime that occurs in rural areas. Corruption and bribery among PRM officers are recognized as large problems in these areas. Response by PRM units in urban areas, such as Maputo, is more effective and professional.

Jurisdiction

The PRM has authority to provide internal security throughout the country. While their jurisdiction is broad, the PRM has a strong presence in major urban areas, but little presence in rural or border areas.

Size and Strength

The PRM is estimated to have 18,000 to 20,000 members.

PRM Police Women

Training

The PRM is poorly trained with personnel receiving approximately 6 months of education and training before being put in the field. Operational procedures are not finely tuned, nor are they close to efficiency. The police force in general is severely underbudgeted for resources like vehicles, equipment, land, and uniforms.

Officer Training

Recent efforts by the Ministry of Interior to provide adequate training for its officers have improved the national police capabilities. However, the effects of years of poor training are still evident in many career officers.

Training includes partnering with other countries in the region, such as South Africa, and NGO groups, such as the Mozambique Christian Council's weapons collection program. It likely will take several years to sufficiently increase the professionalism and effectiveness of Mozambique's security forces.

Basic Training

In May 1999, the government opened its police academy in Maputo. There are two main courses of training. The first is an orientation course for new cadets; the second is the main course of basic law enforcement instruction and physical fitness.

Advanced Training

The Academy of Political Sciences (ACIPOL) conducts advanced training exclusively for officers of the PRM. The courses include police science, exact sciences, management, human sciences, and social sciences. The ACIPOL, which opened in 2000 ,has helped to standardize the skills required for basic law enforcement. The

U.S. government has agreed to provide support in developing new curriculum and training standards.

Specialized Training

In 2005, the Ministry of Interior conducted Trafficking in Persons training for 90 officers in Maputo, Zambezia, and Nampula provinces. The Ministry has been trying to find new ways to combat the problem of human trafficking in Mozambique.

International Training Opportunities

In March 2006, the International Law Enforcement Academy, Gaborone, conducted a criminal investigation course for mid-level police officers. Officers from Angola, Lesotho, Seychelles, Swaziland, Uganda, Zambia, and Mozambique participated.

Domestic Security Forces

The Rapid Intervention Police (FIR) is responsible for enforcing internal stability. It is considered better trained and equipped than the PRM. The agency is subordinate to the Ministry of Interior. Most of the officers are former military members. The FIR is estimated to have 4,000 to 6,000 members.

APPENDIX A:
EQUIPMENT RECOGNITION

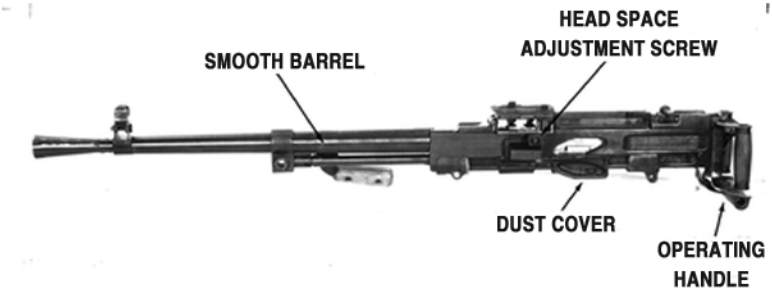
INFANTRY WEAPONS

7.62-mm General Purpose Machinegun PK Series

Caliber	7.62 x 54R mm
Effective Range	1,000 m
Cyclic Rate of Fire	650 to 720 rounds/minute
Operation	Gas, automatic
Feed Device	25-round metallic-link belts, joined, in 100- or 250-round box
Weight Unloaded	8.4 kg
Length Overall	1,173 mm

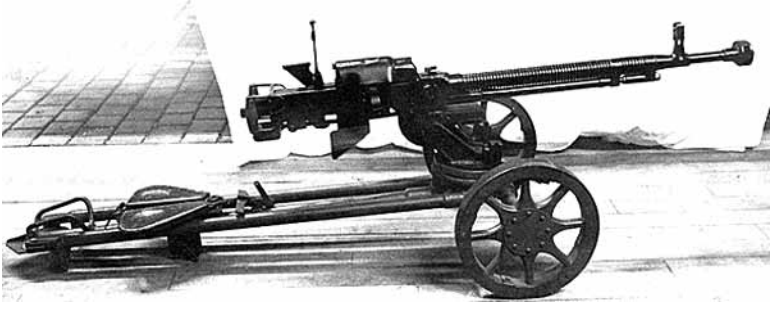
NOTE: PK and PKM are the basic models; with bipod, they fill the role of a light machinegun. The PKS and PKMS, mounted on a tripod, fill the heavy-machinegun role. PKT is a PK modified for use as a coaxial machinegun. PKB is a PKT modified for pintle mounting.

SGM 7.62mm



Maximum Effective Range	1,000 m
Caliber	7.62-mm x 54-mm
System of Operation	gas, automatic
Overall Length	1,120-mm
Feed	250-rd linked belt

12.7-mm Heavy Machinegun DShK

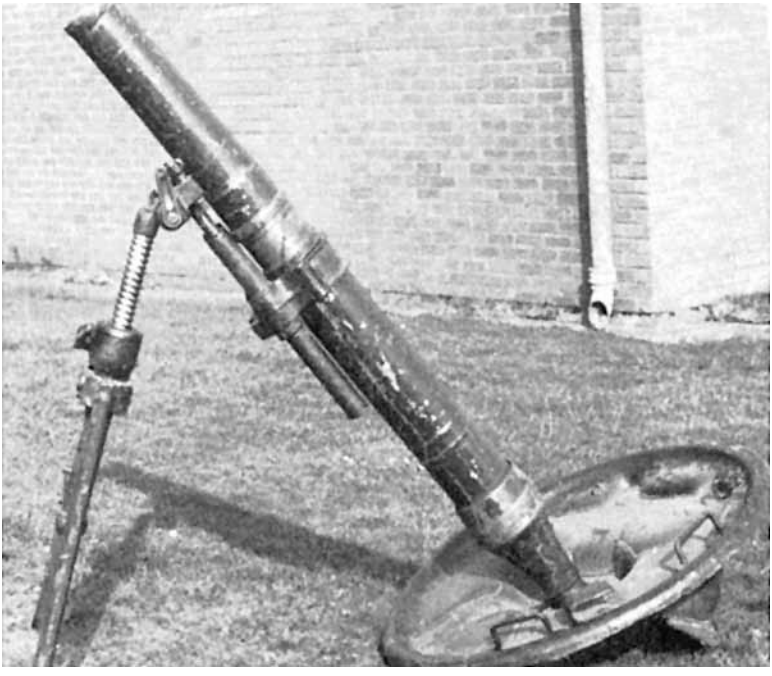


Cartridge	12.7 x 107 mm (API, API-T, HEI)
Effective Range	1,500 m
Cyclic Rate of Fire	575 to 500 rounds/minute
Operation	Gas blowback, air cooled, automatic
Feed Device	Belt
Weight Empty	35.7 kg
Overall Length	1.59 m

30-mm Automatic Grenade Launcher AGS-17

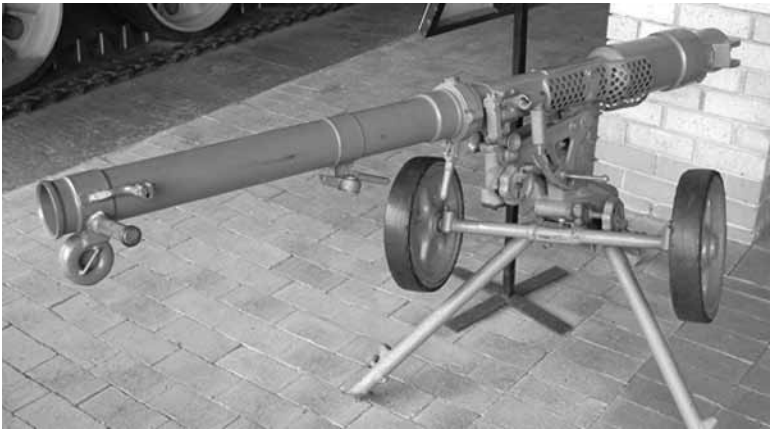
Cartridge	30 x 131.7-mm HE-Frag
Crew	2 to 3
Effective Range	1,200 m
Maximum Range	1,730 m
Rates of Fire	
Cyclic	400 rounds/minute
Automatic	58 to 87 rounds/minute
Single-Shot	45 rounds/minute
Lethal Radius	7 to 9 m
Method of Operation	Gas blowback, selective fire
Feed Device	29-round nondisintegrating-link belt fed from a drum magazine
Weight Unloaded	17.75 kg
Length Overall	840 mm

M-43 120-mm Mortar



Crew	6
Maximum Range	5,700 m
Rate of Fire	15-rds/min
Combat Weight	280 kg
Length	1.854 m
Width	1.62 m
Height	1.206 m
Bomb Weight	15.4 kg

B-10, 82mm, Recoilless Rifle



Max Range	400m
Max Indirect Fire	4,500m
Warhead Type	HEAT, HE/FRAG
Sight	DVO

ARMOR

Main Battle Tank T-55A

Crew	4
Armament	
Main	100-mm rifled cannon
Auxiliary	12.7-mm turret-mounted machinegun; 7.62-mm coaxial machinegun
Maximum Road Speed	50 km/h
Range	500 km (715 km using auxiliary drums)
Gradient	60 percent
Vertical Step	0.9 m
Fording	1.4 m
Combat Weight	36,000 kg
Length x Width x Height	9.0 x 3.3 x 2.3 m
Fuel Capacity	960 liters (plus two 200-liter drums)

Amphibious Infantry Fighting Vehicle BMP-1

Crew; Passengers	3; 6 to 8
Armament	73-mm smoothbore cannon or 14.5-mm heavy MG; coaxial 7.62-mm MG; AT-3 ATGMs
Maximum Road Speed	80 km/h (on water 6 to 8 km/h)
Range	550 to 600 km
Fording	Amphibious
Gradient/Side Slope	60/35 percent
Vertical Step	0.8 m
Trench	2.2 m
Combat Weight	13,500 kg
Length x Width x Height	6.7 x 2.9 x 2.2 m

BRDM-2

Crew/Passengers	4
Type	4 x 4
Armament	1 x 14.5-mm KPVT w/500-rds 1 x 7.62-mm PKVT w/2000-rds
Maximum Speed	100 km/h
Maximum Range	750 km
Fuel Capacity	290 liters
Combat Weight	7,000 kg
Length	5.75 m
Width	2.35 m
Height	2.31 m
Night Vision	yes
NBC	yes
Fording	amphibious
Gradient	60 percent
Vertical Obstacle	0.4 m
Trench	1.25 m

BTR-152

Crew/Passengers	2 + 17
Type	6 x 6
Armament	1 x 7.62-mm SGMB MG w/1,250-rds
Maximum Range	600 km
Maximum Speed	75 km/h
Fuel Capacity	300 liters
Combat Weight	8,950 kg
Length	6.55 m
Width	2.32 m
Height	2.36 m
Night Vision	no
NBC	no
Fording	0.8 m
Gradient	55 percent
Vertical Obstacle	0.6 m
Trench	0.69 m

BTR-60PB

Crew/Passengers	3 + 8
Type	8 x 8
Armament	14.5 KPVT (Tank Heavy Machine Gun) w/ 500-rds 1 x 7.62-mm PKT MG w/2,000-rds
Maximum Speed	80 km/h
Maximum Range	500 km
Fuel Capacity	290 liters
Combat Weight	10,300 kg
Length	7.56 m
Width	2.82 m
Height	2.31 m
Night Vision	yes
NBC	yes
Fording	amphibious
Gradient	60 percent
Vertical Obstacle	0.4 m
Trench	2 m

Comment: The BTR-60PB is the second upgrading of the BTR-60 series APC. Its predecessors were the open-toped BTR-60P and the armor roofed BTR-60A The BTR-60PB's major improvement is the addition of an armored turret armed with coaxially mounted 14.5 and 7.62-mm machineguns.

Armored Personnel Carrier RG-12

Crew; Passengers	2; 6 to 10
Armament	None mounted, firing ports provided
Ballistic Protection	STANAG 4569 Level 1
Mine Protection	STANAG 4569 Level 1
Maximum Speed	100 km/h
Range	1,000 km
Gradient/Side Slope	50/40 percent
Combat Weight	9,200 kg
Overall Length x Width x Height	5.2 x 2.5 x 2.6 m
Fuel Capacity	260 liters of diesel

NOTE: a 25-liter tank for drinking water is provided on board.

Armored Personnel Carrier, CASSPIR MKIII

Crew; Passengers	2; 10
Armament	SS-77 5.56-mm Light Machine Gun
Ballistic Protection	STANAG 4569 Level 1
Mine Protection	STANAG 4569 Level 4b
Maximum Speed	90 km/h
Range	850 km
Gradient/Side Slope	65/40 percent
Combat Weight	12,600 kg
Overall Length x Width x Height	6.8 x 2.5 x 3.12 m
Fuel Capacity	220 liters of diesel

ARTILLERY

76-mm Field Gun ZIS-3 (M1942)

Crew; Section Size	5; 6
Caliber	76.2 mm x 41.6
Range	
Direct Fire	820 m
Indirect Fire	1,500 to 13,290 m
Rate of Fire	
Burst	25 rounds/minute
Normal	15 rounds/minute
Sustained	8 rounds/minute
Traverse Limits	27 degrees left or right
Elevation Limits	–5 to +37 degrees
Travel Weight	1,116 kg
Travel Length x Width x Height	6.1 x 1.6 x 1.4 m
Emplacement/Displacement Time	1 minute

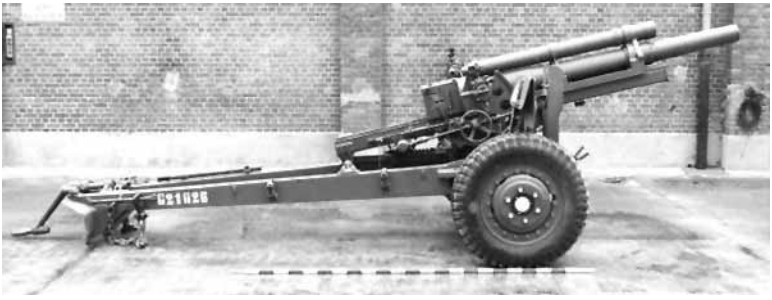
M-46 130-mm

Crew	7
Ammunition	Soviet 130-mm HE
Range Direct	1,170m
Range Minimum-Indirect Fire	5,400m
Maximum Range	27,150 m (conventional) 31,000 m (Using Yugo M79)
Rate of Fire	6-rds/min
Travel Weight	8,450 kg
Length	11.73m
Width	2.45m
Height	2.55m
Prime Mover	6 x 6 truck

122-mm Towed Gun-Howitzer D-30 Lyagushka

Crew	5
Gun Caliber	122-mm x 38
Ammunition Types	HE-frag.; HEAT; flechette; illumination; smoke
Range	
Direct Fire	1,000 m
Indirect Fire	4,000 to 15,300 m
Rate of Fire	
Burst	8 rounds per minute
Normal	6 rounds per minute
Sustained	4 rounds per minute
Traverse Limits	360 degrees
Elevation Limits	–7 to 70 degrees
Travel Weight	3,210 kg
Travel Length x Width x Height	5.40 x 1.95 x 1.7 m

M101-105mm



Crew	8
Ammunition	M1 Frag-HE 105mm/M60 smoke WP 105mm
Rate of Fire	10-rds/min
Range Direct	1,000m
Range Extended	15,000m
Range Conventional	11,160m
Emplacement/Displacement	2-3mins
Combat Weight	2,030 kg
Length	5.991 m
Width	3.65 m
Height	3.124 m
Prime Mover	6 x 6

BM-21 122-mm MRL

Crew	5
Armament	40 x 122-mm rockets
Rate of Fire	36-rds/20-sec
Max Range:	20,380 m
Reload Time	7 min
Maximum Speed	80 km/h
Maximum Range	525 km
Fuel Capacity	340 liters
Combat Weight	10,500 kg
Length	6.9 m
Width	2.5 m
Height	2.48 m

152 mm Howitzer D-1 (M1943)

Crew; Section Size	6; 7
Caliber	152.4 mm x 27.6
Range	
Direct Fire	800 m
Indirect Fire	4,000 to 12,400 m (conventional only)
Rate of Fire	
Burst	4 rounds/minute
Normal	4 rounds/minute
Sustained	3 rounds/minute
Emplacement/Displacement Time	2 minutes
Traverse Limits	18 degrees left or right
Elevation Limits	–3 to +64 degrees
Travel Weight	3,640 kg
Travel Length x Width x Height	7.6 x 2.0 x 1.9 m

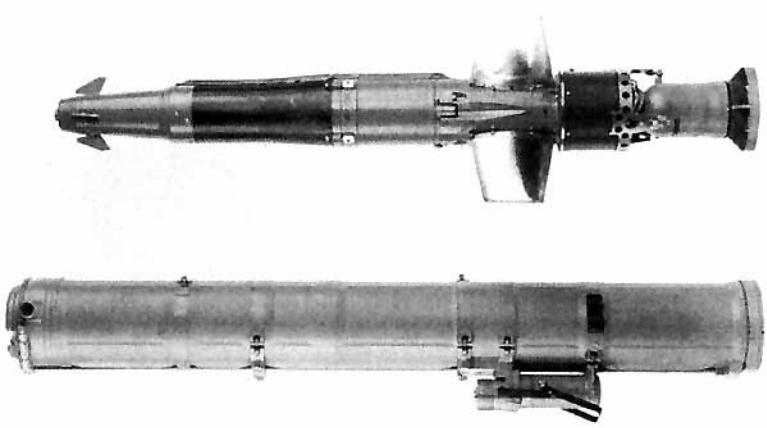
ANTIARMOR

Antitank Guided Missile System 9K11 Malyutka (AT-3 SAGGER)

Warhead Types	HEAT; HE-frag; tandem HEAT
Range	3,000 m
Operation	Wire guided, manual line-of-sight command
Launch Weight	10.9 to 13.5 kg (depending on variant)
Missile Length x Diameter	860 x 125 mm

NOTE: many series-production and post-series-production upgrades exist to increase accuracy, range, and effectiveness.

Antitank Missile System 9K111 Fagot (AT-4 SPIGOT)



Type	Wire-guided semiautomatic line-of-sight (SACLOS) ATGM system
Warhead	HEAT; tandem HEAT
Range	70 to 2,500 m (depending on missile variant)
Armor Penetration	400 mm (9M111); 460 mm (9M111-2)
Launch Weight	12.5 kg
Missile Length x Diameter	875 x 120 mm

AIR DEFENSE

Low- to Medium-Altitude SAM System
S-125 Neva/Pechora 2-T (SA-3 GOA)

Type	Short-range, two-stage, theater-defense missile system
Range	32 km
Target Altitude Limits	20 m to 20 km
Burst Radius	Approximately 12.5 m
Single-Shot Kill Probability	72 to 99 percent
Warhead	60 kg HE-frag
Guidance	Command
Fuze	Doppler radar proximity and contact
Launch Weight	946 kg
Missile Length x Diameter	5.9 x 0.375 m

NOTE: *Pechora* is the Russian designation for the export version of the S-125 *Neva*. A modernized version, *Pechora M*, exists; data above is for *Pechora M*. Additional upgrades to improve performance exist.

MANPADS 9K32/9K32M Strela-2, -2M (SA-7 GRAIL)

Type	2-stage, low-altitude manportable SAM system
Warhead	1.17 kg HE-frag with contact fuze
Guidance	Infrared passive homing
Effective Range Limits	800 to 3,200 m (4,200 m for Strela-2M)
Effective Altitude Limits	50 to 1,500 m (2,300 m for Strela-2M)
Maximum Target Speed	Outbound 800 km/h; inbound 540 km/h
Warhead	1.17 kg HE-frag with contact fuze
Guidance	Infrared passive homing
Number of Reloads	5 per launcher
Combat Weight	9.15 kg (9.6 for Strela-2M)
Launcher Length	1.49 m

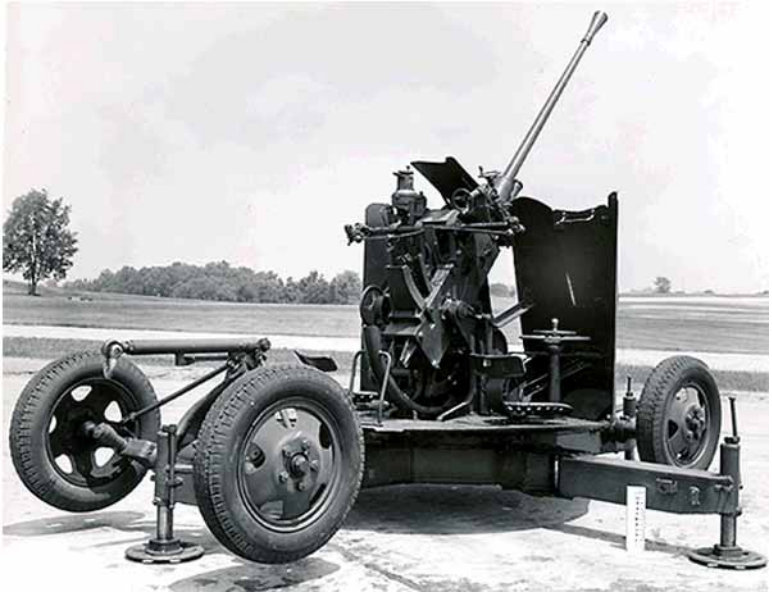
Surface-to-Air Missile 9K31 Strela-1, Strela-1M (SA-9 GASKIN)

Type	Low-altitude air defense missile system
Missile	
Payload	3-kg HE-frag. warhead with proximity fuze
Guidance	Passive IR-homing seeker
Lethal; Damage Radius	5 m; 7.6 m
Launch Weight	30 to 41 kg (depending on missile type)
Length	1.8 m
Range	500 to 4,200 m (depending on missile type)
Target Altitude	30 to 3,500 m (depending on missile type)
Maximum Target Speed	
Inbound	1,116 km/h
Outbound	792 km/h
Platform	BRDM-2 TEL, turret and belly wheels removed, with 4x launcher boxes
Associated Radar	FLAT BOX A (battery commander's vehicle)

57-mm Self-Propelled Twin Air Defense Artillery ZSU-57-2

Crew	6
Ammunition	57-mm FRAG-T, APC-T
Range	
Tactical	4,000 m
Maximum Vertical	9,400 m
Maximum Horizontal	12,000 m
Rate of Fire	105 to 120 rounds/minute per barrel
Traverse Limits; Rate	360 degrees; 30 degrees per second
Elevation Limits; Rate	–5 to +85 degrees; 20 degrees per second
Reload; Reaction Times	30 seconds; 2 to 3 seconds
Maximum Travel Speed	50 km/h
Road Range	400 km
Gradient	60 percent
Vertical Step	0.8 m
Trench	2.7 m
Fording	1.4 m
Combat Weight	28,000 kg
Travel Length x Width x Height	8.48 x 3.27 x 2.75 m
Platform	T-54 chassis

37-mm Air Defense Artillery Gun M1939 (Russia), Type 55 (China)



Crew	8
Ammunition	37 X 253R mm FRAG-T, AP-T
Range	
Tactical Antiaircraft	2,500 m
Maximum Vertical	6,700 m
Maximum Horizontal	8,500 m
Rate of Fire	160 to 180 rounds/minute
Traverse Limits; Rate	Unlimited; 67 degrees/second
Elevation Limits; Rate	–5 to +85; 34 degrees/second
Weight	2,353 kg
Length x Width x Height	5.94 x 1.90 x 2.08 m
Platform	Towed 2-axle 4-wheel cruciform carriage

23-mm Towed Twin Air-Defense Artillery ZU-23-2

Crew	5
Ammunition	23.0 x 152B mm API-T, HEI, HEI-T
Ranges	
Tactical Antiaircraft	2,500 m
Maximum Vertical	5,100 m
Maximum Horizontal	7,000 m
Rate of Fire per Barrel	800 to 1,000 rounds/minute
Traverse Limits; Rate	360 degrees; 74 degrees per second
Elevation Limits; Rate	–10 to +90 degrees; 54 degrees per second
Weight	950 kg
Length x Width x Height	4.60 x 1.86 x 2.07 m
Platform	2-wheel towed 2A13 carriage or various vehicles

S-60 57-mm

Crew	7
Maximum Range	12,000 m (horizontal) 8,800 m (vertical)
Rate of Fire	100 - 120 rds/min
Combat Weight	4,500 kg
Length	8.6 m
Width	2.054 m
Height	2.46 m

AIRCRAFT

AN-26, -26B (CURL A)

Type	Twin-turboprop, short-range transport
Crew; Passengers	5; 38 to 40
Normal Cruising Speed	435 km/h
Range with Maximum Fuel	1,100 to 2,560 km (depending on cargo loading)
Maximum Payload	5,500 kg
Armament	Provision for bomb rack on fuselage below each wingroot trailing edge
Cargo Handling	Powered mobile over-head winch (2,000-kg capacity); flush-mounted floor conveyor or rollgangs
Takeoff Run	870 m
Service Ceiling	7,500 m
Maximum Take-off Weight	24,000 kg
Length x Wingspan x Height	23.80 x 29.20 x 8.58 m

Mi-8T (HIP C)

Type	Twin-turbine transport helicopter
Crew; **Passengers**	3; 24
Weapons	Possibly 57-mm rockets or 500-kg bombs
Maximum Dash Speed	140 kn
Range	260 nmi
Service Ceiling	4,800 m
Main Rotor	
Number of Blades	5
Diameter	21.3 m
Payload	
Internal	4,000 kg
Sling Load	3,000 kg
Maximum Design Takeoff Weight	12,000 kg (rolling takeoff)
Weight Empty	6,824 kg
Fuselage Length x Width x Height	18.22 x 2.5 x 4.75 m

SHIPS

TZIRA (DEFENDER) Class PB

LOA x Max. Beam x Max. Draft	8.4 x 3 x 0.8 m
Displacement, Full Load	2.7 metric tons
Complement	4
Speed, Full Power	46 kn
Range	175 nmi at 35 kn
Guns	7.62-mm machinegun
Radar System	
Surface Search/Navigation	Unidentified

NOTE: TZIRA can tow a 10-ton/35-foot boat.

Namacurra Class Inshore Patrol Craft

Displacement, tons	5 full load
Dimensions, feet (metres)	29.5 × 9 × 2.8 (9 × 2.7 × 0.8)
Main machinery	2 Yamaha outboards; 380 hp(m) (2.79 kW)
Speed, knots	32
Range, n miles	180 at 20 kt
Complement	4
Guns	1-12.7 mm MG. 2-7.62 mm MGs.
Depth charges	1 rack.
Radars: Surface search	Furuno; **I-band**

Willard Class RHIB

Displacement, tons:	2 tons full load
Dimensions, feet (metres):	23.8 x 9 x 1.7 (7.24 x 2.7 x 0.5)
Main machinery:	2 Yamaha outboards; 150 hp(m) (110kW)
Speed, knots:	35
Range, n miles:	180 at 20 kt
Complement:	4
Guns:	1-12.7 mm MG. 2-7.62 mm MGs.
Radars: Surface search:	Furuno; I-band.

APPENDIX B: HOLIDAYS

National Holidays

New Year's Day	Celebration of the first calendar day of a new year	1 January
Day of Heroes	Celebration in honor of the nation's founders	3 February
Women's Day	Honors the nation's women	7 April
Worker's Day	Honors the working population	1 May
Independence Day	Celebration of independence from Portugal	25 June
Lusaka Accords Day	Celebration of the treaty that ended the war with Portugal	7 September
Revolution Day	Commemoration of the Army's role in winning independence and the day the rebellion began	25 September
National Family Day/Christmas	Christians celebrate Christmas; non-Christians celebrate Family Day	25 December

APPENDIX C: LANGUAGE

Key Words and Phrases

English	Portuguese
Do you have...?	*Você tem?*
Does anyone speak English?	*Alguém-fala inglês?*
Excuse me	*Com licença*
Get a doctor	*Comece um doutor*
Get out!	*Fora! or Saia daqui!*
Get up!	*Levante-se!*
Go back	*Vá para trás*
Good afternoon	*Boa tarde*
Good day	*Bom dia*
Good evening/good night	*Boa noite*
Good morning	*Bom dia*
Good-bye	*Adeus/Tchau*
How are you?/How do you do?	*Como vai?*
How do I get to...?	*Como eu começo a?*
How many?	*Quantos?*
How much does it cost?	*Quantos custa?*
I don't understand	*Não entendo*
I understand	*Eu compreendo*
I'm fine	*Eu sou fino*
I'm hungry	*Eu estou com fome*
I'm lost	*Eu sou perdido*
I'm thirsty	*Eu sou sede*
I'm tired	*Eu sou cansado*

English	Portuguese
Just a minute	*Apenas um minucioso*
My name is...	*Meu nome é*
No admission/entrance	*Nenhuma entrada*
No smoking	*É proibido fumar*
No thoroughfare	*Nenhuma passagem*
Straight forward	*Reto em frente*
Straight back	*Reta parte traseira*
What does this mean?	*Que este meio?*
What is this?	*Que é este?*
What is your name?	*Como você se chama?*
What is your occupation?	*Que trabalho faz?*
What is your telephone number?	*Que é seu número de telefone?*
What time is it?	*Que horas são?*
What's wrong?	*Que é que tem?*
Where are we now?	*Onde estamos nós agora?*
Where are you going?	*Onde você vai?*
Where do you live?	*Onde você vive?*
Where does this path lead?	*De onde este trajeto conduz?*
Where does this trail lead?	*De onde esta fuga conduz?*
Where does this road lead?	*De onde esta rua conduz?*
Where have you come from?	*De onde você veio?*
Who is that fellow?	*Quem é esse companheiro?*
Who is this?	*Quem é este?*
Will you help me?	*Você ajudar-me-á?*
You're welcome	*De nada*
Afternoon	*Tarde*
America	*América*
And	*e*

English	Portuguese
Bandage	*A atadura*
Barber shop	*Barbearie*
Bathhouse	*Casa do banho*
Beer	*A cerveja*
Begin	*Começar*
Behind	*Atrás*
Big	*Grande*
Blanket	*O cobertor*
Book	*O livro*
Boots	*As botas*
Bread	*O pão*
Breakfast	*Desjejum, Café da manhã*
Bridge	*A ponte*
Building	*O edificio*
Bus	*O Õnibus*
Car	*O carro*
Careful	*Cuidadoso*
Church	*A Igreja*
Cigarettes	*Os Cigarros*
Coat	*O casaco*
Coffee	*O café*
Cold	*Frio*
Come	*Vir*
Cup	*A caneca*
Currency	*Moeda corrente, dinheiro*
Danger	*Perigo*
Day	*A dia*
Dinner	*O jantar*

English	**Portuguese**
Dog	*O cäo*
Down	*Pra baixo*
Early/earlier	*Prematuro*
East	*Leste*
Embassy	*A Embaixada*
Enough	*Bastante*
Entrance	*A entrada*
Evening	*O entardecer*
Exit	*A saída*
Far	*Longe*
Fast	*Veloz*
First-aid kit	*O jogo de primeiros socorros*
Flashlight	*O projetor de sinais luminosos*
Fog	*O nevoeiro denso*
Follow	*Seguir*
Food	*Alimento/comida*
Fork	*O garfo*
From	*De*
Gasoline/petroleum	*A gasolina*
Gloves	*As luvas*
Go	*Ida*
Hat	*O chapéu*
Head	*A cabeça*
Health Card	*O cartão da saúde*
Heavy	*Pesado*
Hello	*Oi/ Alõ*
Help	*Ajuda*

English	Portuguese
Here	*Aqui*
Highway	*Estrada de rodagem*
Hold	*Porão*
Hospital	*O hospital*
Hot	*Quente*
Hour	*A hora*
How	*Como*
Hurry	*Pressa*
Immediately	*Imediatamente*
In	*Em*
Insect repellent	*O repelente de inseto*
Kilometers	*Quilômetro*
Knife	*A faca*
Late/later	*Tarde/Mais tarde*
Left	*Esquerda*
Light	*A lume*
Listen	*Escutar*
Lock	*A fechadura*
Lunch	*O almoco*
Map	*A mapa*
Market	*O mercado*
Matches	*Os igual*
Medicine	*O remédio/O medicina*
Midnight	*Meia-noite*
Miles	*As milhas*
Milk	*A leite*
Minute	*O minuto*

English	Portuguese
Mosque	*A mesquita*
Mosquito net	*O mosquiteiro*
Mrs.	*A senhora*
Near	*Perto*
New	*Novo*
No/not	*Não*
None	*Nenhum*
Noon	*Meio-dia*
North	*Norte*
Nothing	*Nada*
Now	*Agora*
Okay	*OK*
Old	*Tempo antigo*
On	*Por diante*
Open	*Abre*
Or	*Ou*
Out	*Saida*
Plate	*O prato*
Please	*Por favor*
Police	*A policia*
Quiet	*Quietude*
Radio	*Transmitir, comunicar-se por radio*
Rain	*A chuva*
Receipt	*O recibo*
Repeat	*Repetir*
Right (direction)	*Direita*
Right/correct	*Certo*

English	Portuguese
School	*A escola*
Shoes	*Os sapatos*
Shut	*Fechar*
Sir/Mr.	*Senhor*
Sit	*Sentar*
Sleep	*Sono*
Slow/slowly	*Lento/Lentamente*
Small	*Pequeno*
Snow	*A neve*
Soap	*O sabão*
South	*Sul*
Stand	*Suporte*
Stop!	*Parem!*
Sun	*O sol*
Taxi/cab	*O taxi*
Tea	*O chá*
Thanks/thank you	*Obrigado (said by men)* *Obrigada (said by women)*
There	*Lá*
To	*A*
Tobacco	*O fumo*
Today	*Hoje*
Toilet	*O banheiro*
Tomorrow	*Amanhã*
Train	*O trem*
Truth	*A verdade*
United States	*Os Estados Unidos*
Up	*Para cima*

English	Portuguese
Very	*Muito*
Wait	*Espere*
Watch	*O relógio*
Water	*A agua*
Weather	*O tempo*
Welcome	*Recepcão*
West	*Oeste*
What	*O que*
When	*Quando*
Where	*Onde*
Which	*Qual*
Who	*Quem*
Why	*Porque*
Wind	*O vento*
Wrong	*Errado*
Yes	*Sim*
Yesterday	*Ontem*

Numbers

English	Portuguese
0	*Zero*
1	*Um (Uma if feminine)*
2	*Dois (Duas if feminine)*
3	*Três*
4	*Quatro*
5	*Cinco*
6	*Seis*
7	*Sete*

English	Portuguese
8	*Oito*
9	*Nove*
10	*Dez*
11	*Onze*
12	*Doze*
13	*Treze*
14	*Catorze*
15	*Quinze*
16	*Dezesseis*
17	*Dezessete*
18	*Dezoito*
19	*Dezenove*
20	*Vinte*
21	*Vinte e um*
22	*Vinte e dois*
30	*Trinta*
40	*Quarenta*
50	*Cinquenta*
60	*Sessenta*
70	*Setenta*
80	*Oitenta*
90	*Noventa*
100	*Cem*
1000	*Mil*

Months, Days of the Week

English	Portuguese
Sunday	*domingo*

English	Portuguese
Monday	*segunda-feira*
Tuesday	*terça-feira*
Wednesday	*quarta-feira*
Thursday	*qunita-feira*
Friday	*sexta-feira*
Saturday	*sábado*
January	*janiero*
February	*fevereiro*
March	*março*
April	*abril*
May	*maio*
June	*junho*
July	*julho*
August	*agosto*
September	*setembro*
October	*outubro*
November	*novembro*
December	*dezembro*

Common Signs

English	Portuguese
Beware of dog	*Beware do cão*
Bus stop	*Batente da barra-ônibus*
Cashier	*Caixa*
Closed	*Fechado*
Entrance	*Entrada*
Exit	*Saída*
Gentlemen	*Cavalheiros*

English	Portuguese
Hot	*Quentes*
Ladies	*Senhoras*
No smoking	*Nenhum fumar*
No vacancy	*Nenhuma Vacância*
Occupied	*Ocupada*
Pull	*Tração*
Push	*Impulso*
Restrooms	*Banheiros*
Sold out	*Vendido para fora*

Key Military Terms

English	Portuguese
Air Force	*A Força Aérea*
Air defense	*A Defesa de ar*
Aircraft	*O avião*
Aircraft carrier	*A Porta-aviões*
Airfield/airport	*O campo-de aviação/*
Ammunition	*O munição*
Amphibious	*Anfibio*
Anti-	*Anti*
Antitank weapon	*A anti-arma do tanque*
Armed Forces	*As Armadas Forças*
Armor/armored	*O armado*
Army	*O Exército*
Artillery	*A Artilharia*
Assault	*Assalto*
Attack	*Ataque*
Aviation	*Aviação*

English	Portuguese
Backpack	*A trouxa*
Barracks	*As barracas*
Base	*A base*
Battalion	*Batalhão*
Battery (unit)	*Unidade*
Battle	*Batalha*
Bomb/bombing	*A bomba*
Brigade	*Brigade*
Camouflage	*Camuflar*
Coastal defense	*A Defensa coastal*
Combat	*A combate*
Command	*O comando*
Commander	*O comandante*
Commandos	*Os commandos*
Communications	*As comunicações*
Company	*Companhia*
Conscript	*A recruta*
Corps	*Corpos*
Crew	*O grupo*
Cruiser (ship)	*O cruzador*
Defense/defend	*A Defesa*
Destroyer (ship)	*O navio*
Division	*Divisão*
Engineer	*O Coordenador*
Enlisted	*Alistado*
Entrench	*Entrench*
Equipment	*O equipamento*

English	Portuguese
Escort	*Escolta*
Fighter/fighter-bomber (acft)	*O avião*
Fire Control	*O controle de fogo*
Ford/fordability	*O vau/passer a vau*
Formation	*Formação*
Fortify/fortification	*Fortify*
Foxhole	*O Foxhole*
Front Parte	*Dianteira*
Garrison	*Garrison*
Grenade	*A granada*
Gun/gunner	*O injetor*
Halt	*Parada*
Headquarters	*As matrizes*
Helicopter	*O elicóptero*
Howitzer	*O Howitzer*
Infantry	*Infantaria*
Information	*A informação*
Intelligence	*A inteligência*
Landmine	*O minado antipessoal*
Machinegun	*O injetor de máquina*
Map	*A mapa*
Marine	*O Fuzileiro Naval*
Mess hall	*Salão do mess*
Military	*As Forças*
Mine	*A mina*
Minefield	*O campo de minas*
Mission	*A missão*

English	Portuguese
Mortar	*O morteiro*
Navy	*A Marinha*
Nuclear/biological/chemical	*O Nuclear/biológico/química*
Observation post	*O borne de observação*
Officer	*O Oficial*
Operations	*As operações*
Password	*A senha*
Patrol	*A patrulha*
Pistol	*A pistola*
Platoon	*Pelotão*
Reconnaissance	*O reconhecimento*
Regiment	*Regiment*
Resupply	*O reabastecimento*
Rifle	*O rifle*
Rifleman	*O Rifleman*
Signal	*O sinal*
Smoke	*O fumo*
Squad	*Squad*
Tactics	*As táticas*
Tank	*O tanque*
Tent	*A tenda*
Terrain	*O terreno*
Vehicle	*O veículo*
Weapon	*A arma*
Withdraw/withdrawal	*Retira-se*
Beach	*A praia*
Brush	*A escova*

English	Portuguese
City	*A cidade*
Forest	*A floresta*
Gorge	*O gorge*
Ravine	*A ravina*
Gulf	*O golfo*
Hill	*A colina*
Island	*O console*
Jungle	*A selva*
Lake	*A lago*
Mountain	*A montanha*
Ocean	*O oceano*
Plain	*A planície*
Plateau	*O platô*
Port/Harbor	*O porto*
Ridge	*O cume*
River	*O rio*
Road	*A rua*
Rock	*A pedra*
Sea	*O mar*
Thicket	*O arvorcedo*
Valley	*O vale*
Village	*A vila*
Wade	*Vadear*

APPENDIX D:
DANGEROUS PLANTS AND ANIMALS

Snakes

Puff Adder

Description:
Adult length usually 0.6 to 1 meter (2-3 feet), maximum of 1.5 meters (5 feet); thick, heavily built snake. Background color varies from bright to light yellow, yellow-brown, orange-brown, light brown, or gray. Belly yellowish white to gray with black blotches. Rough-scaled appearance and alternating pattern of dark and light chevron-shaped markings.

Habitat:
Most widely distributed venomous snake in Africa; encountered almost anywhere, at both low and high elevations, except in rain forests and extreme desert conditions.

Activity and behavioral patterns:
Both diurnal and nocturnal; known to bask in early mornings or late afternoons. Comparatively slow-moving and sluggish; relies on immobility and camouflage to escape detection. Bad tempered and excitable; when disturbed, makes long deep hissing noise and may lash out viciously.

Venom's effects:
Many serious bites reported; only a small portion prove fatal. Venom is potent cytotoxin, attacking tissue and blood cells.

Symptoms include extreme pain with swelling and large blisters in region of the bite.

Shield-nosed Snake

Description:
Adult length usually 0.4 to 0.6 meter; thick, heavy-bodied snake in relation to its short length. Background color is usually pale gray-brown, salmon pink, or orange-brown with a series of brown blotches over the back and tail. Head and forepart of body glossy black. Belly white to yellowish. Identified by prominent rostral scale (nose shield), which it uses as a "bulldozer."

Habitat:
Savanna and sand veld areas; also arid sandy and stony regions.

Activity and behavioral patterns:
Nocturnal. Usually sluggish, although very active after rains. Supposedly plays dead when cornered, but usually hisses and strikes repeatedly when molested. Does not spread hood.

Venom's effects:
Venom reportedly primarily neurotoxic.

Burrowing Asp

Description:
Adult length is usually less than 0.9 meter; relatively slender snake. Background color varies; usually uniform dark purplish-brown

to black above. Short, conical head, not distinct from the neck; snout broad, flattened, often pointed. Its fangs are well-developed and comparatively large in relation to the size of its head. Small eyes with round pupils. Tail short, ending in distinct spine.

Habitat:
Rain forests and savanna. Commonly lives under stones or in burrows.

Activity and behavioral patterns:
May emerge at night, particularly after rain. Likely to bite as soon as it is touched.

Venom's effects:
Venom primarily hemotoxic. Victims may experience intense local pain, swelling, and, in some instances, necrosis.

Berg Adder

Description:
Adult length is usually 0.2 to 0.4 meter, maximum of 0.6 meter; relatively stout snake. Background color is generally grayish olive to dark brown, with typically two rows of triangular black dorsal markings and lateral rows of square markings.

Habitat:
Prefers diverse habitats: montane grasslands, even above the snowline, and valleys near sea level.

Activity and behavioral patterns:
Diurnal; seeks shelter in shallow rock crevices and beneath grass clumps. Hisses loudly and strikes violently if approached; quick to strike.

Venom's effects:
Venom primarily neurotoxic, affecting eyes and other sensory functions. Eyes cannot focus, eyelids droop, and sense of taste and smell lost. Not known to cause respiratory distress. Pain and swelling at site common.

Gaboon Viper

Description:
Adult length usually 1.2 to 1.5 meters, maximum of 2 meters; thick, heavy snake. Color pattern resembles an oriental carpet; complex pattern of cream, purple, brown, and pink. Head distinctive; white or cream above, with dark brown or black triangles on sides. Usually has pair of triangular nasal "horns."

Habitat:
Generally found in tropical rain forests and immediate environs. Sometimes found in deforested areas. Well camouflaged; blends in with leaf litter of forest floor.

Activity and behavioral patterns:
Nocturnal. May be found basking in patch of sunlight on forest floor, but more likely to be half buried in leaf litter. Slow-moving and does not flee when approached. Makes very loud hissing noise when disturbed. Strikes only as last resort or if trodden on.

Venom's effects:
Longest fangs (up to 50 millimeters) of any snake in world enable viper to inject massive amounts of potent cytotoxic venom deep into victim. Venom contains cardiotoxins that possess neurotoxin-like properties, which may be more dangerous than cytotoxins. Immediate severe pain is felt at site, followed by rapid painful

swelling of bitten area as early as 5 minutes after bite. Bite usually lethal without prompt treatment.

Snouted Night Adder

Description:
Adult length usually 0.3 to 0.4 meter; maximum of 0.5 meter. Relatively thick snake. Background color generally brownish, greenish, or grayish with series of brown to black spots over back and tail. Head has prominent dark V-shaped mark on top and upturned snout.

Habitat:
Generally lowveld and arid savanna.

Activity and behavioral patterns:
Nocturnal.

Venom's effects:
Venom weakly cytotoxic. Bites generally produce local swelling, lymphadenopathy, and mild fever without development of local necrosis; not considered serious threat to humans.

Green Night Adder

Description:
Adult length usually 0.4 to 0.6 meter, maximum of 0.75 meter; moderately stocky snake. Background color generally vivid green with indistinct bars or chevrons along the back. Usually velvet-like sheen.

Habitat:
Moist, warm, low-lying areas at elevations up to 2,000 meters.

Activity and behavioral patterns:
Mainly nocturnal but sometimes seen in daytime. Terrestrial.

Venom's effects:
Bite usually results only in local pain, swelling, and lymphadenophy. Not considered lethal to humans.

Eastern Rhombic Night Adder

Description:
Adult length usually 0.4 to 0.6 meter, maximum of 1.0 meter; moderately stocky snake. Background color varies from gray to olive to pinkish brown; patterned with gray, black, or brown chevrons or spots. Belly usually gray, but may be cream or yellow. Solid dark "V" marking on head.

Habitat:
Open woodland, grassland, and savanna near streams, marshes, or other damp areas.

Activity and behavioral patterns:
Nocturnal, but spends much time basking during day and/or sheltered in trash piles, rock crevices, and other hiding places. Generally non aggressive and docile, seldom attempting to bite except under extreme provocation. When threatened, will either flatten head and body or inflate itself with air, make several frantic strikes, and then glide away quickly.

Venom's effects:
Venom mildly cytotoxic and generally not dangerous, but may cause acute discomfort. Bite usually results only in local pain, swelling, and lymphadenophy. No reliable reports of fatalities.

Black Mamba

Description:
Adult length usually 2.5 to 3 meters (8 to 10 feet); maximum of 4.3 meters (14 feet); relatively slender snake. Background color may be brown, olive brown, dark olive, greenish brown or dark blackish gray. Interior of mouth blue-gray to blackish.

Habitat:
Dry, open woodland and scrub land, especially in area of rocky outcroppings, but not in rain forest or desert. Also found in abandoned termite mounds and mammal burrows. Generally found below 1,500 meters (4,920 feet) elevation.

Activity and behavioral patterns:
Essentially terrestrial, but climbs trees in search of prey or to seek shelter. Generally moves off rapidly at the first sign of danger. When threatened, raises forepart of body from ground and spreads narrow hood. However, if intruder does not move, it will soon drop to the ground and seek cover. Uncertain temper and ready to attack if suddenly disturbed or molested; particularly irritable during mating season (spring or early summer). Very fast snake.

Venom's effects:
Most dreaded African venomous snake; few people survive its bite unless antivenin administered promptly. Venom very potent neurotoxin.

Eastern Green Mamba

Description:
Adult length is usually 1.8 to 2 meters, maximum of 2.5 meters; slender snake with narrow, coffin-shaped head. Background color is uniformly bright green on the back with yellowish-green belly. Interior of mouth is white.

Habitat:
Found in coastal bush, evergreen coastal forests, bamboo thickets and, where these have been destroyed, on tea and mango plantations.

Activity and behavioral patterns:
Active, arboreal species; seldom ventures to ground. Rarely seen. Relatively not aggressive; when cornered, will threaten and bite only as a last resort.

Venom's effects:
Venom primarily neurotoxic. Bites uncommon. Few deaths reported.

Boomslang

Description:
Adult length usually 1.2 to 1.5 meters (3-5 feet); relatively slender snake. Background color varies from almost black to almost uniform green; no

blotches or distinct spots. Short, stubby head and enormous emerald eyes. Scales strongly keeled and overlapping.

Habitat:
Most common in dry woodland, thorn scrub, savannahs, and swamps bordering or close to streams, rivers, and lakes. Not found in rain forest regions or true desert.

Activity and behavioral patterns:
Diurnal; spends most of time in trees and shrubs. Notably non aggressive; quickly retreats if surprised. If cornered or restrained, inflates neck to more than twice usual size.

Venom's effects:
Potently hemotoxic; can cause severe bleeding internally and from mucous surfaces. Deaths reported.

African Garter Snake

Description:
Adult length usually 0.4 to 0.6 meter; moderately slender snake. Background color generally uniform black or gray-black. Head not distinct from the neck. Tail short.

Habitat:
Generally found in coastal forests, high-level grasslands, or arid savannas.

Activity and behavioral patterns:
Non aggressive, nocturnal snake that spends its days hiding under stones or in burrows. Sluggish, but will bite in self-defense.

Venom's effects:
Venom likely neurotoxic. Not considered lethal to humans.

Rinkhals

Description:
Adult length is usually 1.0 meter to 1.2 meters, maximum of 1.5 meters; relatively stocky snake. Background color is usually olive to dark brown or dull black above and below; one or two white crossbars on the throat.

Habitat:
Found in veld and open country, coastal plains, and grasslands at elevations up to 2,500 meters.

Activity and behavioral patterns:
Most highly specialized of "spitting" cobras; can eject venom in fine spray to distance of 1-2 meters. When startled it will rear up and expand its hood, displaying vivid black throat. If approached closely, may drop to ground, roll on to back with mouth agape and play dead.

Venom's effects:
Potent neurotoxin, although bites and fatalities are rare.

Egyptian Cobra

Description:
Adult length usually 1.5 to 2 meters (5-6.5 feet), maximum of 3 meters (10 feet). Background color usually yellow-gray to brown or blue-black, but extremely

variable. Belly yellowish with dark blotches. Most specimens have dark brown or black band across the throat.

Habitat:
Various habitats include flat land, scrubby bushes, grass clumps, irrigated fields, rocky hillsides, old ruins, and in vicinity of villages. Sea level to 1,600 meters (5,250 feet) elevation. Not found in rain forests or extreme desert conditions.

Activity and behavioral patterns:
Nocturnal; emerges at dusk, but often seen basking in sun near its retreat in early morning. Often occupies abandoned rodent burrows or termite mounds. While not overtly aggressive, when molested, will rear and spread an impressive hood up to 12 centimeters (4.7 inches) across.

Venom's effects:
Venom primarily neurotoxic, acting largely on nerves controlling respiratory muscles. Untreated cases may culminate in respiratory failure and death.

White-lipped or Forest Cobra

Description:
Adult length usually 1.5 to 2 meters, maximum of 2.7 meters; relatively slender snake. Background color usually glossy black, dark gray or dark brown dorsal area; belly creamy white to yellow, often with darker blotches.

Habitat:
Found in tropical rain forest and subtropical forest areas; seldom far from water.

Activity and behavioral patterns:
Very active snake that climbs and swims well. Nocturnal but may forage on overcast days. Equally at home in trees, on ground, or swimming in lakes or rivers. When disturbed, can rear to a great height; usually more than two-thirds of body raises from ground. Spreads narrow hood.

Venom's effects:
Bites reported infrequently, venom highly neurotoxic; fatalities recorded.

Mozambique Spitting Cobra

Description:
Adult length usually 0.9 meter to 1.2 meters, maximum of 1.5 meters. Background color generally pale gray to olive-brown black; each scale edged in black. Belly is salmon pink. Irregular black crossbands on throat.

Habitat:
Found in open woodlands, plains, savanna, and rocky hillsides. Usually near water.

Activity and behavioral patterns:
Nocturnal; adults may emerge from shelters to bask during day, and forage at night. Young specimens much more diurnal and frequently encountered in open at any time of day. React to intruders by rearing body and spraying venom.

Venom's effects:
Venom primarily cytotoxic and can cause considerable tissue damage; neurotoxic symptoms generally minor. Fatalities rare. Neurotoxic symptoms may occur following unusually large dose of venom. Although snake rarely bites, large specimens can "spit" venom as far as 2 meters, aiming at the eyes. Venom does not affect unbroken skin, but can cause great pain.

Swamp Viper

Description:
Adult length usually 0.4 to 0.5 meter, with a maximum of 0.6 meter. Background color is generally pale red-brown; has a vertebral row of black crossbars, broken laterally by an interrupted yellow stripe. Belly is off-white to pale yellow-orange, with distinct black spots.

Habitat:
Found in low-lying marshes and floodplains.

Activity and behavioral patterns:
Very little is know of its habits and behavior. Inhabits abandoned rodent burrows, often basking at burrow entrances.

Venom characteristics:
Venom is likely hemotoxic. There have been no bites on humans recorded.

Bird/Twig/Vine Snake

Description:
Adult length usually 0.8 meter to 1.2 meters; maximum of 1.6 meters. Very slender snake. Background color is gray-brown with

black and pink flecks. Tongue is bright red-orange with a black tip. Lance-shaped head and large eyes with keyhole-shaped head and large eyes with keyhole-shaped pupils. Color and pattern make it nearly invisible in scrub brush.

Habitat:
Savanna and coastal forest.

Activity and behavioral patterns:
Aboreal; prefers low shrubs, brush, and dead trees. Timid, though easily irritated. When threatened, it inflates its neck vertically, displaying bright interstitial coloration.

Venom's effects:
Venom is primarily hemotoxic. Fatalities are rare, but have been reported.

Black-necked Spitting Cobra

Description:
Adult length usually 1.2 to 2.2 meters, maximum of 2.8 meters. Body color highly variable, ranging from pinkish tan in some geographical areas to uniform black in others.

Habitat:
Found in moist savanna; shelters in abandoned termite mounds, rodent burrows, or hollow tree trunks.

Activity and behavioral patterns:
Generally nocturnal, although juveniles active during day. Although terrestrial and fairly aquatic, good climber. Inoffensive, will usually take off if disturbed. When provoked, raises up, spreads hood, and may "spit" at intruder's face.

Venom's effects:
Venom primarily cytotoxic, causing serious local tissue damage. Large specimens can "spit" venom as far as 3 meters, aiming at the eyes. The venom does not affect unbroken skin, but can cause great pain and possible tissue destruction in the eyes. Venom has caused permanent blindness in humans.

Dangerous Invertebrates

Spiders

Although several spider species in the region are capable of inflicting a painful bite, only the following are capable of inflicting a life-threatening bite:

- Latrodectus spp.
- Loxoceles spp.
- Sicarius spp.

Scorpions

Although scorpions in the region are capable of inflicting a painful sting, only the following are capable of inflicting a life-threatening sting:

- Parabuthus spp.

Insects

There is little specific information of medical importance regarding insects. However, nearly all countries have at least one species of moth having venomous/urticating hairs and/or whose larva (caterpillar) has venomous spines. Some caterpillars are very hairy (such as puss moths and flannel moths) and almost unrecognizable as caterpillars, with long silky hairs completely covering the shorter venomous spines. Others bear prominent clumps of still, venomous spines on an otherwise smooth body. Contact with these caterpillars can be very painful. Some are brightly colored.

Paederus are small (usually 4 to 7 millimeters), slender rove beetles that do not look like typical beetles and have very short wing covers that expose most of their flexible abdomens. When crushed, their body fluid contains an agent that will blister skin on contact. The lesions take about a week to heal and the area remains painful for several weeks. The substance is extremely irritating if it gets into the eyes; temporary blindness has been reported.

Millipedes

Millipedes do not bite and in general are harmless to humans. However, when handled, some larger millipedes (may be more than 50 centimeters long) secrete a very noxious fluid that can cause severe blistering upon contact; some can squirt this fluid at least 2 feet.

Centipedes

Although area centipedes are capable of inflicting a painful bite, none are known to be life-threatening.

African Teak

Other names:
Osage Orange, fustic, bow wood.

Mechanisms of toxicity:
Benzophenones, xanthones, stilbenes, flavonoids, and tannins known to the genus. Has a milky, bitter sap; yields orange dye that causes skin inflammation.

Comments:
Includes 12 species found in tropical America, South Africa, and Madagascar.

Desert Rose

Other names:
Monkey poison, mock azalea, impala lily.

Mechanisms of toxicity:
Cardiac glycosides; used for ordeals, arrow poison, and as a fish stupifier.

Comments:
Five species; shrubs or trees; tropical and subtropical African and Arabian distribution. Thrive best in dry areas; have thick stems.

Velvet Bean

Other names:
Cowitch, cowhage, pica-pica, ox eye bean, horse-eye bean.

Mechanisms of toxicity:
Many of the species' pods and flowers are covered with irritant hairs (proteolytic enzymes). Can be dangerous if they become embedded in the eye. Beans tend to be foul tasting, even after thorough boiling, so little danger of ingestion exists.

Comments:
Many species are widely naturalized.

Nettle Tree

Other names:
Ortiga brava, pringamoza.

Mechanisms of toxicity:
Trees and shrubs with powerful stinging hairs. The intensity of sting delivered by these plants is species-variable. The bushy, tree-like varieties tend to be more irritating. Any contact between leaves or branches and skin can result in profound burning pain that can last for more than 24 hours. There is no permanent damage.

Comments:
35 native species in tropical and southern Africa, and tropical America. Often used as hedges or local medicinals.

Angel's Trumpet

Mechanisms of toxicity:
Can kill. Tropane alkaloids are the toxic principle. People have been poisoned through consumption of crushed seeds accidentally included in flour.

Comments:
Used by Indians to worm hunting dogs, and as a plant to prevent insects from destroying other cultivated plants. Added to beer in west Africa to make the drink more potent. The plant is native to South America.

Modikka

No photograph available.

Mechanisms of toxicity:
The root is reported to contain prussic acid and a cyanogenic glycoside, which is destroyed by drying. It also contains a toxalbumin called modeccin, which is a protein-synthesis inhibitor. The usual poisoning scenario is that of the root being mistaken for an edible tuber, especially in situations of scarce food. Death has occurred after ingestion of the fruit. Symptoms within one day are mainly due to the hydrocyanic acid; the toxalbumin results in illness a few days later. Used in India as a "worming" medicine; sap is very irritating. Has been used in Africa to murder.

Comments:
Some species have been used in Africa as medicinals (e.g., for malaria and leprosy).

Poisonvine

No photograph available.

Other names:

Arrow poison plant.

Mechanisms of toxicity:

Seeds have digitalis-like toxins and are used as arrow and spear poison in Africa.

Comments:

Genus of 38 tropical species of shrubs. Monkeys have died after eating a few leaves.

Bushman's Poison

Other name:

Poison tree, wintersweet.

Mechanisms of toxicity:

Seeds have a high concentration of toxin (cardiac glycosides); fruit pulp contains only traces. Wood extract is easily absorbed through the skin; can be mixed with latex from one of the Euphorbia family and gum from Acacia to make arrow poison; also used as an ordeal poison. Extracts applied to prickly fruits and laid in paths of barefoot enemy to kill. Symptoms of toxicity include pain, nausea/vomiting, abdominal pain, diarrhea. Variable latent period (interval between exposure and symptoms) with cardiac conduction defects and sinus bradycardia; hyperkalemia. Some species cause dermatitis, but this is not a common problem.

Comments:

Dense evergreen shrubs or small trees with a milky sap found in Arabia and tropical eastern and southern Africa. Fruit resembles

an olive or small ellipsoidal plum and turns reddish to purple-black at maturity (one to two seeds). Fruit exudes a milky sap when cut. Aromatic flowers are tubular, white/pink, in dense clusters in the forks of the leaves.

Fool's Parsley

Mechanisms of toxicity:
All parts are toxic, possibly due to a cicutoxin-like substance and traces of coniine. Symptoms of toxicity include profuse salivation, diaphoresis, gastroenteritis, seizures, and coma. Children have died from the plant being mistaken for parsley (Petroselinum crispum) and the rhizomes and roots for turnips or radishes.

Comments:
A carrot-like annual herb up to 2 feet high.

Bitter Apple, Bitter Gourd

No photograph available.
Mechanisms of toxicity:
Dried pulp is a drastic purgative that has caused bloody diarrhea, even toxic colitis and death; chemical nature unclear.

Comments:
Has a thick tap-root and numerous coarse, sprawling, branched stems up to 18 feet long. Leaves are longer than they are wide and have stiff hairs on both surfaces. Tend to be most abundant in dry inland areas. Botanical literature frequently confused as to identification; easy to mistake for harmless plants.

Tapioca

Other names:
Manioc, cassava, yuca.

Mechanisms of toxicity:
Several varieties contain a toxin that breaks down in heat. Bitter or sweet casava cannot be distinguished other than by taste. Bitter casava is poisonous when eaten raw. Cooking (with several changes of water) eliminates the toxic principle (requires special preparation).

Comments:
Genus includes almost 100 species (trees, shrubs, and herbs) of tropical and warm Americas; some varieties are very important as a food source. Same subfamily as Croton. Shrubby tree 3-5 feet high. Widely cultivated. Large tuberous roots rich in starch.

Fireweed

No photograph available.

Other names:
Candle plant; dusty miller; fleawort; ragwort.

Mechanisms of toxicity:
Contains many alkaloids known to be toxic to stock. Seneciosis is a name given to a disease (caused by pyrrolizidine alkaloids) marked by liver degeneration and necrosis. The entire plant is poisonous; deaths have been reported. Most poisonings due to use in herbal teas. Causes Budd-Chiari syndrome. Can also produce pulmonary disease. Milk from animals that have grazed on these plants and honey made by bees that collected the nectar contain the alkaloids.

Comments:
One of the largest genera (number of species) of seed plants. Found mainly in temperate areas and tropical mountains worldwide.

Heliotrope

Other names:
Cherry pie, scorpion's tail, Indian heliotrope.

Mechanisms of toxicity:
Contains pyrrolizidine alkaloids. Cause of large epidemics (Afghanistan, India) of illness following ingestion of bread made with flour contaminated with members of this genus. The pathologic effects (Budd-Chiari syndrome) take weeks to months, and death comes slowly over years. Chronic copper poisoning has occurred associated with this plant.

Comments:
A large genus of worldwide distribution (250 tropical and temperate trees and shrubs).

Sasswood

No photograph available.
Other names:
Ordealtree, mancona bark, ironwood, camel poison, black bean, Cooktown ironwood.

Mechanisms of toxicity:
Extremely poisonous; the two main species have similar toxicities. Alkaloids of esters and amides of cinnamic acid have been isolated. Most of the alkaloids are esters of diterpenoid carboxylic acids including cardiotoxic alkaloids. Powerful analgesic to the mucous membranes.

Comments:
A fish poison.

Pokeweed

Other names:
Pokeberry, poke salet.

Mechanisms of toxicity:
Mature stems, roots, and berries are poison (saponins mostly in foliage and roots). Death possible when not prepared properly.

Comments:
Young shoot tips, less than 6 inches, are eaten in many cultures, including Canada; requires proper preparation (boiled with water changes; water contains toxic substances — kills snails that carry bilharzia). Dye from berries used to color ink, wine, sweets.

Freshwater Mangrove

No photograph available.

Other names:
Putat, bitung, laut.

Mechanisms of toxicity:
Saponins and hydrocyanide have been isolated from fruit and seeds. Used as fish poisons in many Pacific islands. Fruit contains

a triterpenoid saponin, and the seeds are emetic and have been shown to induce hypoglcemia in rodents.

Comments:
Large tree found growing along shorelines; have large (20-38 centimeters-long, 10-15 centimeters-wide) non-toothed leaves, white to pink flowers (on individual stalks; square in cross section), and one-seeded fruits (9-13 centimeters-long; square in cross-section). Seeds are crushed and used as fish poison by Australian troops and aborigines.

Kamyuye

No photograph available.
Mechanisms of toxicity:
Contains latex with a mixture of sequiterpene alcohols. Has long been used as a medicinal. Used in Africa as a poison. Accidental fatalities have occurred when the bark was used to prepare a medicine for stomach problems.

Comments:
Tropical African aromatic shrub. Source of vanilla-scented oil.

Rattlepod

Other names:
Rattlebox, rattleweed, chillagoe, horse poison.

Mechanisms of toxicity:
Contains pyrrolizidine alkaloids (monocrotaline, heliotrine, retrosine); can kill. Low-level ingestions can cause lung damage; high levels will damage the liver. Some species

have caused toxicity through the contamination of flour or when incorporated in teas.

Comments:
The fruits are inflated dehiscent legumes (pods) with parchment-like walls; the ripe seeds come loose within the pods and rattle when shaken. The flowers are pea-like. Found in open woods, roadsides, margins, sandy soils, and fields.

Panama Tree

Other names:
Castano, tartargum.

Mechanisms of toxicity:
Seeds are edible, but pods have internal stiff bristles that easily penetrate skin, causing intense irritation.

Comments:
There are 200 tropical species.

Strychnine

Other names:
Nuxvomica tree, Snakewood tree.

Mechanisms of toxicity:
The entire plant, including the seeds, contains the powerfully acting indole alkaloid strychnine, which can kill.

Comments:
Genus of 190 different species of trees, shrubs and vines with berry-like fruits, found in most tropical regions. Some have the reputation of having edible fruit despite dangerous seeds. It is a source of curare obtained by stripping and macerating its bark. Curare, now used as a muscle relaxant, was formerly used as an arrow poison by South American Indians.

Notes

Notes

Notes

Notes

Notes

Notes

Notes

Notes