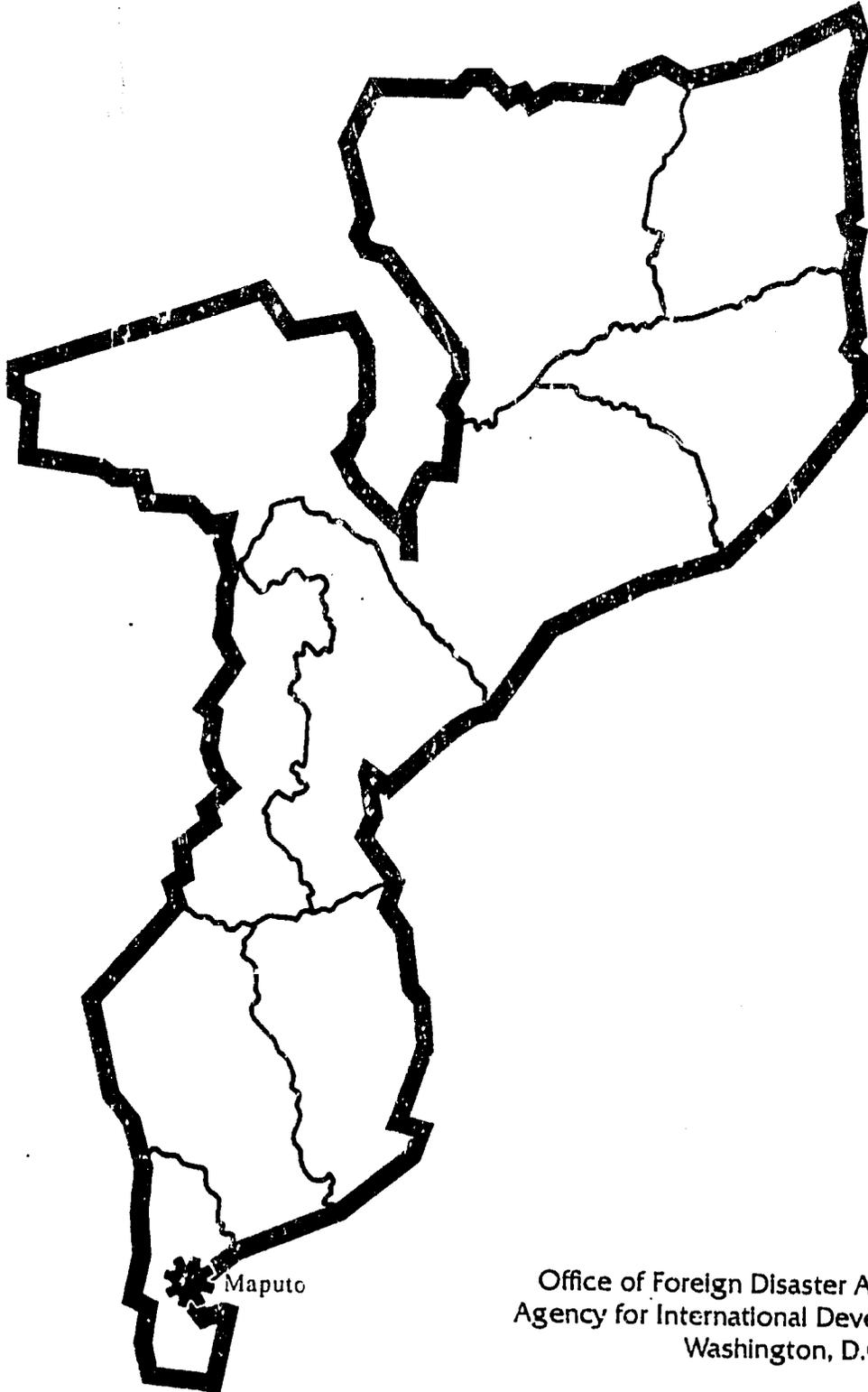
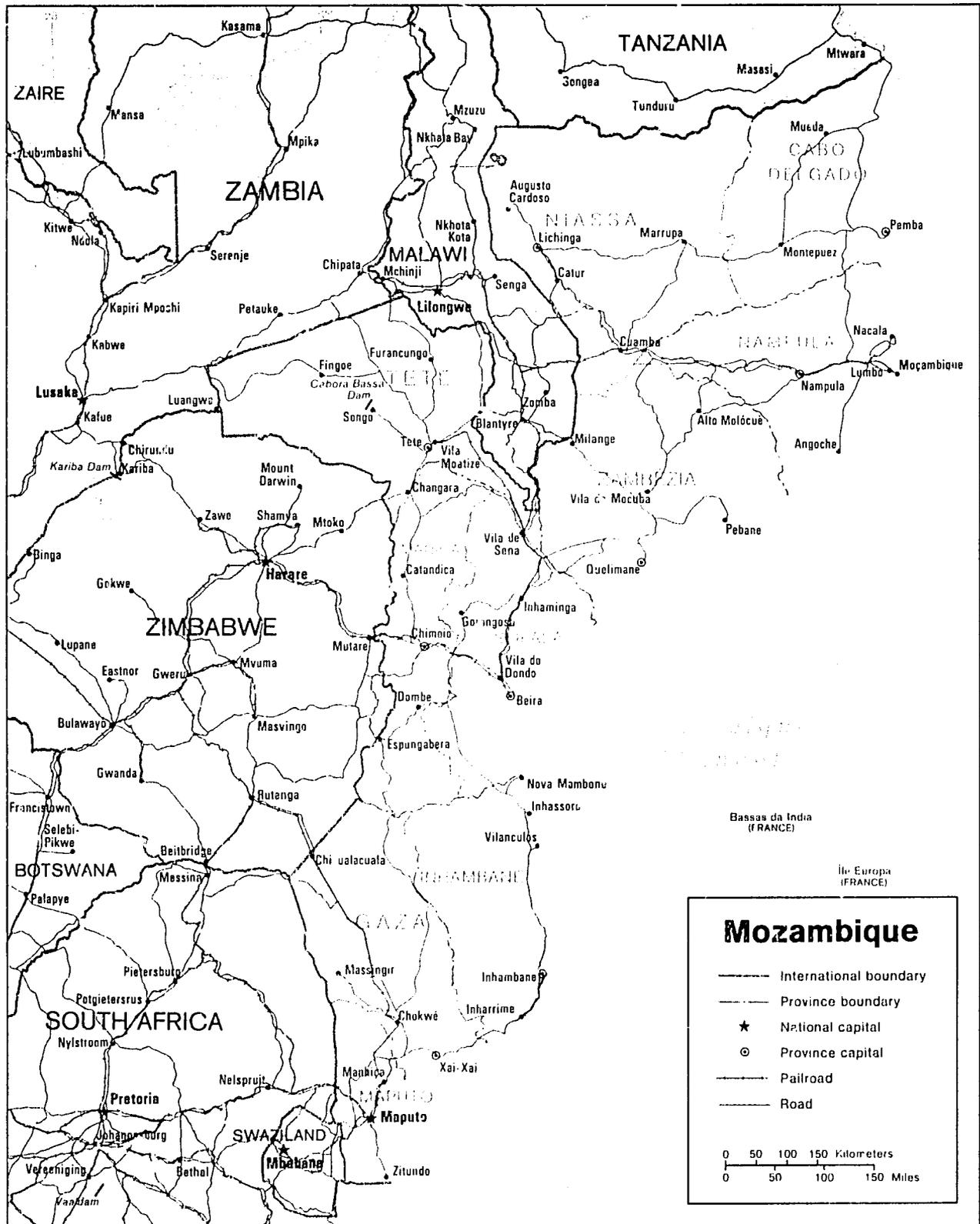


Mozambique

A Country Profile



Office of Foreign Disaster Assistance
Agency for International Development
Washington, D.C. 20523



MOZAMBIOUE: A COUNTRY PROFILE

prepared for

The Office of U.S. Foreign Disaster Assistance
Agency for International Development
Department of State
Washington, D.C. 20523

by

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The country profile of Mozambique is part of a series designed to provide baseline country data in support of the planning and relief operations of the Office of U.S. Foreign Disaster Assistance (OFDA). Content, scope, and sources have evolved over the course of the last several years and the relatively narrow focus is intentional.

We hope that the information provided will also be useful to others in the disaster assistance and development communities. Every effort is made to obtain current, reliable data; unfortunately it is not possible to issue updates as fast as changes would warrant.

We invite your comments and corrections. Address these and other queries to OFDA, A.I.D., as given above.

April 1987

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1. General Information1.1 Geographic Codes

AID Standard	656
AID Region	AFR/SA
State Region	AF/S

1.2 Host Mission to the U.S.

Embassy of People's Republic of Mozambique
1900 M Street, N.W. Suite 570
Washington, D.C. 20036
Telephone: (202) 293-7146

1.3 U.S. Mission in Mozambique

Embassy of the United States
35 Rua de Mesquita, 3rd Floor
P.O. Bcx 783
Maputo, Mozambique
Telephone: (258) 26051, 26052, 26053

A.I.D. Affairs Office
Rua Faria de Sousa, 107
Telephone: (258) 744482
Telex: 6180 USAID MO

1.4 Time Zones

GMT + 2; EST + 7

1.5 Currency (October 1986)

US \$1.00 = 39.98 meticaís (official rate)
US \$1.00 = 1,600 meticaís ("parallel market")
100 centavos = 1 metical
Coins: 1, 2 1/2, 5, 10, 20 meticaís and 50
centavos
Notes: 50, 100, 500 and 1000 meticaís

Visitors must declare all foreign currency
upon arrival.

1.6 Travel and Visa Requirements

Visas can be obtained from the Mozambican Embassy to the U.S. A valid passport and a record of cholera and yellow fever inoculations are also required to enter the country. Typhoid and tetanus shots and malaria suppressants are recommended. Travel outside of Maputo is usually restricted due to the threat of guerrilla attacks.

1.7 Holidays and Calendar

New Year's Day.....	January 1
Heroes' Day, anniversary of Mondlane's assassination.....	February 3
Mozambican Women's Day.....	April 7
Worker's Day.....	May 1
Independence Day.....	June 25
Victory Day.....	September 7
Armed Forces Day.....	September 25
Family Day.....	December 25

Fiscal year = Calendar year

1.8 Treaties and Agreements

Agricultural Commodities
Economic and Technical Cooperation
Investment Incentives

1.9 International Organization

African Development Bank, Economic Commission for Africa, GATT, G-77, IMF, Lomé Convention, Non-Aligned Movement, Organization of African Unity (OAU), Southern African Development Coordination Committee (SADCC), World Bank, and most U.N. Organizations.

1.10 Geography

- Location and Area:** Mozambique lies on the southeastern coast of Africa, situated between latitude 26°52' and 10°27' south and longitude 30°12' and 40°51' east. It is bounded by Tanzania on the north, Malawi, Zambia, and Zimbabwe on the west, and Swaziland and South Africa to the south. The island of Madagascar lies due east, directly across the Mozambique Channel. Mozambique covers 799,380 sq. km, an area about twice the size of California, and has a coastline 2,470 km long. Maputo, formerly called Lourenço Marques, is the capital and largest city.
- Topography:** The country is divided by the Zambezi River into two distinct geographic zones. North of the Zambezi River, a narrow coastline gives way to a transitional zone of hills and low plateaus, gradually rising to a range of rugged highlands along the western border. To the south, the littoral coastline is broader, stretching in some places the entire width of the country. The most prominent mountain ranges are the Livingstone-Nyasa Highlands beside Lake Nyasa; the isolated Shire or Namuli Highlands in the north; the Angonia Highlands bordering Malawi; the Tete Highlands near Zambia; the Gorongosa Highlands to the south of the Zambezi River; and the Lembombo Mountains along the South African border.
- Climate:** Mozambique has a tropical climate, generally warm and humid throughout the year, except for the decidedly cool winter months of June and July, when temperatures average between 18°C to 20°C (65°F to 68°F) in the south. A hot, rainy season lasts from October to April. Relative humidity averages between 70 and 85 percent year-round. Rainfall is uneven and unpredictable and generally decreases from north to south.

1.11 Population

The population of Mozambique was estimated at 14.1 million in 1986, based on the 1980 census and an annual growth rate of 2.6 percent. The population is approximately 87 percent rural and the average population density is 17 inhabitants per square kilometer. The urban population lives primarily in the capital, Maputo, which has a population of 904,000, and in the other major port city, Beira, which had a population of 350,000 in 1984. Mozambique's population growth rate of 2.6 percent is lower than most African countries and contraception is taught in schools and at family planning centers.

Population by Province (1986)

<u>Province</u>	<u>Area (sq. km)</u>	<u>Pop (000)</u>
Maputo	26,358	1,488
Gaza	75,709	1,142
Inhambane	68,615	1,138
Sofala	68,018	1,252
Manica	61,661	753
Tete	100,724	963
Zambezia	105,008	2,935
Nampula	81,606	2,757
Cabo Delgado	82,625	1,079
Niassa	129,056	593
<u>TOTAL</u>	<u>799,380</u>	<u>14,100</u>

Although the government does not keep records of the movement of workers across borders, it is estimated that several hundred thousand Mozambicans work in the mines of South Africa or as migrant farm laborers in Zimbabwe and Zambia. In addition, several hundred thousand Mozambican refugees are believed to have migrated to neighboring countries to escape the drought and civil strife.

1.12 Ethnic Groups

Virtually 99 percent of Mozambique's population are native Africans and the remainder are either Portuguese, Asians, or persons of mixed racial origin. Among the African population, ten ethnic clusters are usually identified, based on commonalities of tribal language, culture, history, location, and lineal descent. These clusters, listed in order of size, are Macua-Lomue, Tsonga, Lower Zambezi, Shona-Karanga, Islamic Coastal, Chopi, Maravi, Yao, Maconde, and Ngoni. The tribes living north of the Zambezi River are engaged primarily in subsistence farming, hunting, and fishing and trace their ancestry matrilineally. To the south, the people grow cash crops, raise livestock, or work in the service or industrial sectors, and follow patrilineal descent patterns. Before independence, the number of Portuguese living in Mozambique was estimated at 250,000. However, there are now fewer than 15,000.

1.13 Language

Portuguese is the official language of the government and is spoken primarily by the educated in the cities. Most of the African tribes speak their own Bantu dialects. Swahili is spoken in the northern coastal region. Many Mozambicans who have lived in South Africa, Zimbabwe, Zambia, or Tanzania also speak English.

1.14 Religion

The 1975 constitution established Mozambique as a secular state, guaranteeing "the freedom of citizens to practice or not to practice religion." However, the explicitly atheistic Mozambican Government is openly antagonistic to the Roman Catholic Church and expelled most foreign-born priests and missionaries in 1976. Nevertheless, between 15 and 20 percent of the population is Catholic and another five percent Protestant. Some

isolated tribal groups practice animism and sorcery. Portions of the Yao, Makua-Lomue, and Islamic Coastal tribes practice some of the tenets of Islam that were introduced by early Arab traders.

1.15 History and Government

Colonial Experience: From 1891 to 1975, present-day Mozambique was part of the scattered Portuguese African empire, along with the current nations of Cape Verde, Guinea-Bissau, Sao Tome and Principe, and Angola. The early Portuguese explorer, Vasco da Gama, stopped off at Mozambique on his trip around the African Cape and was surprised to find already thriving Arab trading posts on the northern coast of the country. The Portuguese began to establish their own trading settlements during the early 16th century, hoping to exploit the gold, ivory, and slave trade, but these bastions were primarily used as stop-over points for Portuguese ships traveling to and from India. For the next 300 years, the Portuguese presence in Mozambique was constantly threatened by African revolts and increased competition with the Dutch, French, and British. In 1891, the country was officially delineated and designated Portuguese East Africa and the port city of Lourenço Marques was named the colonial capital. By the turn of the century, costs of maintaining its overseas colonies forced Portugal to virtually hand over all monopoly rights and sovereignty to three chartered companies, owned by British, German, and Portuguese investors. In 1930, Antonio Salazar, the Portuguese Minister of Colonies and later dictator of Portugal, broke up the commercial interests of the chartered companies and tried to make Mozambique a successful colony for white Portuguese settlers. As dictator, Salazar encouraged Portuguese to emigrate to Mozambique, forced the Portuguese language, culture and Catholicism onto the population, and intensified exploitation of the colony's labor and natural resources.

**Struggle for
Independence:**

After World War II, while many European nations were granting independence to their colonies, Portugal clung tightly to its African possessions. Partly in response to growing international criticism, the Lisbon government made some cosmetic reforms to the colonial administration, giving black Mozambicans some rights and local sovereignty. However, in the early 1960s, Salazar feared that the bloody civil war in Angola would spread to Mozambique and introduced his own secret police apparatus to jail, beat, and torture any political dissidents. In 1962, several exiled dissident groups came together to form the Front for the Liberation of Mozambique (FRELIMO), led by Eduardo Mondlane, a southern Mozambican educated in Portugal and the United States. In 1964, FRELIMO began a campaign of armed guerrilla war against Portuguese colonial rule, supported by the governments of Tanzania, the Soviet Union, the People's Republic of China, and some Western countries. The Portuguese army, already involved in Angola, maintained control over the south, but made little headway against the rebel-held areas in the north. In 1969, Eduardo Mondlane was assassinated by a letter bomb mailed to his headquarters in Tanzania and the leader of the Marxist faction, Samora Moises Machel, became military commander of FRELIMO. A prolonged and bloody guerrilla war of attrition lasted until 1974, when military leaders overthrew the right-wing government of Portugal and sought a negotiated settlement with FRELIMO. On June 25, 1975, the thirteenth anniversary of the founding of FRELIMO, Mozambique became an independent state and the capital city, Lourenço Marques, was renamed Maputo.

Recent History:

Samora Moises Machel served as President and absolute ruler of the People's Republic of Mozambique from independence until his death in 1986. Mozambique is officially a one-party Marxist-Leninist state, controlled entirely by the FRELIMO leadership.

The mass exodus of the Portuguese following independence left Mozambique's economy and administrative structure in almost total disarray. The government seized all private land, abolished private medical and legal practices, established collective state farms and factories, suspended most civil liberties, and sent dissidents to re-education camps. Since independence, the FRELIMO government has been under attack from two opposition groups. In 1976 and 1977, the United Democratic Front of Mozambique (FUMO), a multi-racial, socialist organization backed by Portuguese benefactors and Ian Smith's former Rhodesian government, temporarily set up a government-in-exile and claimed control of the northern Cabo Delgado Province. However, with the collapse of the white regime in Rhodesia, a band of anti-FRELIMO guerrillas, called RENAMO or the Mozambique National Resistance (MNR), began operating out of the Transvaal Province of South Africa. RENAMO launched a series of raids to sabotage railways, roads, and other infrastructure targets in an effort to destabilize the Mozambican economy. At the same time, the FRELIMO leadership publicly supported the African National Congress (ANC), a organization dedicated to the overthrow of the white-minority South African government. In early 1984, in a move that surprised the international community, the governments of Mozambique and South Africa signed a mutual non-aggression treaty, the Nkomati Accord, agreeing not to support opposition movements in each other's countries. Although time will tell if this treaty can be sustained, it represents the recognition by both governments that the close economic relationship between the two countries must not be disrupted by political animosities.

Since 1980, the war between FRELIMO and RENAMO has intensified. RENAMO does not appear to exercise administrative control over any portion of the country but rather is a guerrilla force that carries out hit-and-run attacks against government installations, economic targets, and civilians.

The Mozambican Government continues to assert that the South African Government (SAG) supports RENAMO, in violation of the Nkomati Accord, but SAG denies it. The governments of Zimbabwe and Tanzania provide troops to help the Mozambican army fight RENAMO, and the USSR, Cuba, and East Germany continue to provide military advisors.

On October 19, 1986, President Machel was killed in a plane crash that occurred just inside the South African border. Machel was returning from a summit meeting in Zambia with other "frontline" state leaders. The cause of the crash has not been determined, but many believe that the South African government caused the crash. Other evidence suggests that the accident was caused by bad weather and pilot error. Machel was succeeded by former Foreign Minister, Joaquim Chissano, who announced that he would follow the pragmatic policies initiated by Machel.

Foreign Policy:

Mozambique's relations with non-African countries have also undergone changes since independence. In 1977, the Government of the People's Republic of Mozambique (GPRM) signed a Treaty of Friendship and Cooperation with the Soviet Union and began receiving technical and military assistance from East Bloc countries and Cuba. In 1981, the GPRM expelled four U.S. Embassy employees after accusing them of espionage and collaboration with the South African intelligence service. In response, the U.S. Government suspended plans to provide development aid to Mozambique. However, with the onset of drought in Mozambique in 1981, the U.S. Government renewed its assistance by providing emergency food aid and technical assistance to the country. At the same time, there were indications that the GPRM was growing disillusioned with the inadequate technical assistance provided by the Communist-bloc nations. Mozambique has begun to court Western investment and assistance, permit the return of some private enterprises, and pursue a foreign policy of non-alignment.

Administrative
Structure:

According to the 1975 constitution, the 210-member, unicameral People's Assembly is the supreme organ of the State, but in reality the executive council of FRELIMO makes all the major decisions for the government. By law, FRELIMO is the sole political party and the president of FRELIMO serves as president of the State. Some of the more recent actions of the GPRM, such as the Nkomati Accord and opening up to the West, suggest that Mozambique's policy makers may be more pragmatic than their rhetoric implies. Mozambique is divided into ten provinces, each managed by a provincial governor answerable to FRELIMO. At the grass roots level, FRELIMO party cells called circulos or "dynamizing groups," function to mobilize public support and fight corruption, sloth, alcoholism and other "reactionary tendencies."

1.16 Economy

Basic Indicators
(1984):

GDP at market prices	\$2,012 million
GDP average rate of growth (1980-83)	-6.3 percent
GNP per capita	\$150
External debt	\$2.4 billion
Balance of payments	
imports	\$654 million
exports	\$154 million
trade deficit	-\$410 million

Source: World Bank, 1985 (estimates)

The Portuguese exodus left the shattered Mozambican economy with an unskilled labor force, a weak industrial base, and depleted foreign exchange reserves. Some of the departing property owners deliberately set fire to their farms and factories. After independence, the FRELIMO government immediately confiscated and nationalized private property, collectivized agriculture, and established "People's shops" to replace commercial markets. Over the next several years, the combined effect of chronic droughts and floods, guerrilla attacks on

economic targets, trade difficulties with neighboring countries, and government mismanagement caused the GNP to fall by 25 percent and left Mozambique in a state of economic collapse. During this period, Mozambique received most of its foreign aid from China and the Soviet-bloc countries. However, in 1981, there were indications that the GPRM was beginning to liberalize the economy and court Western aid and investment. That year the government closed the "People's shops" and permitted the return of some private enterprise. The government has adopted a liberal foreign investment code and permitted investment by several South African, European, and American companies. In 1984, Mozambique signed the Lomé Convention with the EEC, joined the IMF and World Bank, and agreed to reschedule its huge external debt payments. Faced with an overwhelming foreign exchange deficit, the GPRM devalued the metical by over 80 percent in early 1987.

Agriculture:

The agricultural sector accounts for roughly 45 percent of Mozambique's GDP and virtually 90 percent of the country's total labor force. Only five percent of all of the arable land is cultivated, of which 90 percent is devoted to family subsistence farming of cassava, cereals, and cashew nuts. During surplus years, these crops are sold on the commercial market. Most of the state and cooperative farms are utilized for Mozambique's major cash crops: sugarcane, cotton, tea, and sisal, but some have converted to growing food crops for the urban population.

Drought, floods, and civil strife have all taken their toll on Mozambique's agricultural sector. Between 1982 and 1984, overall marketed agricultural production fell by more than 50 percent. The depletion of seed reserves and a critical shortage of other agricultural inputs such as tools, fertilizers, and irrigation equipment has also contributed to smaller crop yields over the years. Finally, agricultural production has been adversely affected by a weak marketing infrastructure and the lack of production incentives for farmers.

Marketed Food Production ('000 tons)

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Maize	78	89	46	46
Rice	29	41	17	19
Sorghum	1	2	2	1
Cassava	11	10	6	9
Beans	15	7	4	3

Source (1981-83): AGRICOM, reported in UNDRO Multi-Agency Mission

Source (1984): FAO estimates

Marketed Cash Crop Production ('000 tons)

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Cashew nuts	88	95	80	60
Seed Cotton	64	73	60	24
Sugar	170	178	126	74

Source: AGRICOM, reported in UNDRO Multi-Agency Mission (1984)

Industry:

Mozambique's industrial sector operates well below capacity, accounting for only 10 percent of the GNP and 5 percent of the labor force. Most of the manufacturing is centered around Maputo, although several new plants have opened up in the northern provinces. The normally dominant food processing sector (mainly sugar, cashews, tea, and prawns) has been the hardest hit by the drought and decreased agricultural production. There are severe shortages of consumer goods throughout the country and Mozambique is still heavily dependent on South Africa for manufactured imports. Other small-scale industries located in Mozambique include cement and textile factories, assembly plants for radios, railway carriages, and motorcycles, and manufacturing plants of tires, cigarettes, beer, shoes, and agricultural implements.

Mining:	Although some areas of Mozambique are believed to be rich in minerals, the mining sector is underdeveloped and underexploited. Coal accounts for the largest mineral reserves, but recently, deposits of iron ore, uranium, tantalite, bauxite, gold, asbestos, and precious stones have been discovered and are awaiting exploration. Natural gas and petroleum reserves are also being explored by several foreign companies. All mineral rights belong to the government, which issues concessions for prospecting and mining.
Major Exports:	Cashew nuts, prawns, tea, cotton, sugar and molasses, petroleum products, copra, coal, sisal, timber
Principal Purchasers:	United States, Portugal, Netherlands, East Germany, United Kingdom, Japan, South Africa
Major Imports:	Machinery and spare parts, raw materials, consumer goods
Principal Suppliers:	South Africa, East Germany, Iraq, Switzerland, United Kingdom, West Germany, Portugal

1.17 Health

Basic Indicators: (1980)	Crude birth rate/1,000	46
	Crude death rate/1,000	19
	Infant mortality rate/1,000	159
	Life Expectancy	
	males	44
females	47	

Source: UNICEF, 1984

The poor health situation in Mozambique can be attributed to widespread malnutrition, lack of sanitation and potable water in rural areas, and a tropical climate conducive to vector-borne diseases. Parasitic diseases, such as malaria, yaws, filariasis, and sleeping sickness are endemic to the north, while waterborne diseases, such as schistosomiasis, amebiasis, and infectious

hepatitis are prevalent along rivers and streams. Cases of measles, typhoid, poliomyelitis, and tetanus are common throughout the country, but vaccination campaigns have been initiated by the government. Other commonly reported diseases include leprosy, cerebro-spinal meningitis, and venereal infections. Maputo is relatively free of most of the common rural diseases, although an outbreak of cholera killed at least twelve persons in 1980. Foreign visitors to Maputo should drink only bottled or boiled and filtered water.

1.18 Nutrition and Diet

The diet of the rural population is very high in carbohydrates from such staple foods as cassava, corn, millet, and potatoes, but very low in protein sources such as beef, because of the presence of the tsetse fly in the north. The main dish is a porridge made from corn, rice, or cassava, accompanied by a sauce of beans, coconut, or groundnuts. Fish and rice are consumed by people living along rivers and the coast. Groundnuts, beans, and mangoes are also a regular part of the diet. Locally brewed beer is a popular beverage. The per capita daily consumption of food is approximately 1,844 calories, well below the recommended minimum allowance of 2,600 calories. Since independence, the combined effects of chronic droughts and floods, which have destroyed crops and livestock, exacerbated by a poor transportation infrastructure and guerrilla attacks against Mozambican farmers, have caused devastating famines in scattered provinces around the country. Marasmus, kwashiorkor, anemia, and vitamin deficiencies are commonly found among children in these famine-stricken areas. Even the capital city of Maputo has regularly experienced food shortages, necessitating government rationing of imported food.

1.19 Education

The mass exodus of the Portuguese left Mozambique with very few trained teachers, doctors, administrators, or skilled workers. The GPRM launched an extensive educational campaign, which raised the national literacy rate from 7 percent in 1975 to 28 percent in 1985. Children are taught Portuguese at five years of age and attend at least seven years of compulsory primary and secondary education. In 1981, there were 5,709 primary schools and 138 secondary schools, all of them state-run and free to all students. The curriculum stresses reading, vocational training, agricultural development, and political indoctrination. Under the FRELIMO regime, health and education account for over one-third of the national budget. In 1976, the University of Lourenço Marques was renamed the Eduardo Mondlane University, and provides degrees in law, economics, engineering, and agricultural sciences. University students are required to give as many years of public service as time spent at the university. Many Mozambican students receive technical training and higher education in Soviet-bloc countries.

1.20 Communications

Radio and Television: Radio Mocambique, the government-controlled radio service, broadcasts in Portuguese, English, and African languages and operates three stations in Maputo and eight other provincial stations. Stations from South Africa and other neighboring countries, as well as Voice of America and BBC news can be received on most short-wave radios. Experimental television is currently being broadcast by an Italian company, Televisao Experimental, in Maputo. In 1983, there were an estimated 275,000 radios and 1,500 TV sets in Mozambique.

Telephone and
Telegraph:

Mozambique's automatic dial telephone service works reasonably well, although lines are usually overloaded during business hours. The country dialing code is 258. Telephones are available in all government-owned and leased residences. Telephone and telegraph service is available inside the country and to the outside world, but can be slow and expensive.

Press:

The official news agency is AIM (Agencia de Informacao de Moçambique). There are two daily newspapers, Diario de Moçambique, a popular tabloid, and Noticias, a government-run newspaper, both published in Portuguese.

2. Disaster Vulnerability

2.1 Overview of the Physical Environment

Mozambique is located in the subtropical belt of the southern hemisphere. The climate is regulated by the movement of the intertropical convergence zone (ITCZ), the warm Mozambique Channel current, and the southeast trade winds, which are partially blocked by the mountains of Madagascar. Rains are brought by the seasonal monsoon and tropical cyclonic disturbances spawned in the Indian Ocean. The rainy season begins in November and ends in April. The cooler, dry season generally lasts from May until October. Topographically, Mozambique is 44 percent lowlands and marshes, 17 percent hills and low plateaus, and 39 percent high plateaus and mountains.

Mozambique can be divided into three agroclimatic regions: the northern tropical, the central fertile, and the southern semi-arid zones. The northern tropical zone extends south of the Rovuma River on the Tanzanian border down to the Ligonha River, encompassing the provinces of Cabo Delgado, Niassa, and Nampula. The terrain is characterized by a thin strip of flat coastline that gradually gives way to a rugged highland plateau ranging from 200 to 1,750 meters in elevation. The Messinge, Lucheringo, and Lugenda rivers feed into the mighty Rovuma, while the Lurio River flows out into the Indian Ocean. Average annual rainfall in this zone ranges from 850 mm to 1,200 mm. Three of Mozambique's largest lakes are found in this region: Lake Nyasa (Malawi), one of the largest lakes in Africa; Lake Chiota; and Lake Chirua, all of which share shores with the nation of Malawi. The western highlands are covered by a dense tropical rain forest. The soil composition in the northern zone is a mixture of sand, clay, and ferrous soil. Intensive farming of cotton, cashews, and sisal takes place primarily along the coast.

The central fertile zone incorporates Zambezia, Tete, Manica, and Sofala provinces, located between the Ligonha and Save rivers. The topography varies from a flat eastern coastline to a continuous mountain plateau, with peaks in the far west reaching 2,000 meters. The Zambezi River, Africa's fourth largest river, cuts through the landscape, as do several smaller rivers, including the Luala, the Pungue, the Revue, and the Buzi. This zone tends to receive the most precipitation, getting as much as 1,500 mm a year along the coast. Man-made Lake Cabora Bassa, created by the Cabora Bassa Dam, joins the Zambezi River in Tete Province. Gorongosa National Park, located in the heart of the central zone, is a refuge for elephants, zebra, buffalo, jackals, lions, and RENAMO guerrilla units. The landscape is generally covered by savanna grasslands, except for forests in the Tete and Gorongosa highlands. The rich black soil is mostly composed of alluvial deposits. This zone is generally the most agriculturally productive region of the country. Sugar, rice, and cotton are grown in the fertile river valleys, while tea is cultivated in the highlands of Zambezia Province.

Below the Save River to the farthest point south lies the southern semi-arid zone of Mozambique. This zone contains Inhambane, Gaza, and Maputo provinces and its terrain consists of a flat plain stretching from the Indian Ocean coastline to the western border. The slow-moving Limpopo, Changane, Olifants, and Incomati rivers flow into the Indian Ocean, while the Maputo River empties out at Delgado Bay. The southern zone receives the least amount of rainfall, only an average of 700 mm a year. The plains are covered with short, edible grasses, where cattle can graze without the threat of the tsetse fly, which persists to the north. Crocodiles and hippopotamuses live in the marshy rivers and streams. The soil is generally sandy and does not retain water or nutrients well. Small farms that grow rice, bananas, vegetables, and citrus fruits are found along the rivers and near the coast.

Mean Monthly and Annual Rainfall (mm)

Stations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN- UAL
<u>Northern Zone</u>													
Pemba	171	153	180	120	26	17	18	4	6	10	34	129	868
Lichinga	239	239	232	74	18	4	2	2	3	14	78	223	1128
Nampula	249	216	203	77	25	17	19	8	6	14	77	186	1097
<u>Central Zone</u>													
Quelimane	281	278	273	111	87	69	52	28	16	12	82	174	1463
Beira	275	287	267	127	65	39	38	37	25	19	128	215	1522
Chimoio	236	214	157	53	23	20	13	23	16	29	114	174	1072
Tete	154	176	89	15	3	4	2	2	2	3	54	136	640
<u>Southern Zone</u>													
Inhambane	150	145	110	67	52	59	34	26	29	33	79	160	944
Xai-Xai	151	164	91	75	70	60	50	31	41	42	93	117	985
Maputo	159	136	80	68	24	17	19	17	34	53	68	92	767

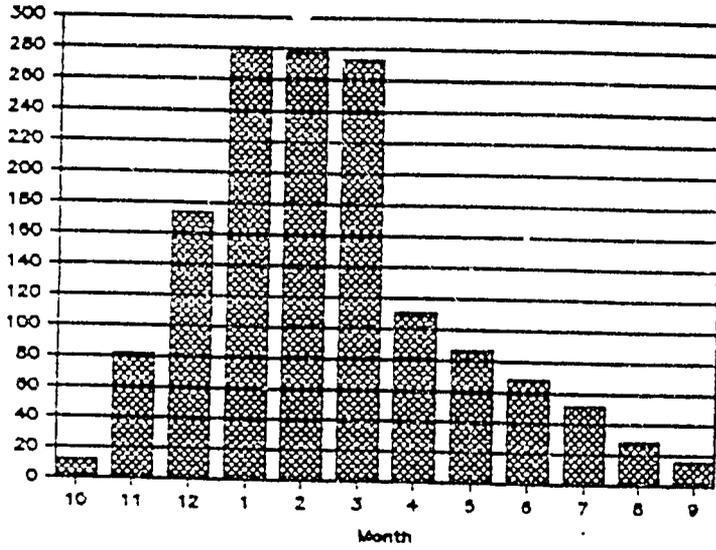
Source: NOAA/AISC. Agroclimatic Conditions and Assessment Methods for Drought/Food Shortages in Subequatorial Africa, 1984

2.2 Droughts

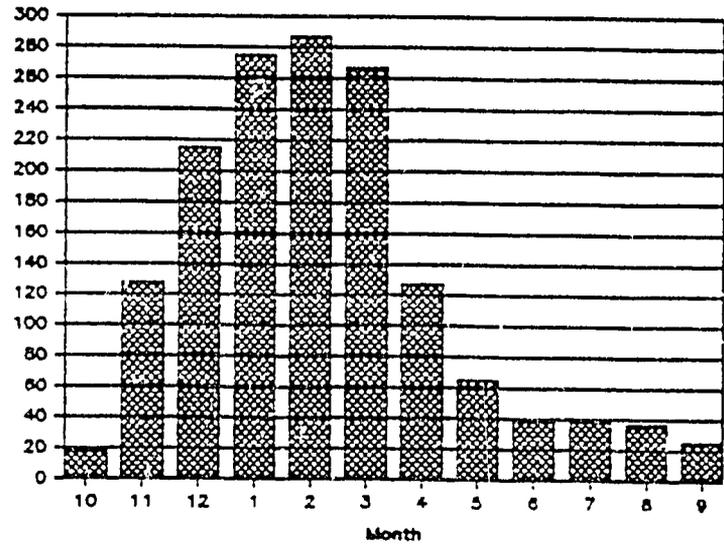
All three agroclimatic zones have experienced droughts, but the southern and central provinces are the most vulnerable. Severe rainfall deficits were recorded in 1949-1950, 1959-60, and 1969-70. The latest drought that began in 1981 has certainly been the longest and most

MONTHLY AVERAGE RAINFALL DISTRIBUTION AT SELECTED STATIONS (mm)

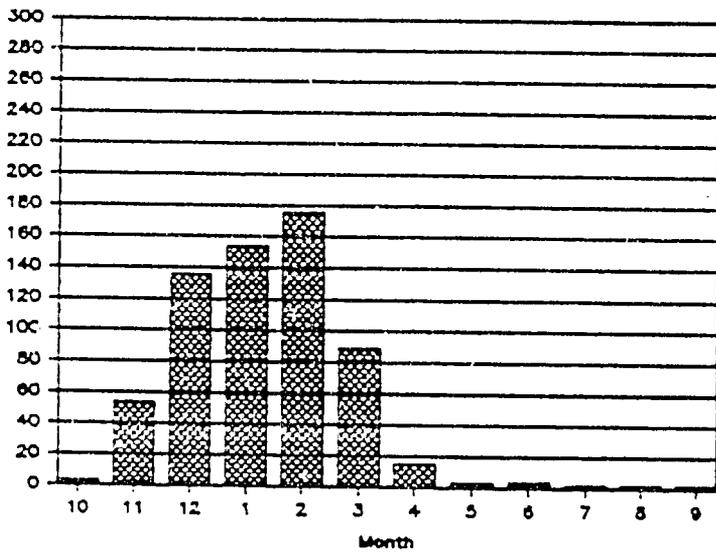
QUELIMANE



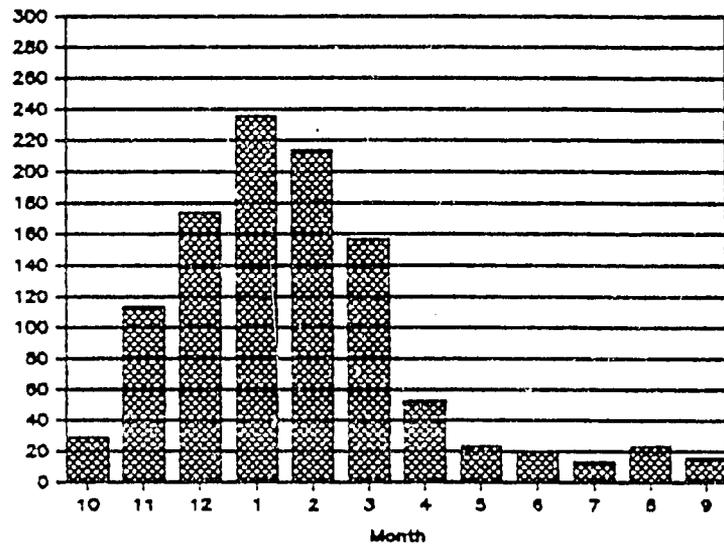
BEIRA



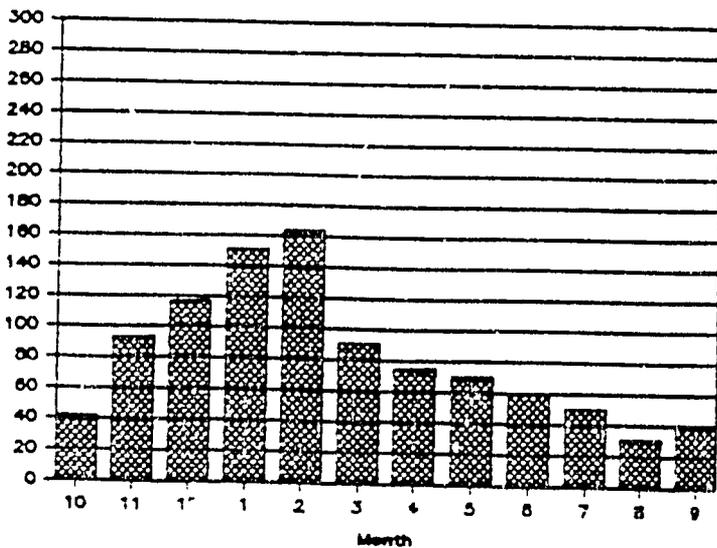
TETE



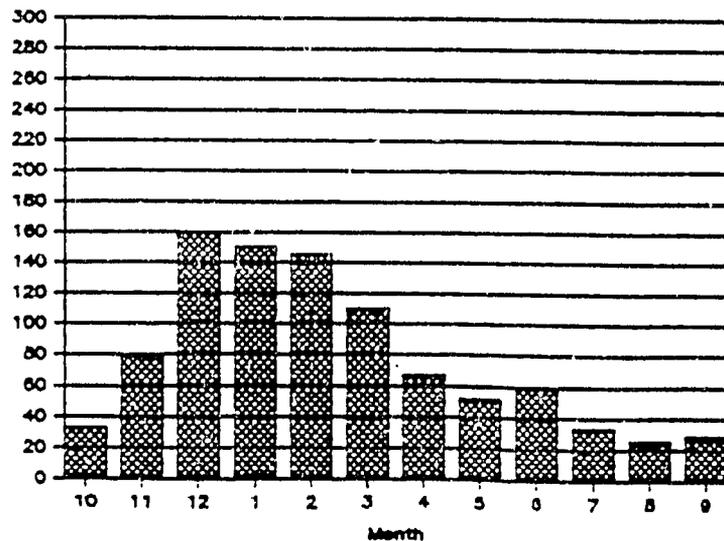
CHIMOIO



XAI-XAI



INHAMBANE



destructive. Agricultural production declined significantly between 1981 and 1985. Overall market production of maize, sorghum, and rice fell from 132,000 tons in 1982 to 64 tons in 1983. The low water levels in several of the southern rivers caused a dramatic reduction in the yields of irrigated crops, such as rice. Cassava, groundnuts, and beans, which are often used as cereal substitutes, were also below normal yields. Furthermore, thousands of head of cattle perished due to the lack of watering holes and forage in their southern grazing lands.

Rainfall Measurements During Recent Rainy Seasons (Nov.-Mar.)

Stations	1981/82	1982/83	1984/85
<u>Northern Zone</u>			
Pemba, Cabo Delgado	611	627	533
Lichinga, Niassa	636	475	789
Nampula, Nampula	914	1,031	837
<u>Central Zone</u>			
Quelimane, Zambezia	1,650	381	867
Beira, Sofala	1,361	434	1326
Chimoio, Manica	880	419	na
Tete, Tete	464	213	576
<u>Southern Zone</u>			
Inhambane, Inhambane	320	264	629
Xai-Xai, Gaza	294	193	na
Maputo, Maputo	374	247	708

Source: UNDR0, 1984 and NOAA/CIAD, 1986

Even during years of normal rainfall, Mozambique is only able to produce about half of its market needs for staple food. Drought alone is not the sole cause of the decline in agricultural production. Until 1985, the government failed to provide support or incentives to the family farm sector, which accounts for most of the domestic food production. In addition, Mozambique's agricultural sector was faced with a severe shortage of seeds and other agricultural inputs, which further inhibited food production. Flooding during the height of the 1984 and 1985 growing seasons destroyed a high percentage of the crops in the southern provinces. Finally, armed insurgents stepped up their attacks on farmers, driving them off their land and preventing them from growing or harvesting their crops. By 1985, the drought had ended, but domestic food production remained low and the total food aid requirement was over 500,000 tons. The southern provinces will require several years of above normal rainfall, in order to replenish the water table depleted by the five year drought.

2.3 Famine/Food Shortage

Although it is usually associated with drought, famine is simply defined as mass hunger due to a scarcity of food in the marketplace. Between 1981 and 1985, almost 20 African countries were experiencing droughts, but only Mozambique, Ethiopia, Sudan, and Angola were threatened with famine. All four of these countries were in the midst of civil war, which exacerbated the food shortage by inhibiting food production, displacing thousands, and hampering food deliveries to affected regions. Mozambique's bankrupt economy did not have the foreign exchange necessary to cover its food deficit and the international community did not respond with donated food shipments until the crisis reached famine-scale proportions. By the end of 1984, the Government of the People's Republic of Mozambique (GPRM) reported that 100,000 people had died as a result of the famine. That year, over 4,700,000 people were listed as "affected", usually defined as the segment of the population who require emergency food assistance.

Famine was most apparent in the drought-stricken provinces of Maputo, Gaza, Inhambane, Manica, Sofala, and Tete. During a famine, children and the elderly are the most vulnerable to malnutrition and disease. At the height of the famine in 1983, ten to twenty people a day were dying of starvation and disease in Gaza and Inhambane provinces. In a survey taken in these two provinces, 43.3 percent of the children were suffering from mild to moderate malnutrition and 19 percent from severe malnutrition. This is catastrophically high, considering the fact that children under the age of 15 make up almost 47 percent of Mozambique's total population. In classic conformity with the normal stages of famine, rural families first sold their material belongings in an effort to stave off starvation. When there was nothing left to buy or sell, the hungry consumed "famine foods", such as roots, leaves, and an indigenous water plant known as "nunufario". As a last resort, thousands of sick and emaciated people moved into government-organized relief camps or migrated to neighboring countries in search of food.

2.4 Epidemics and Disease

Disease and malnutrition are the principal causes of death in Mozambique. Weakened by malnutrition and forced to congregate in unsanitary displacement camps, thousands of famine-victims died as a result of disease. In the early months of 1983, a cholera epidemic claimed the lives of at least 189 people in the southern provinces. In a health assessment of several villages and camps in both Gaza and Inhambane provinces, the U.S. Centers for Disease Control (CDC) reported that the most common causes of death and illness were malnutrition, diarrhea, malaria, pneumonia, and tuberculosis. The rural population is also plagued by scurvy, rickets, scabies, fleas, and hookworm. Mozambique has a poor mortality and morbidity surveillance system, but in 1980 the following data on the incidence of disease were reported to the World Health Organization.

Incidence of Disease, 1980

<u>Disease</u>	<u>Cases</u>
Cholera	559
Pulmonary Tuberculosis	6,786
Leprosy	1,676
Measles	27,588
Viral Hepatitis	2,333
Meningococcal Infection	243
Tetanus	546

Source: WHO World Health Statistics Annual, 1983

2.5 Floods

Paradoxically, the same areas of Mozambique that experience droughts are also susceptible to flooding. Flooding usually occurs in the southern and eastern portions of the country, where the land is flat and marshy and the rivers are sluggish and meandering. Floods are produced by seasonal downpours or tropical cyclones that occasionally hit the southeastern coast of Africa. In 1971, torrential rains caused the worst flood disaster in Mozambique's history, killing over 500 people living in settlements along the Zambezi River. Floods have compounded crop losses of rice, maize, and vegetables, further aggravating food shortages throughout the country. The drought caused farmers to plant their crops closer to river banks, so that when torrential rains did come, many farms were completely inundated. Floods have also caused tremendous damage to the nation's infrastructure. Flooding in 1985 wiped out portions of the national highway and railroad and destroyed several bridges and small dams.

Mozambique has over fifty rivers and streams, most of them originating in neighboring countries. Flooding as a result of Cyclone Domoina in 1984 was made much worse when the South African Government decided to release floodgates upstream in order to relieve the pressure on their own dams. The Cabora Bassa Dam was built in 1976 to control flooding along the Zambezi River, as well as produce hydroelectric power, provide irrigation, and make the river navigable. Several smaller dams have also been built, including the Massingir Dam on the Olifants tributary, the Mapai Dam on the Limpopo, and the Corrumane Dam on the Incomati River. However, these dams are used primarily for irrigation, rather than as an effective means of flood control.

2.6 Tropical Cyclones and Storms

Tropical cyclones are relatively rare occurrences in Mozambique's disaster history, but when they do strike, they can cause tremendous damage. Most tropical cyclones that generate in the Indian Ocean follow

a southwesterly course and curve back in a southeasterly direction. Some of these storms continue on a west-southwest path and slam into the southeastern coast of Africa. In January 1984, Cyclone Domoina passed through Maputo, killing over 100 people and causing an estimated \$75 million worth of damage. Maputo's waterworks were totally disabled, as were the city's power and communication systems. Most of the crops in the southern provinces were completely destroyed and over 5,000 head of cattle perished. Cyclone Domoina packed 100 km/hr winds and dropped 300 mm of rain in a two day period, causing flooding throughout Maputo Province. Mozambique has also suffered disasters resulting from a destructive hailstorm (1977) and an intense electrical storm (1985).

2.7 Civil Strife and Displaced Persons

Like many of the famine-stricken countries in Africa, Mozambique has been ravaged by a long and costly civil war. The conflict can be traced back to 1964, when anticolonial FRELIMO forces began an armed guerrilla campaign against Portuguese colonial rule. Immediately after independence, opposition groups sprang up to wage their own guerrilla war against the FRELIMO leadership. These opposition groups, comprising supporters of the old regime, FRELIMO defectors, mercenaries, and the disaffected, call themselves the Mozambican National Resistance (MNR), sometimes referred to as RENAMO. The FRELIMO leadership refers to them as "bandits", who are supported and financed by wealthy Portuguese benefactors and the South African Government. Small guerrilla groups have been extremely effective at disrupting the fragile Mozambican economy, by attacking development projects, burning farms, interdicting transportation routes, and physically intimidating villagers. Joint Mozambican and Zimbabwean military ventures have thus far been only temporarily successful at liberating rebel controlled areas. The famine in Mozambique has certainly been exacerbated by this renewed insurgent activity. Food convoys have been ambushed, roads have been mined, and grain warehouses have been burned to the ground. By 1985, insurgent activity replaced drought as the primary cause of hunger in Mozambique.

The famine and civil strife provoked a mass exodus of thousands of Mozambican refugees to the neighboring countries of Malawi, Zimbabwe, Zambia, Swaziland, and South Africa. In 1985, more than half a million persons (most of them women and children) were listed as displaced. Most of these deslocados were forced to leave their farms due to the recurrent attacks by RENAMO guerrillas. Most moved into army-protected villages, known as aldeamentos, situated outside the provincial capitals. Relief camps, consisting of thousands of tiny, overcrowded huts, sprang up at and Vilanculos in Inhambane, Chibuto in Gaza, and Espungabera in Manica. At Moatize in Tete Province, displaced persons lived in abandoned boxcars at the end of the railroad line. Displaced families are the most vulnerable to famine and the most dependent on food aid and the provision of basic necessities, such as clothing, blankets, soap, and utensils.

2.8 Disaster History

<u>Disaster</u>	<u>Date</u>	<u>Location</u>	<u>Impact</u>
Flood	02/67	Maputo and Gaza provinces	50,000 homeless
Flood	01/71	Zambezi River Zambezia and Sofala	500 killed; 500,000 affected
Flood	02/75	Limpopo River Gaza Province	1 killed; 75,000 affected; 70% of maize and bean crop destroyed
Flood	02/76	Incomati River Maputo Province	Damaged maize, wheat, rice and bean crops
Cyclone Emily	02/77	Limpopo, Umbeluzi, and Incomati rivers in Gaza and Maputo provinces	300 killed; 40,000 homeless; over 400,000 affected. Caused over \$3.4 million damage to produce, livestock, and infrastructure
Storm	10/77	Maputo Province	Hailstorm caused 3 deaths and 51 injuries
Flood	03/78	Zambezi River in Tete, Manica, Sofala, and Zambezia provinces	45 killed; 220,000 homeless. \$63.7 million in material losses
Cyclone Angele	12/78	Nampula Province	4 killed; 25,000 homeless; 80,000 affected
Epidemic	04/80	Maputo City	Cholera killed 12 people and infected approximately 200
Drought	1981-1982	Southern and central provinces	Crop production reduced by 80%

Disaster History (cont'd)

<u>Disaster</u>	<u>Date</u>	<u>Location</u>	<u>Impact</u>
Drought/ Famine	1983	Maputo, Gaza, Inhambane, Manica, Sofala, Zambezia, and Tete provinces	40,000 died from famine, over 4,750,000 affected. Crop production down by 70-80%
Epidemic	1983	Southern provinces	189 deaths due to cholera
Cyclone Domoina	01/84	Maputo and Gaza provinces	109 killed; 49,000 displaced; 350,000 affected. Total damage estimate at over \$75 million
Drought/ Famine	1984- 1985	Tete, Manica, Sofala, Inhambane, Gaza, and Maputo provinces	100,000 deaths; 2,466,000 affected
Floods	2/85	Maputo, Gaza, Manica, and Sofala provinces	8 killed; 2,500 families homeless
Storm	3/85	Maputo Province	Damaged 32 electri- cal transmission towers, hundreds of houses.

Source: OFDA Disaster History, 1986

OFDA case reports on the 1984 and 1985 disasters are included as appendices to this profile.

3. Disaster Preparedness and Assistance3.1 Host Government Disaster Organization

The Department for the Prevention and Control of Natural Calamities (DPCCN) is the permanent national disaster relief organization of the Government of the People's Republic of Mozambique (GPRM). The DPCCN is responsible for managing emergency relief operations, distributing relief supplies, and coordinating relief activities with other GPRM agencies, private voluntary organizations, and international donors. The department is subordinate to the Ministry of Cooperation and reports directly to the interministerial Council for the Prevention and Control of Natural Calamities. The Chairman of the Council, an honorary role, is the Minister of Cooperation while the Minister of Commerce, who serves as Vice Chairman, convenes the Council and largely guides its direction.

The Department is composed of a Director, a small secretariat, a planning and information office, provincial field directors and staff, and the Logistical Support Unit (LSU). In February 1984, the GPRM signed a project agreement with the U.S. private voluntary organization CARE to establish and manage the LSU as the operational arm of the DPCCN. The project was funded by the Office of U.S. Foreign Disaster Assistance (OFDA), which recognized the need for a permanent logistical unit within the DPCCN to handle the food emergency. As outlined in the project agreement, the LSU is directly responsible for: 1) port clearance, handling, storage, and forwarding of food and relief goods coming into Mozambique; 2) maintenance and operation of vehicles used to transport relief commodities; 3) establishment of a computer based management and reporting system to track inventory and distribution; 4) provision of information on food and commodity needs in affected areas; 5) coordination with donors concerning the allocation of relief supplies at the provincial and district level; and 6) training host national staff in management, accounting, English language, and data processing, with the intent that the LSU become an entirely Mozambican unit within four years of project initiation.

As the lead disaster relief agency, the DPCCN works closely with other GPRM ministries and departments in coordinating the national relief response. The Ministry of Commerce is responsible for overall food planning and its parastatal marketing agency, AGRICOM, is charged with purchasing and distributing domestic food surpluses. The Ministry of Agriculture oversees the agricultural sector of the economy and distributes seeds and other agricultural inputs to farmers. Epidemiological surveillance and immunization is the responsibility of the Ministry of Health. The Ministry of Ports, Railways, and Merchant Marine provides logistical support for the distribution of relief supplies. Repair of infrastructural damage caused by floods and cyclones falls under the aegis of the Ministry of Construction and Water.

The DPCCN has a reputation as a highly effective and deeply committed national relief agency. During the drought/food emergency, the GPRM was quick to acknowledge the magnitude of the crisis and appeal for international assistance. The government has made the food emergency a high national priority and has sought to deliver food and relief commodities to all accessible, affected populations. However, delivery of emergency relief supplies has been disrupted by frequent RENAMO attacks. The establishment of the Logistical Support Unit, under the management of CARE, has certainly bolstered the DPCCN's logistical capabilities and now a higher percentage of the affected population is accessible. The DPCCN has also improved its information collection capability, an important function in any relief organization. Both CARE and UNICEF have provided technical assistance to the DPCCN to strengthen its ability to collect accurate information on the size of "at risk" populations and the assessment of needs. The DPCCN produces a monthly situation bulletin on each of the affected provinces and shares this information with interested donor agencies. The DPCCN has also worked well with the various donor governments and organizations in coordinating international disaster assistance.

GPRM Contacts

Departamento de Prevenção e Combate as
Calamidades Naturais (DPCCN)
Avda Ahmed Sekou Toure 21
Maputo
Telephone: 741054

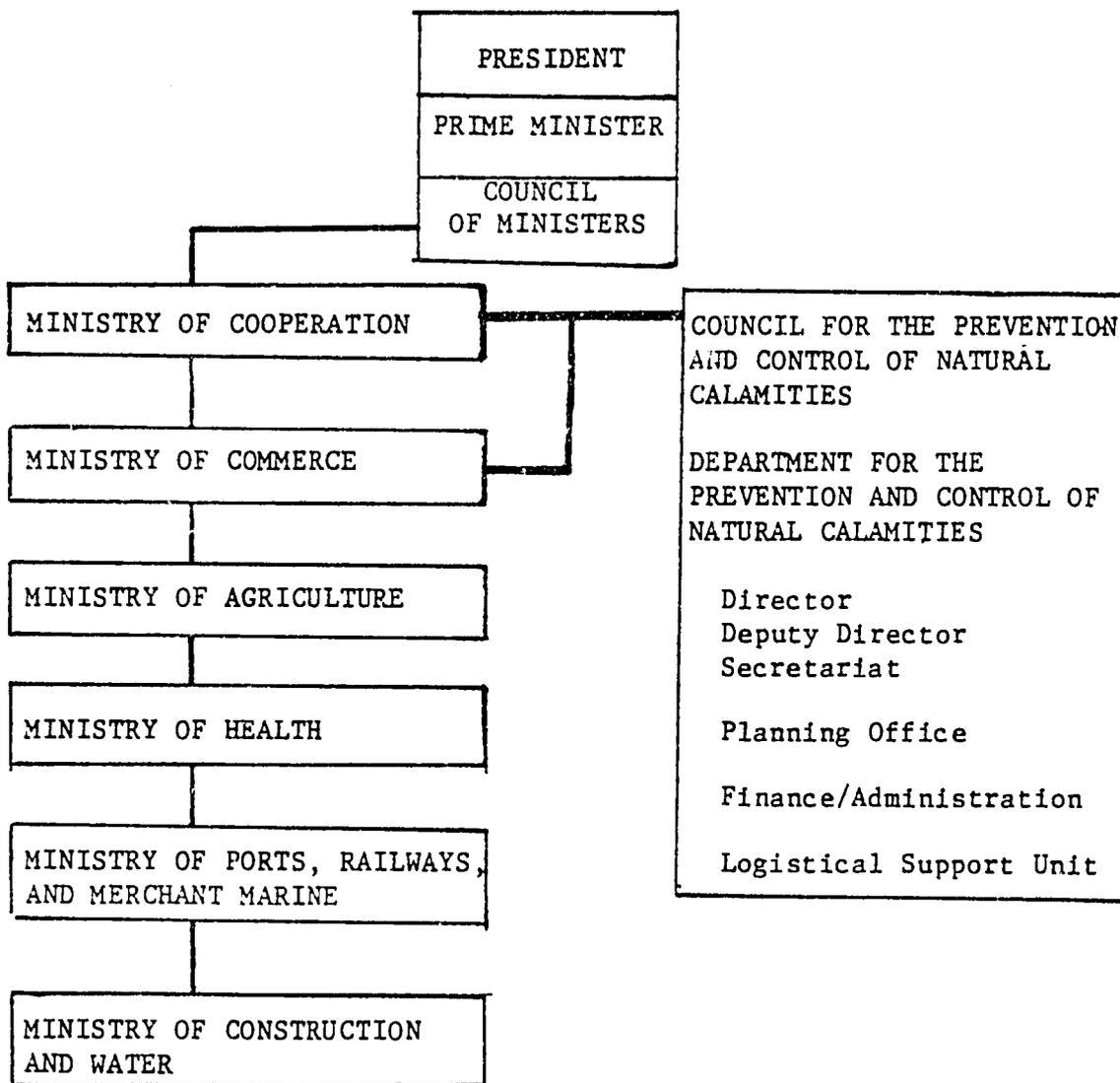
Ministerio de Comercio (Commerce)
Praça 25 de Junho
Maputo
Telephone: 741087

Ministerio de Agricultura (Agriculture)
Avda Alcordos de Lusaka
Maputo
Telephone: 21071

Ministerio de Saude (Health)
Avdas Eduardo Mondlane e Salvador Allende
Maputo
Telephone: 30814

Servico Meteorologico de Moçambique
P.O. Box 256
Maputo
Telephone: 741061

ORGANIZATIONAL CHART



3.2 Host Country Voluntary Organizations

The Mozambique Red Cross Society (MRC) was founded in 1981, making it one of the youngest members of the League of Red Cross and Red Crescent Societies (LRCS). The League and its national societies provide emergency assistance to victims of natural disasters. During the recent famine, the MRC and LRCS delegates were actively involved in delivering food, clothing, and agricultural inputs to victims in Gaza, Maputo, Manica, and Sofala provinces. The International Committee of the Red Cross (ICRC), the nonpolitical international organization mandated to provide assistance to victims of civil strife, delivered medical supplies and materials to displaced persons located in Zambezia Province. Since its inception, the MRC has provided first aid training to factory workers, firemen, police, teachers, and students. In 1985, the MRC and the LRCS began a disaster preparedness project in Mozambique, designed to 1) train staff in disaster management, 2) maintain relief supply warehouses and vehicle workshops around the country, 3) operate an ambulance service in Maputo city, and 4) prepare a disaster preparedness plan to be integrated into a national disaster preparedness strategy.

Mozambican Red Cross Society
Av. 24 de Julho, 641
Maputo
Telephone: (258) 295 45

The other major host country voluntary organization involved in disaster relief is the Christian Council of Mozambique (CCM), a Protestant church group affiliated with the World Council of Churches. Working closely with the U.S. PVO Church World Service, the CCM distributed food, medicines, and supplies to relief camps in Inhambane, Gaza, Maputo, and Sofala provinces during the famine. The CCM also supports a school feeding program, in cooperation with the Ministry of Education, and a rural development irrigation project in Inhambane Province.

Christian Council of Mozambique
Av. Ahmed Sekou Toure 1822
P.O. Box 108
Maputo
Telephone: 25102, 25103, 22836

3.3 Agricultural Sector

Due to a combination of natural and man-made factors, Mozambique's agricultural sector is not able to produce enough food to feed its population. Only five percent of all of the arable land is cultivated, although it has been estimated that as much as 70 percent of the country's land area is suitable for agricultural purposes. The two main staple food crops, cassava and corn, are grown throughout the country on small

family subsistence farms. Between 80 and 90 percent of the total population is dependent on agriculture for all or a substantial part of its livelihood. Most of the imported food goes to feeding Mozambique's urban population. Most urban Mozambicans live on a monthly food ration set and distributed by the government. Rural families who can no longer farm their land because of drought, floods, or civil strife are the segment of the population most vulnerable to famine and dependent on food aid.

Crop Calendar

<u>Crop</u>	<u>Sowing Period</u>	<u>Harvesting Period</u>
Corn	November-January	April-June
Rice	October-December	April-June
Sorghum	November-January	March-May
Wheat	February-April	July-September
Beans	March-May	June-September
Cassava	August-April	All year

Mozambique's agricultural sector can be divided into four different types of farming systems:

State farms were former colonial plantations, now owned and managed by the GPRM's Ministry of Agriculture. They occupy approximately six percent of the total cultivated land area, or roughly 140,000 hectares. These state farms grow mostly cash crops such as sugar, cotton, tea, and sisal, although some farms have converted to cultivating irrigated food crops for the urban population. State farms account for 15 percent of the total domestic agricultural production. They employ an estimated 150,000 workers and utilize modern agricultural techniques, such as the use of pesticides, fertilizers, and farm machinery.

Cooperative farms are also supported by the government, mainly with the provision of credits and agricultural inputs. At present, only about 12,000 hectares are cultivated by peasant cooperatives. Generally these cooperative farms have proved to be very unsuccessful and unproductive, accounting for less than one percent of the total agricultural production.

Traditional family farms occupy almost 90 percent of the available farmland or approximately 2,000,000 hectares. These peasant family farmers grow almost 80 percent of the total agricultural production, mostly corn, sorghum, beans, and cassava for the family's own consumption. That which is not used for basic family subsistence is traded in the marketplace or sold to the government for distribution. However, low producer prices and attacks by RENAMO guerrillas have discouraged these farmers from growing and selling any surplus. Cashew nuts and cotton are grown primarily by family farmers and sold to government-authorized concessionaires. Women do most of the sowing and harvesting, which is done entirely by hand.

Private plantations still occupy about 50,000 hectares of land and cultivate only cash crops for export. They account for four percent of the country's total agricultural production.

After independence, the GPRM embarked on a policy of developing state farms and cooperatives. The Ministry of Agriculture invested entirely in the state farm and cooperative sectors, promoting large-scale, cash crop agricultural complexes in the Limpopo River valley, the citrus growing region of Maputo Province, the Angonia district in Tete, and the Erati region in Nampula. However, after years of neglect, the GPRM has begun to support the family farm sector, guaranteeing purchase of family surpluses, raising official producer prices of some crops, and providing seeds and hand tools to family farmers. To meet the severe shortage of agricultural inputs in Mozambique, the GPRM requested and received donations of seeds, fertilizers, pesticides, and tools from several international donors. Two parastatal companies, BOROR and INTERQUIMICA, are responsible for the internal distribution of seed, fertilizers, and pesticides.

Marketed agricultural production has declined steadily from a high of 150,000 tons in 1981. In 1985, AGRICOM, the GPRM food marketing agency, recorded marketed surpluses of only 60,000 tons of corn and 17,500 tons of rice. It is important to remember that marketed production accounts only for sales through the official market, most of it coming from the state farm sector. The traditional peasant family farmers have little incentive to produce more than they need for their own subsistence. Due to the scarcity of foreign exchange and consumer goods in Mozambique, farmers lack incentives to increase output and sell their produce. The presence of more money chasing fewer goods has ensured an explosion of the black market, known as candonga. AGRICOM has begun guaranteeing purchase of family farm surpluses and providing these farmers with agricultural inputs and consumer commodities donated by the international donors.

Marketed Food Production ('000 tons)

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Corn	78	89	46	46	60
Rice	29	41	17	19	18
Sorghum	1	2	2	1	na
Cassava	11	10	6	9	na
Beans	15	7	4	3	na

Source (1981-1983): AGRICOM, reported by UNDRO
(1984-1985): FAO estimates

Due to the absence of economic activity in Mozambique, there is an abundance of available food storage space. However, most of the grain warehouses are located in the port cities of Maputo, Beira, Quelimane, and Nacala. Rural storage sheds and silos have been destroyed by RENAMO. In March 1986, the GPRM maintained a food security stock of 17,000 tons of corn, 13,500 tons of wheat, and 5,000 tons of rice.

3.4 Health Sector

The Portuguese exodus left Mozambique with virtually no health care system for a population of almost 10 million. Before the exodus, there were more than 500 physicians in the country, all of them Portuguese. After independence, the GPRM abolished private medical practice and declared medical care free for all Mozambicans. By 1975, there were fewer than 90 doctors left in the entire country, and in Zambezia Province, three doctors served a population of 1.8 million. The GPRM immediately made improvement of the national health care infrastructure one of its highest priorities and devoted over seven percent of the national budget to health. Medical personnel were recruited from several socialist, African, and Western countries. Programs were instituted to train rural health workers in primary and preventive health care. The GPRM launched nationwide immunization campaigns against measles, diphtheria, tetanus, typhus, poliomyelitis, tuberculosis, and smallpox. By 1985, it was estimated that about one-half of all Mozambicans have access to preventive health care and about one-third to curative care.

According to the World Bank, there were approximately 400 registered physicians in Mozambique in 1985, or one doctor for every 33,000 people. All of these physicians, both expatriates and nationals, received their formal training abroad. However, basic preventive and therapeutic health care training is provided to indigenous agentes polivalentes elementarios, rural health workers modeled after the Chinese "barefoot doctors." At the next level are the agentes sanitarios, preventive health workers who teach villagers how to purify water, build latrines, preserve food, and serve as back-ups to the rural health workers. Local "dynamizing groups" also provide public health instruction. Aware of the severe shortage of physicians, facilities, and medical supplies in country, the GPRM Ministry of Health has stressed preventive health care and basic outpatient services. In remote rural areas, the village medicine man or curandeiro treats the sick with a mixture of herbal remedies and black magic.

In 1983, there were 1,122 health posts, 220 primary health centers, 26 rural hospitals, seven provincial hospitals and three central hospitals. (UNICEF, 1985). The three main hospitals in the country, in Maputo, Beira, and Nampula, are the best-equipped, but all facilities lack drugs, beds, equipment, and personnel. Health posts in the countryside are often housed in small huts, staffed by nurses or midwives, and do not have cold chain facilities for refrigerating

medicines. Health posts and hospitals have also been frequent targets of RENAMO attacks. Between 1982 and 1986, the GPRM reported that 484 health posts were destroyed by RENAMO.

The Ministry of Health administers the national health service and implements the overall health strategy. A provincial director of health directs the health care services in each province and there are provincial health offices located in every district capital. The Ministry of Health has adopted a formulary of essential drugs to restrict the indiscriminate importation of inappropriate, expensive pharmaceuticals. During the famine, the Nutrition Section of the Ministry of Health conducted nutritional surveys of vulnerable groups in affected areas. The Ministry of Health also received emergency medical support in the form of grants, drugs, equipment, and medical personnel from UNICEF, ICRC, Medecins Sans Frontiers, and other private voluntary organizations.

3.5 Water and Energy

Only about 10 percent of the population has access to clean water, most of it serving Maputo. In 1984, Maputo's waterworks were severely damaged by Cyclone Domoina. In response to an appeal from the GPRM, OFDA provided technical assistance to repair and rehabilitate Maputo's damaged water system. Outside of the major cities, the population must fetch water from wells, lakes, and streams. Although some public buildings are made of concrete or brick, most of the rural population lives in small, thatched-roof huts, made of bamboo and mud. As a result of a Ministry of Health preventive health campaign, approximately one-half of all households have access to latrines. Health brigades were sent out to the countryside to build pit latrines and teach proper sanitation practices.

All matters concerning water supply and water resources in Mozambique fall under the aegis of the National Directorate of Water (DNA), a department of the Ministry of Construction and Water. The recent drought dried up several rivers and depleted the freshwater aquifer in Gaza and Inhambane provinces. In 1985, OFDA financed a UNICEF project in collaboration with DNA to provide safe drinking water to over 100,000 people in Inhambane Province. The UNICEF project provided technical assistance, equipment, and materials to two Mozambican water agencies: UDAAS, the National Water Supply and Sanitation Agency, responsible for constructing shallow wells in Inhambane Province; and GEMOC, the State Drilling Company, which is to drill and rehabilitate tubewells in eastern Inhambane.

Mozambique's energy needs are furnished primarily by foreign sources, despite the completion of the Cabora Basso hydroelectric project in the late seventies. The Cabora Basso Dam, constructed by a South African, German, and French consortium, is now owned and administered by a corporation formed by the governments of Mozambique and Portugal, the latter holding about 80 percent of the stock. Under the corporation

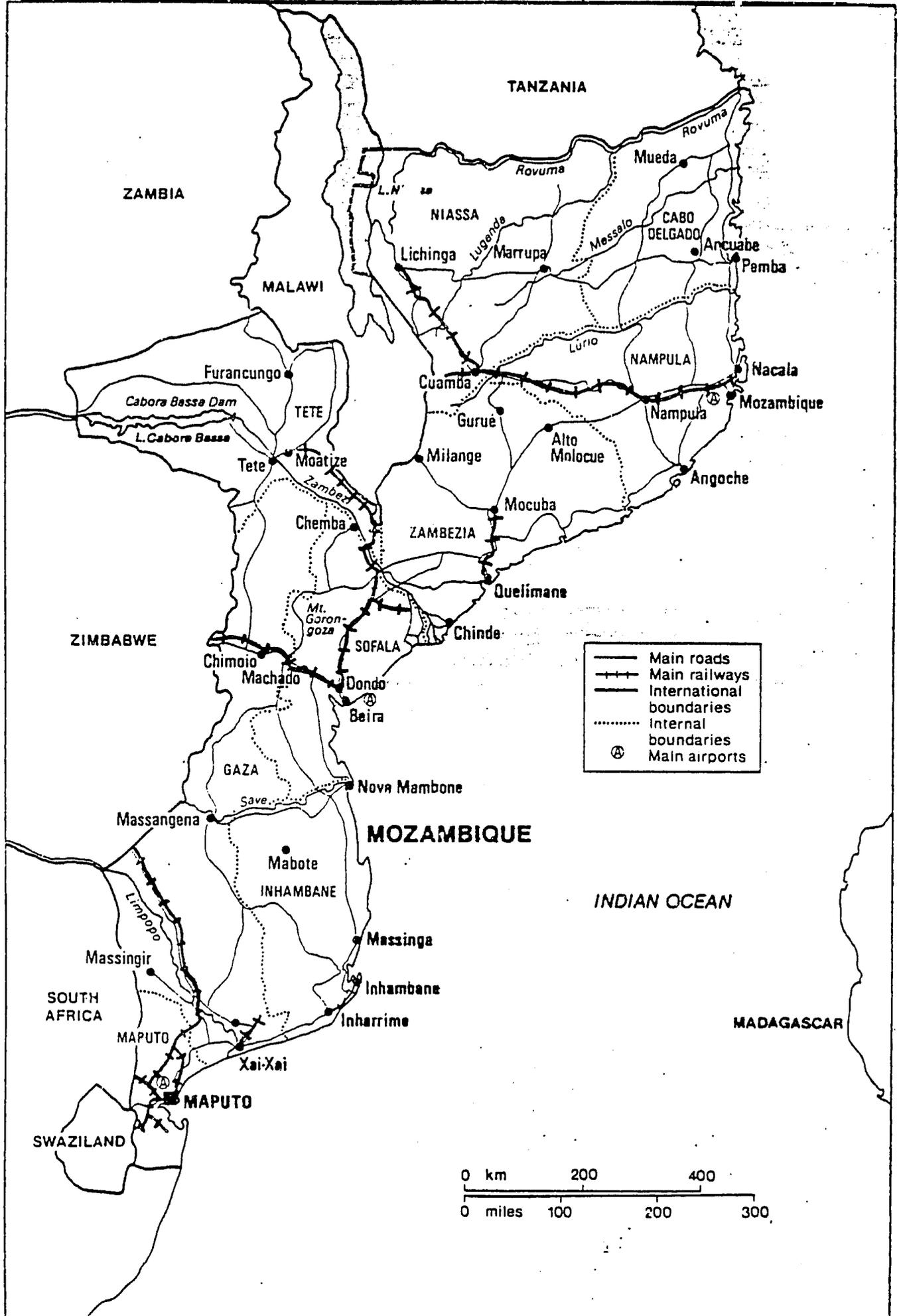
agreement, Mozambique is to gradually acquire full ownership of the project by the year 2005. A 1984 tripartite agreement among the GPRM, Portugal, and South Africa provided for a maximum of 1,450 megawatts of power to be sold to South Africa. In return, South Africa provides up to 90 megawatts to southern provinces of Mozambique.

Electricidade de Moçambique (EDM) oversees production and distribution of electric energy. Maputo is connected to the South African electrical grid and the electric current in the city is 220 V, 50 Hz. RENAMO guerrillas have frequently sabotaged power lines and substations. In March 1985, a severe storm knocked out 32 electrical transmission towers, which supplied the city of Maputo with power generated from South Africa. Most of Maputo was without power and forced to rely on a single, antiquated thermal power station. In response to an appeal from the GPPM, several international donors, including the governments of Denmark, Netherlands, Norway, and Sweden, purchased coal and diesel fuel to keep the power plant operating. The Government of Italy provided \$1,500,000 to repair the damaged transmission line. The United States Government purchased 30,000 tons of coal for the Maputo power station and sent an electrical engineer from Ebasco Plant Services Inc., to evaluate the back-up power plant.

Over 50 percent of Mozambique's energy consumption is derived from imported oil. Crude oil is processed at a refinery of the state-owned Mozambique National Petroleum Company (PETROMOC), located outside of Maputo. The critical shortage of foreign exchange has drastically reduced Mozambique's importation of crude petroleum, which fell from 641,000 tons in 1982 to 105,000 tons in 1983. The GPRM hopes to derive revenue and its own oil supply from contracts with U.S., French, and South African companies engaged in offshore oil exploration.

3.6 Road Transport

Mozambique's road network consists of 4,500 km of asphalted roadway, 500 km of road paved with gravel, and some 20,000 km of graded earth feeder roads (World Bank, 1985). Most of the paved highways link the provincial and district capitals and do not provide access to agriculturally productive areas in the interior. Transportation of food to and from remote rural areas is difficult, because the dirt tracks can only be traversed by four-wheel vehicles and are frequently washed out during rainy season. Flooding in 1985 impeded traffic along National Route 1, the major thoroughfare for delivering food and relief supplies from the port at Maputo to relief camps in Gaza and Inhambane provinces. RENAMO guerrillas have mined roads and ambushed truck convoys delivering food to relief camps.



The Department of Roads and Bridges, under the Ministry of Construction and Water, is responsible for construction, maintenance, and repair of the national road system. Two road construction companies, Emoresa de Construcao e Manutencao das Estradas and the Portuguese-owned Tamega, are contracted by the Department to build and reconstruct streets and highways. Following the 1985 flood, the governments of Italy, the United Kingdom, and the United States provided funds and materials to rebuild damaged bridges and roads.

The decline in commercial transport activity led to a reduction in the national vehicle fleet (cars, buses, trucks) from over 100,000 vehicles in 1973 to approximately 27,000 vehicles in 1984 (World Bank, 1985). One of the most urgent needs during the recent famine was for trucks, trailers, four-wheel vehicles, spare parts, and diesel fuel to replenish the vehicle fleets of the DPCCN and the Ministries of Commerce and Health. Numerous donors provided vehicles, spare parts, and diesel fuel to improve the GPRM's logistical capability.

Road Distances Between Provincial Capitals (km)

	Beira	Inham	Xai	Mapu	Nampu	Pemba	Queli	Tete	Lichi
Beira	---								
Inhambane	802								
Xai-Xai	999	263							
Maputo	1,205	469	206						
Nampula	1,018	1,746	1,943	2,149					
Pemba	1,477	2,175	2,372	2,578	438				
Quelimane	485	1,213	1,410	1,616	607	1,036			
Tete	632	1,166	1,363	1,569	1,576	2,005	1,043		
Lichinga	1,676	2,404	2,601	2,807	658	1,087	1,265	2,234	
Chimoio	198	732	929	1,135	1,142	1,471	609	434	1,800

Inham = Inhambane

Nampu = Nampula

Xai = Xai-Xai

Queli = Quelimane

Mapu = Maputo

Lichi = Lichinga

Source: Edicao Do Departamento De Estradas e Pontes, 1983

3.7 Railroads

The national rail network is divided into of three separate rail systems, totaling almost 3,000 km. The southern system, operating out of Maputo, provides rail service to Inhambane, Swaziland, South Africa, and Zimbabwe. The central corridor (950 km) connects the port at Beira with the town of Machipanda on the Zimbabwe border and with the coal mines in Tete. The northern line (920 km) extends from Nacala to Cuamba, where the line branches off to Lichinga and Entre Lagos on the Malawi border. The track is 1.067-meter gauge, the width common throughout southern Africa. The railroad is operated by Companhia Ferroviaria de Moçambique

(CFM), a state-owned company under the Ministry of Ports, Railways, and Merchant Marine. The railroad is primarily used to transport freight from the landlocked countries of Swaziland, Zimbabwe, and Malawi to the three major ports in Mozambique. In 1985, trains were utilized to transport emergency supplies from Maputo to the district capital at Moamba. Guerrilla attacks and the deteriorating condition of the tracks have made the railroad unreliable. In 1986, service along the southern and northern lines was frequently disrupted by RENAMO sabotage and tracks and trains along the Beira corridor had to be protected by Mozambican and Zimbabwean troops. The governments of France, Portugal, Canada, United Kingdom, Italy, and East Germany are investing in repair and reconstruction of all the railroad lines.

3.8 Water Transport

Mozambique is served by three major ports - Maputo, Beira, and Nacala - and a number of smaller ports and anchorages. Most of the imports, food, and relief donations enter through the port at Maputo. All three ports are connected to rail lines, which provide access to the neighboring countries of South Africa, Swaziland, Zimbabwe, and Malawi. The black African states belonging to the Southern African Development Coordination Conference (SADCC) have invested in upgrading Mozambique's ports and railroads, in an effort to bypass South Africa's transportation system.

Maputo is Mozambique's largest and busiest port and has the most modern cargo handling facilities.

Coordinates:	Lat 25°58'S; long 32°36'E
Authority:	Direccao Nacional dos Portos e Caminhos de Ferro Avenida dos Martires de Inhaminga 336
Telephone:	28790
Approach:	Safe entrance. Depths between 8 and 11 m.
Accommodation:	Ferro-concrete wharf, 2,225 m long, can accommodate 12 vessels. Largest vessel: 228.6 m length, 10.1 m draft
Facilities:	18 general cargo berths (2,615 m)
Storage:	30 warehouses available. Two cold storage plants for fruit and fish have been erected.
Cranes:	82 cranes on main wharf, capable of handling containers between 3 and 60 tons.
Towage:	Compulsory for berthing and unberthing. One tug available
Charges:	U.S. ships must pay all expenses in U.S. dollars. Other vessels pay in currency of the country where vessel is registered or of the country of charterers. Rates on application.

Beira is a main sea outlet for exports from Zimbabwe, Zambia, and parts of Malawi.

Coordinates: Lat 19°49'S; long 34°50'E
Authority: Caminho de Ferro de Mozambique
Approach: Shallow coastal and harbor waters make it necessary for ships to approach the port through a channel some 20 km long.
Accommodation: Largest vessel: 25,000 deadweight tons.
Facilities: 10 general cargo berths (1,700 m)
Storage: 12 sheds for general cargo (32,260 sq. m)
Cranes: One mobile diesel crane of 3 tons and forklift trucks capable of handling between 3.5 to 25 tons.
Towage: Available
Charges: On application

Nacala is the main sea outlet for the Republic of Malawi.

Coordinates: Lat 14°32'S; long 40°40'W
Authority: Capitania de Nacala. Tel. 2720
Accommodation: The harbor is 0.8 km wide at the entrance and 60 m deep with good anchorage for any size vessel. The old wharf can accommodate four vessels with length of 426 m.
Storage: Three sheds for discharging and two for unloading.
Cranes: Twelve electric cranes: nine at 5t, two at 10t, one at 20t.
Towage: One tug available
Charges: On application

Source: Lloyd's Ports of the World, 1985.

Between 1983 and 1986, the poor condition of the nation's roads and increasing security problems necessitated the use of coastal marine transport to deliver emergency food commodities to several displaced persons camps along the coast of Inhambane Province. WFP, UNDR0, and UNICEF chartered a landing barge from the Government of the Seychelles to ferry emergency food supplies from the ports at Maputo and Beira to otherwise inaccessible anchorages at Inhassoro and Vilanculos. The vessel, christened the 'Cinq Juin', is a 350-ton capacity flat-bottomed landing craft, capable of discharging directly on the beaches without berthing facilities. The Government of the Netherlands funded the operation of four smaller landing craft for off-loading the Cinq Juin. In January 1986, the Norwegian aid agency, NORAD, assumed the operating costs of the Cinq Juin, in cooperation with Navique, the GPRM shipping company and the Ministry of Ports, Railways, and Merchant Marine.

3.9 Air Transport

Mozambique's national airline is Linhas Aereas de Moçambique (LAM), which provides regular domestic service to Pemba, Nampula, Lichinga, Tete, Quelimane, Beira, and Maputo. In 1983, the LAM fleet consisted of four Boeing 737s and one Douglas DC-10. A second state company, TTA, provides scheduled and chartered light plane and helicopter service. There are two international airports at Maputo and Beira, paved airfields at each of the other provincial capitals, and dozens of small airstrips scattered throughout the country. Both Maputo and Beira airports have instrumental approach runways (2,800 m and 2,400 m long, respectively) and can accommodate Boeing 707s.

Aircraft Entry Requirements

All private and non-scheduled commercial aircraft overflying or landing for non-commercial purposes must obtain prior permission at least 72 hours prior to departure and a flight plan must be on file.

Non-scheduled commercial flights landing for commercial purposes must obtain prior permission from the Secretaria De Estado Da Aeronautica Civil, Department de Aviacao Civil, Postal Box 227, Maputo, Mozambique (telegraphic address: AERONAUTICA MAPUTO/TELEX: 6-595MCTAC MO) at least 72 hours prior to departure. All requests must include: (a) registration of aircraft and call sign; (b) color and nationality of aircraft; (c) nationality and names of crew and passengers; (d) purpose of flight; (e) name and address of persons to be contacted in Mozambique; (f) nature of cargo, if any; and (g) name and postal and telegraphic addresses of aircraft operator and owner.

Special Notices

1. All overflights are subject to altitude restriction. A flight plan must be filed to gain overflight approval at least 72 hours prior to entry into the airspace of Mozambique. All international flights over Mozambique territory shall be conducted through the ATS routes network.

2. Due to fuel shortage, all inbound aircraft anticipating refueling, must contact the fuel supplier prior to departure to guarantee fuel availability.

Other airlines serving Mozambique include Aeroflot, Cubana, Interflug, Lesotho Airways, South African Airways, Air Angola (TAAG), Air Portugal (TAP), and Varig.

Due to Mozambique's inadequate road network and serious security situation, air transport is often the only viable means of transporting emergency relief commodities to isolated communities. In 1985-86, UNDP and UNICEF funded DPCCN airlifts of high-value, low-volume goods, such as medicines, blankets, and supplementary foods to relief camps in otherwise inaccessible areas. LAM provided planes and crews for the airlift effort. The U.S. PVO, Mission Aviation Fellowship/AirServe furnished air transport for personnel monitoring relief operations.

Mozambique's worst air disaster occurred on March 30, 1986, when an Antonov 26 twin-turbo prop airplane crashed after takeoff from Pemba. Forty-nine people, including several FRELIMO party officials, were killed in the crash. Later in the year, on October 19, President Samora M. Machel and 33 other people were killed when their plane, returning from a summit meeting in Zambia, crashed just inside the border of South Africa.

3.10 USG Disaster Assistance

Since 1984, the United States Government has been one of the largest donors of disaster relief assistance to Mozambique. Relations between the two governments have improved considerably since their lowest point in 1981, when the GPRM expelled four U.S. Embassy employees after accusing them of espionage and collaboration with the South African intelligence service. Starting in 1983, the GPRM began to take several initiatives to improve relations with Western nations and reform some of its economic policies. In 1984, Mozambique joined the IMF and World Bank and embarked on an economic austerity and recovery program. The GPRM has also moved away from a strictly socialist economy and begun to support the family farm sector and some private enterprise. In November 1984, the USG's Agency for International Development (A.I.D.) established an A.I.D. Affairs Office (AAO) in Maputo to manage a bilateral Private Sector Rehabilitation Program. In addition, the AAO monitors and coordinates the USG relief response to declared disasters in Mozambique.

In accordance with the A.I.D.'s Handbook 8 Foreign Disaster Assistance, the U.S. Ambassador or acting Chief of Mission may declare a disaster in a foreign country if 1) the magnitude of the disaster is beyond the host country's ability to respond adequately, 2) the host country has requested assistance, and 3) it is in the interest of the U.S. Government to provide assistance. The Ambassador is authorized to provide up to \$25,000 immediately; additional relief expenditures are approved and coordinated by the Office of U.S. Foreign Assistance. OFDA can provide emergency relief and short-term rehabilitation assistance in the form of grants, relief commodities, logistical support, technical assistance, etc. A.I.D.'s Office of Food for Peace (FFP) administers the USG's P.L. 480 Title II emergency food program. The Mission Disaster Relief Officer (MDRO) recommends appropriate USG assistance and serves as the liaison with the host government.

OFDA case reports on the 1984 and 1985 disasters are included as appendices to this Country Profile. These case reports detail the U.S. Government's disaster assistance provided to Mozambique. The chart below summarizes this assistance.

U.S. Disaster Assistance to Mozambique 1975-1986

<u>Year</u>	<u>Disaster</u>	<u>Commodity/Service</u>	<u>Provided Thru</u>	<u>Cost</u>
1975	Flood	Seeds	UNDRO	\$225,000 <u>\$225,000</u>
1977	Flood	Local purchase of food		\$25,000 <u>\$25,000</u>
1984	Cyclone	Grant	GPRM	\$25,000
		Water treatment plant assessment	WASH	\$7,518
		Repair of Maputo Waterworks		<u>\$890,000</u>
				<u>\$922,518</u>
1984	Drought/ Food shortage	Local purchase of food	CCM	\$25,000
		Nutritional survey	CDC	\$4,400
		Grant for airlift	LORCS	\$130,000
		Grant for coastal barge	WFP	\$98,500
		Food distribution	WVRO	\$247,800
		Grant to establish Logistical Support Unit (LSU)	CARE	\$1,763,000
		59,078 MT of food	FFP	\$9,150,200
		Food transport	FFP	<u>\$6,189,600</u>
				<u>\$17,608,500</u>
1985	Flood	Road repair		\$25,000 <u>\$25,000</u>
1985	Storm	Power station assessment		\$17,321
		30,000 MT of coal		<u>\$250,000</u>
				<u>\$267,321</u>

U.S. Disaster Assistance to Mozambique 1975-1986

<u>Year</u>	<u>Disaster</u>	<u>Commodity/Service</u>	<u>Provided Thru</u>	<u>Cost</u>
1985	Drought/ Food Shortage	Airlift of 7,982 blankets	DOD	\$125,865
		Grant for logistical support, wells, and NGO collaboration	UNICEF	\$3,250,000
		Trucks and fuel	CWS	\$65,000
		Grant to continue LSU	CARE	\$600,000
		CARE project evaluation		\$20,000
		62,364 MT of food	FFP	\$14,208,300
		Food transport	FFP	\$6,257,900
			<u>\$24,527,065</u>	
1986	Drought/ Food Shortage	Ocean and air transport of 11,720 blankets		\$97,610
		Charter of plane for monitoring program	AIRSERVE	\$76,000
		Purchase of seeds	GPRM	\$800,000
		Food distribution project	WVRO	\$236,000
		Grant to continue LSU	CARE	\$4,201,831
		66,421 MT of food	FFP	\$9,631,000
		Food transport	FFP	\$4,830,900
			<u>\$19,873,341</u>	

Source: OFDA Commodity/Service File, 1986

3.11 U.S. Voluntary Agencies

1. CARE/Mozambique

Av. Felipe Samuel Magaica 859, Maputo
P.O. Box 4657
Telephone: 33342/3

Activities: Since February 1984, CARE has been providing technical assistance to strengthen the logistical capabilities of the DPCCN. Working as a part of and within DPCCN, CARE is assisting in the coordination of the management of logistical activities among entities engaged in the distribution of emergency relief assistance in six of the country's provinces. CARE also serves as the communications and informational network and the liaison among NGOs. CARE maintains provincial representation in Maputo, Tete, Beira, Chimoio, Inhambane, and Chibuto, with inventorying of warehouses, assessing transport needs, dispatching trucks and boats, training counterparts, and generally assisting DPCCN in all logistical activities of emergency supply.

2. Mission Aviation Fellowship (AirServe)
Av. Patrice Lumumba 770, Maputo
P.O. Box 4161
Telephone: 31815, 744527

Activities: MAF serves other relief organizations, providing airplane transport of passengers and cargo to isolated, affected areas. Their airplane fleet includes an 11-passenger King Air 200, a Twin Otter, and a single-engine Cessna 210.

3. World Vision Relief Organization (WVRO)
P.O. Box 2420
Harare, Zimbabwe
Telephone: 723770

Activities: U.S. affiliate of World Vision International facilitates food distribution programs in Tete, Manica, Gaza, Maputo, and Zambezia provinces. In Tete and Zambezia, WVRO provides returnee farmers with AgPaks, packages of seeds, tools, and fertilizers. WVRO operates out of Zimbabwe, but plans to open offices in Tete, Manica, and Maputo.

3.12 International Donors

International Organizations

1. European Economic Community (EEC)
Hotel Polana, Room 150/151, Maputo
Telephone: 32237

Activities: Since late 1983, the EEC has been active in Inhambane Province. An integrated rural development and agricultural rehabilitation scheme is underway in Vilanculos and Govuro districts. In Tete Province the EEC is carrying out a potato seed multiplication project in collaboration with the Ministry of Agriculture. Similarly, in Moamba, the EEC has a big project with the Ministry of Agriculture to assist private farmers, cooperatives and family sectors, with a supply of pumps and equipment.

2. International Committee of the Red Cross (ICRC)
Av. Agostinho Neto 284, Maputo
Telephone: 742475

Activities: Currently, a team of expatriates is working to train nationals in the Maputo General Hospital in the fabrication and fitting of prostheses for amputees.

3. League of Red Cross Societies (LRCS)
Av. 24 de Julho 641, Maputo
Telephone: 29545, 30045

Activities: In the emergency context in 1984/5, the League was active in Manica Province with airlifts to Machaze, Machanga, and other communities as well as with transport and distribution of U.S.-donated, World Vision-sponsored maize grain. The League has started a three-year "Disaster Preparedness" project in all 10 provinces of the country, including programs in management, training, communication, provision of vehicles, development of maintenance capacity, stocking of warehouses for disaster preparedness, assessments of health and nutrition, and forecast/early warning information system.

4. Lutheran World Federation (LWF)
Rua Dar es Salaam 296, Maputo
Telephone: 741185

Activities: Active in Mozambique since 1977, LWF manages several village-level, self-help projects, including an agricultural training project in Gaza and a well construction project in Tete. LWF has donated substantial quantities of corn, blankets, and medical supplies to disaster victims.

5. United Nations Development Program (UNDP)
Av. Kenneth Kaunda 931, Maputo
Telephone: 744151

Activities: UNDP Resident Representative coordinates the U.N.'s relief programs in Mozambique. UNDP has provided direct assistance to the DPCCN, donating tractors and landrovers and funding emergency airlifts of food and high value goods.

6. United Nations Childrens Fund (UNICEF)
Av. de Zimbabwe 1422, Maputo
Telephone: 741023

Activities: UNICEF's emergency relief and rehabilitation program operates several projects in cooperation with various GPRM agencies. These include a food and nutrition information system within the Ministry of Health, a logistical support project in cooperation with the DPCCN, a well and water supply program, a commodity-grain exchange project, and the provision of seeds, drug kits, and survival items.

7. World Food Program (WFP)
Rua Don Carlos 83, Maputo
Telephone: 742322

Activities: WFP manages the U.N.'s food assistance program to Mozambique. In addition, WFP financed the operation of the Cinq Juin, the landing barge used to deliver food to coastal areas in Inhambane Province.

Non-Governmental Organizations

1. ADPP - Development Aid from People to People
CP 489, Maputo

Activities: The Danish solidarity organization ADPP has about 20 expatriate cooperants building schools near Maputo. In the relief context, they have contributed substantial amounts of goods, including clothes, to DPCCN for distribution in Maputo Province.

2. Community AID Abroad
Av. Patrice Lumumba 431, Maputo
Telephone: 21193

Activities: A consortium of two Australian NGOs, Freedom from Hunger and the Australian Overseas Service Bureau, manages a rural development project in Inhambane.

3. Eduardo Mondlane Foundation
Rua Dar es Salaam 305, Maputo

Activities: This Dutch/Mozambican NGO has procured substantial quantities of relief goods, channeled through DPCCN, and has provided medicines to health posts in Inhambane Province.

4. Medecins Sans Frontieres (MSF)
Av. Martires du Machava 46, Maputo
Telephone: 743756

Activities: MSF is a French NGO of nurses and doctors providing medical support to hospitals and health posts in Inhambane and Tete provinces.

5. Medecins du Monde
Rua Perreira Marion 280, Maputo
Telephone: 743832

Activities: This French NGO provides medical support to hospitals in Sofala Province.

6. OXFAM
Av. Patrice Lumumba 770, Maputo
Telephone: 27518

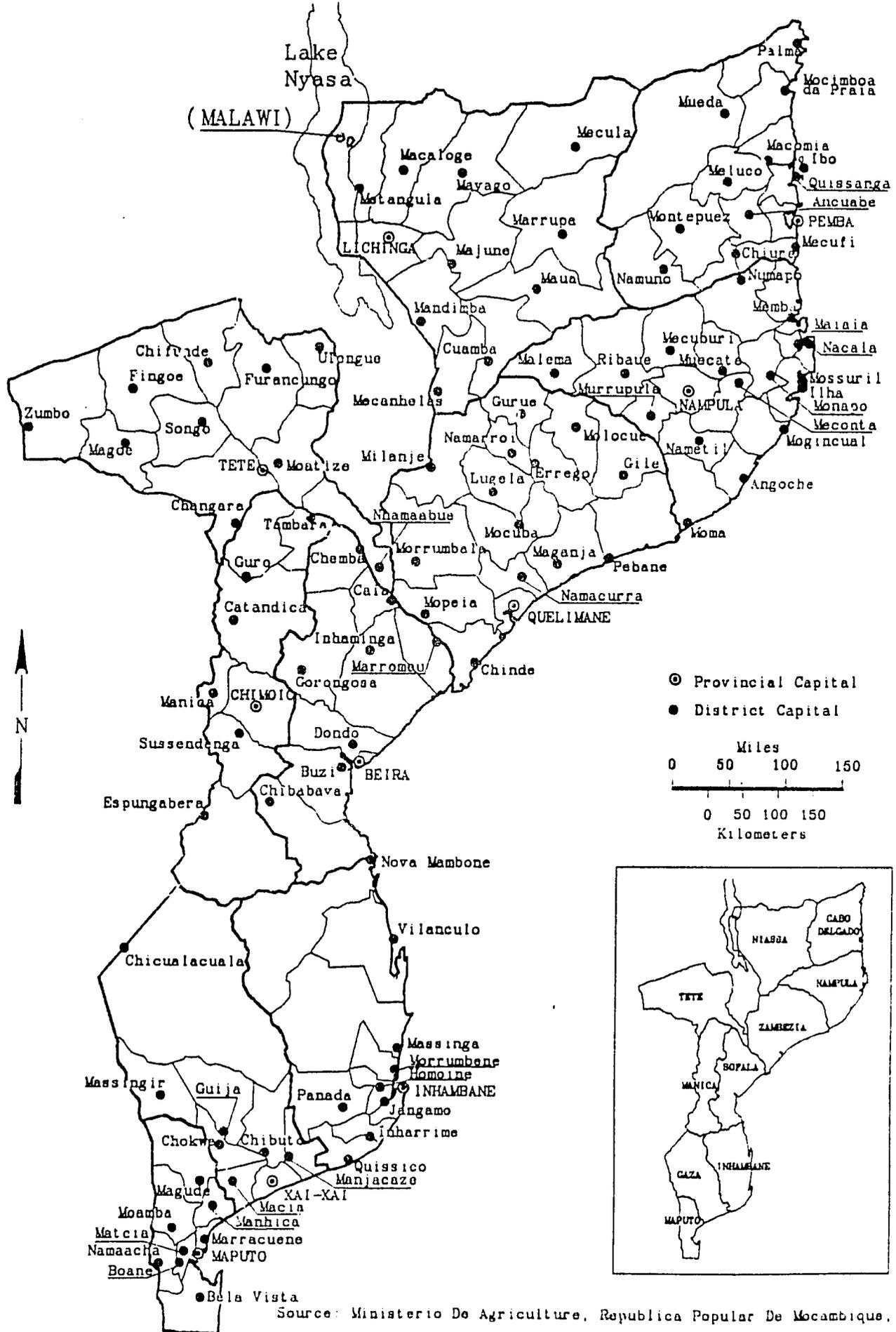
Activities: In the country since 1983, OXFAM completed a massive seed distribution program throughout Tete Province in 1984 and manages small projects in Tete, Gaza, Sofala, and Cabo Delgado provinces.

7. Save the Children Fund/U.K. (SCF)
Av. Patrice Lumumba 770, Maputo
Telephone: 30923

Activities: SCF has provided technical assistance to the Ministry of Health.

The following private voluntary organizations have also provided humanitarian assistance to Mozambique, in conjunction with other agencies: Adventist Development and Relief Agency (ADRA), Belgian Socialist Solidarity, CARITAS, Church World Service, Knights of Malta, and World Council of Churches.

DISTRICT CAPITALS



Source: Ministerio De Agricultura, Republica Popular De Mocambique, 1983.

FEWS/PWA March, 1987.

1984 Cyclone Case Report

Date: January 29-30, 1984

Location: Maputo and Gaza Provinces in southern Mozambique

No. Dead: 109 known dead

No. Affected: 350,000 were affected to some degree by the loss of crops; 49,000 rural people lost all their possessions.

Damage: About 250,000 hectares of agricultural land were affected by flood waters, destroying a large portion of the summer harvest, the Maputo waterworks was rendered inoperable, and small irrigation systems, including pumps and dams, were destroyed. Railway and road links to the rest of the country and to Swaziland and South Africa were cut in several locations. Total damage was estimated at over \$75 million.

The Disaster

Mozambique found itself unexpectedly in Cyclone Domoina's destructive path on January 29-30. After battering Madagascar earlier in the month (January 20-24), the storm slammed into southern Mozambique with 100 kilometers per hour winds and torrential rains before moving on to Swaziland and South Africa.

In the capital city of Maputo (population about one million), the strong winds felled hundreds of trees, ripped roofs off houses in the center of town, and flattened less durable structures on the city's outskirts. Massive flooding of the Umbeluzi River left the city's waterworks totally disabled and forced thousands of people in the interior to flee before the rising waters. The 300 mm of rain which fell during a two-day period was the equivalent of 40% of the average annual rainfall in Maputo.

Renewed heavy rains on February 2 added to the flooding of the Umbeluzi, Incomati, and other principal rivers in Maputo and southern Gaza provinces. The situation was made even worse by the decision of the South African Government (with GPRM knowledge) to open their flood gates to relieve pressure on their own dams. The result was the worst flooding in Mozambique's recorded history.

While the death toll remained relatively low at 109, material damage from the cyclone and flooding was extensive. Besides the damage to the Maputo water pumping and treatment plant and to many dwellings and public buildings, power and communications were disrupted for a time. Overland links to the north and the south were cut in several places as road and rail lines were breached or damaged.

About 250,000 hectares of agricultural land were inundated, destroying much of the summer harvest: 55,000 tons of corn, 15,000 tons of beans, and 20,000 tons of vegetables. In addition, some 12,000 tons of citrus fruit, 7,000 tons of bananas, and 10,000 tons of sugar cane were lost, and 5,000 head of cattle perished. The loss of numerous small irrigation systems along the rivers jeopardized the winter crop as well. Small private farmers were the most seriously affected.

The heavy crop and livestock losses were regarded with special dismay in this drought-stricken country. (See also MOZAMBIQUE - Drought.) Because the three-year drought had forced farmers to move closer to river beds for most of their planting, they were especially vulnerable when the flooding occurred. Relatively normal rains in Maputo and southern Gaza provinces during the months prior to the cyclone had promised the first substantial harvest in several seasons. With only weeks to go before the summer harvest, most of the promise was suddenly wiped out.

Action Taken by the Government of the People's Republic of Mozambique (GPRM)

The GPRM organized a major relief effort under the personal direction of the Foreign Minister. Rescue workers succeeded in moving most of the people stranded by the flooding to safe ground. The Department for the Prevention and Combat of Natural Calamities, with the assistance of the Mozambican Red Cross, distributed food, milk, clothing, and blankets to the flood victims. Food and relief supplies were airdropped to otherwise inaccessible locations.

Lacking the resources to adequately take care of the affected population, the GPRM appealed to the international community for food assistance for the 350,000 persons who had lost their crops, as well as for fuel, seeds, medicines, tents, blankets, and other relief supplies. The GPRM also identified priorities for the country's rehabilitation, with the first being the restoration of the Maputo waterworks and the replenishment of lost stores of chemicals. Provision of seeds and the replacement of the private irrigation systems were also high priority needs.

Government technicians worked round-the-clock to restore electrical power to the Maputo water plant and to improvise ways of keeping it operating until repairs could be made.

The GPRM undertook a national self-help campaign to assist the flood victims, designating February 25 as a national day of support. Donations of clothing, blankets, and household items were received from many organizations and individuals.

Assistance Provided by the United States Government

The U.S. Ambassador to Mozambique, Peter Jon de Vos, was one of several diplomats who joined the GPRM Minister of Internal Trade in making an aerial survey of the devastated areas. Based on his personal observation of the destruction caused by the cyclone, the Ambassador determined that a disaster existed which warranted USG assistance. The \$25,000 obligated from his disaster assistance authority was pledged to the GPRM relief effort. Some of the P.L. 480 Title II food which had recently arrived in Maputo for drought relief was diverted to meet the needs of the cyclone victims.

OFDA arranged to send a Water and Sanitation for Health (WASH) engineer to Mozambique to assess the condition of the water treatment plant in Maputo and the small irrigation systems and to develop recommendations for OFDA action. After meeting with GPRM officials and inspecting the treatment plant, pumping stations, and pipeline to Maputo, the engineer reported that the damage was so extensive that the provision of any water at all was extremely precarious. Moreover, the water quality was certain to deteriorate drastically if new supplies of chemicals were not made available. In regard to the irrigation systems, he estimated that 50 small dams had been destroyed and 30 pump sets lost in southern Maputo Province.

In response to the WASH engineer's recommendations, OFDA approved \$550,000 for the repair of the Maputo water system. Of that amount, \$300,000 was to be used to repair or replace equipment and \$250,000 was to go toward the purchase of water treatment chemicals.

OFDA further agreed to assist in replacing the lost irrigation pumps of private farmers. Instead of furnishing 10 new pumps, however, as originally planned, the USG pledged \$340,000 for the purchase of motors and parts for pumps contributed by other donors.

Summary of USG Assistance

Ambassador's Authority.....	\$25,000
Grant to GPRM for repair of Maputo waterworks.....	\$550,000
Grant to GPRM for local purchase of motors and parts for donated pumps.....	\$340,000

Travel and administrative expenses of WASH engineer.....	\$7,518
TOTAL	\$922,518

Assistance Provided by U.S. Voluntary Agencies

None reported.

Assistance Provided by the International Community

Please note: Although every effort has been made to include all contributions reported to OFDA and to avoid double counting, it has not always been possible to separate contributions intended for cyclone relief from those directed to the drought disaster.

International Organizations

EEC - water treatment products, tents, blankets, and helicopter fuel, all valued at \$406,000; also, purchase and transport costs of maize and bean seeds, totaling \$1,130,435.

LORCS - on behalf of the Mozambican Red Cross, launched an international appeal on February 11 and sent a delegate to attend to cyclone relief (in addition to the delegates already in the country working on the drought disaster).

UNDP/UNDRO resident coordinator - issued an international appeal for relief and rehabilitation requirements identified by the GPRM.

Governments

Australia - \$25,000 in cash.

Austria - \$54,350 in cash for repair of irrigation systems.

Canada - assessment mission to identify relief requirements and \$117,190 in cash through LORCS.

Denmark - 30 pumps for irrigation systems, value not reported.

Germany, Fed. Rep. - \$36,982 in cash for relief supplies and \$11,095 for seeds.

Italy - 82 rubber boats (Zodiak) with 37 outboard motors, medicines, baby food, 70 tents, 1,500 tons of rice, seeds, and transport costs, all valued at \$1,820,700; also, clothing, powdered milk, and 50 tons of fertilizer, value not reported. In addition, Italy planned an assessment

mission and funded the cost of a consultant to assist the UNDP/UNDRO resident coordinator with arrangements for the repair of the rail link to Swaziland.

Mongolia - 12 tons of canned meat, value not reported.

Netherlands - \$165,000 in cash, primarily to rebuild dwellings damaged by the cyclone; also, 150 tents, clothing, blankets, and water purification tablets, all valued at \$152,636.

Portugal - 10 tons of canned meat and 35,000 food packages, value not reported; also, food, blankets, transport and technical assistance, with a total value of \$136,935. The Portuguese Air Force donated medicines, powdered milk, vitamin supplements for children, and clothing, value not reported.

Soviet Union - one ton of medicines, 50 tents, 1,000 blankets, and three tons of food, value not reported.

Tanzania - unspecified assistance.

United Kingdom - seeds, spare parts for pumps, culvert material, a Bailey bridge, and a planeload of relief supplies, all valued at \$994,040.

Voluntary Agencies

Gulbenkian Foundation (Portugal) - \$100,000 in cash for food, medicines, and shelters.

Italian voluntary agencies - food, medicines, seeds, and blankets, all valued at \$18,750; also, alum for water treatment plant, value not reported.

Oxfam (U.K.) - \$69,700 in cash and seeds valued at \$74,516.

Portugal Red Cross - unspecified contribution.

Soviet Union Red Cross - relief supplies valued at \$250,000.

TOTAL \$5,563,329

1984 Drought Case Report

Date: 1981 through 1984

Location: The provinces of Maputo, Gaza, Inhambane, Manica, Sofala, Zambezi, and Tete

No. Dead: Complete figures are not available; an estimated 40,000 died in 1983, according to the Mozambique government

No. Affected: Approximately 4,750,000 people as of December 1983; nearly 1.5 million were in need of urgent assistance by the following April

Damage: Crop production had declined by 70-80% in the most seriously affected provinces after three consecutive years of drought. Heavy livestock losses resulted from a lack of pasture and water.

The Disaster

The present drought in Mozambique, described by the government as the worst to affect the country in 50 years, began to affect crop production as early as 1981. While the food shortage in the northern provinces was relieved by adequate rainfall in the 1982/83 growing season, the situation continued to deteriorate in the central and southern regions. The rural populations in the provinces of Maputo, Gaza, Inhambane, Manica, Sofala, and Zambezi were the most seriously affected. In parts of those provinces, insufficient rains during the critical planting period resulted in the nearly total loss of staple crops (rice, maize, cassava, sorghum) in the 1982-83 and 1983-84 seasons. Thousands of head of cattle perished from a lack of forage and water. The capital city of Maputo and environs suffered a severe water shortage due to the very low water level of the Umbeluzi River.

As the food and water shortages worsened, the incidence of disease rose markedly. A cholera epidemic in several of the drought-stricken provinces took at least 189 lives in the early months of 1983. Sick and emaciated people from the interior began moving in increasing numbers to coastal areas in search of food. Some 300,000 displaced people were eventually sheltered in government-organized camps in Gaza and Inhambane, while tens of thousands of others (mainly from Tete and Manica Provinces) had fled to Zimbabwe.

Several factors combined to exacerbate the effects of the drought. An opposition guerrilla group, the Mozambique National Resistance (MNR), stepped up its attacks against agricultural targets and vital road and rail links, thus affecting food production and commercial activity and seriously hampering the delivery of relief supplies to outlying areas. A shortage of vehicles and spare parts further impeded operations. The

fruitless sowing of crops depleted seed supplies, while a critical shortage of foreign exchange prevented the purchase of such agricultural inputs. Finally, a cyclone in late January 1984 destroyed large portions of the first promising harvest in several seasons in Maputo and Gaza provinces.

Moreover, with virtually no rainfall in parts of southern Tete Province during the year, the food shortage had reached crisis proportions in that more northern area as well. Although Tete is potentially one of the richest agricultural areas in Mozambique and normally supplies food to less productive areas, crop output fell dramatically due to the drought, the increase in insurgent activity, the breakdown of the transportation fleet, and the dearth of agricultural tools and seeds.

By December 1983, the Government of Mozambique estimated that 4,750,000 rural people were affected by the drought, which had cost some 40,000 lives in that year alone. The number of people needing immediate relief was nearly 1.5 million by the following April.

Action Taken by the Government of the People's Republic of Mozambique (GPRM)

The GPRM launched an international appeal on January 12, 1983, for cereal donations and assistance in a long-term recovery program for the central and southern provinces. The government later extended its appeal to include seeds; medical supplies; well-drilling equipment and technical assistance for water supply projects in Maputo City and in Gaza, Inhambane, and Sofala provinces; and logistical support to transport food and other relief supplies to the affected areas. The government periodically updated reports on food needs and estimates on the number of people affected by the drought. The GPRM also cooperated with the FAO in determining seed requirements and developed an emergency distribution plan.

The Department for the Prevention and Combat of Natural Calamities (DPCCN) coordinated the activities of the various government ministries involved in disaster relief. All food operations were centralized in the Ministry of Commerce. An informal government emergency team, comprised of several ministries, was later established to work with the U.N. in coordinating international assistance.

Using international donations, the Ministry of Health combated cholera and other diseases with a program which included laboratory testing, administering antibiotics, vaccinating high risk populations, and

chlorinating water supplies. The government also supplied health centers with medicines and created special rehydration centers in remote areas.

The Minister of Commerce and the Director of Marine Transport worked closely with the UNDP/UNDRO/WFP resident coordinator in Mozambique in carrying out a program to ship food supplies from Maputo to Inhambane and thence to smaller ports in remote areas (Nova Mambone, Inhassoro, and Vilanculos). The program, which was designed to overcome the difficult logistical and security problems of delivering food to drought victims by overland routes, required the chartering of a transport vessel and a smaller landing craft. The Ministry of Transport provided navigational assistance for the landing craft. Inland transportation from ports was undertaken by the government, which also bore the costs of loading and unloading. Some 7,555 MT of emergency food were transported in the first two months of the program. The GPRM also provided distribution centers in the port areas as well as camps for displaced persons in Gaza and Inhambane provinces.

With support from external donors, the Christian Council of Mozambique (CCM), representing the Protestant churches in Mozambique, had donated 8,000 MT of food by October 1983, including 391.35 tons of maize worth \$48,919. The MCC assisted the GPRM Department for the Prevention and Combat of Natural Calamities in channeling relief assistance.

The Mozambique Red Cross (MRC) was also active in the relief effort. MRC worked with LORCS to conduct a general feeding program for some 160,000 persons in Maputo, Gaza, and Inhambane Provinces. In addition, the MRC set up a station in Manjacaze, Gaza Province, to provide intensive feeding for seriously malnourished mothers and children. This station also served as a training center for volunteers and health workers. Foodstuffs provided by the MRC included 97.93 tons of beans valued at \$30,358.

Assistance Provided by the United States Government

At the request of the GPRM, the U.S. Charge d'Affaires traveled to the town of Macuacua (Gaza Province) on October 6, 1983, to observe the condition of Mozambicans recently liberated from areas controlled by the anti-government MNR. Among the desperately needy recent arrivals were many severely malnourished abandoned children.

Based on his personal observations and reliable reports that similar conditions could be found in other areas of Mozambique, the Charge determined on October 11 that a disaster existed in Gaza and Inhambane provinces. He obligated \$25,000 from the Ambassador's disaster assistance authority and this sum was donated to the Mozambique Christian Council for the purchase of food and other relief supplies for the reported 10,000 uprooted and/or abandoned

children in Gaza Province. The MCC was expected to use the money to buy 15 MT of powdered milk in South Africa.

The Charge requested expert assistance in assessing the magnitude of the disaster and suggesting an appropriate USG response. OFDA accordingly arranged for a physician from the Centers for Disease Control (CDC) to conduct an onsite nutritional and medical survey of children in the affected areas of Gaza and Inhambane. The CDC expert concluded that a potentially disastrous health and nutritional crisis existed in the two provinces. His recommendations included supplemental feeding for the most vulnerable as well as the provision of medical supplies, shelter and clothing, and improved sanitation. He also suggested continued surveillance of the situation.

In response to another request from the U.S. Embassy in Maputo, OFDA provided \$98,500 in disaster assistance funds in support of the UNDRO/WFP program to transport food by sea to isolated areas along the coast. U.S. funds were contributed toward the cost of chartering a landing craft. OFDA also approved a \$1 million grant to CARE to finance the proposed Logistical Support Unit (see below under U.S. Voluntary Agencies) and helped the Red Cross to airlift relief supplies to the interior of Manica Province with a grant of \$130,000.

A total of \$1,010,800 was obligated for use in Mozambique from the \$16 million Congressional Appropriation for Africa in FY 1984. This included a grant to CARE for the purchase of trucks (\$763,000) and a grant to World Vision International for a food distribution program in Tete Province (\$247,800).

In addition to the U.S. Charge's visits to Gaza, Inhambane, and Tete provinces and the CDC assessment, two representatives of A.I.D.'s Africa Bureau spent 12 days in Mozambique in December 1983 to evaluate the impact of the food emergency and study requirements for food assistance, and an OFDA disaster relief officer visited Mozambique in May 1984.

The bulk of USG assistance has taken the form of food commodities (corn, rice, wheat, and dairy products) provided by the Office of Food for Peace. FY 1984 approvals included 7,468 MT of commodities through the WFP and 51,610 MT bilaterally. Commodity cost and ocean freight totaled \$15,339,800.

The GPRM agreed to use the local currency generated from the sale of P.L. 480 Title II foods to expand agricultural production, especially in the private sector, or to support relief and rehabilitation activities.

Summary of USG Assistance

Ambassador's authority.....	\$25,000
Travel and administrative expenses of a CDC expert.....	\$4,400
Support for UNDRO/WFP sea transport program.....	\$98,500
Grant to CARE for logistical support unit.....	\$1,000,000
Grant to CARE for purchase of trucks (supplemental funds).....	\$763,000
Grant to LORCS.....	\$130,000
Grant to WVRO for feeding program (supplemental funds).....	\$247,800
Total OFDA assistance.....	\$2,268,700
Total FFP assistance (FY 84).....	\$15,339,800
Total FY 84 Assistance	\$17,608,500

Assistance Provided by U.S. Voluntary Agencies

CARE - established a logistical support unit (LSU) to coordinate the field distribution of emergency food and other relief supplies to the drought victims and to provide on-the-job training to Mozambique nationals for the operation of the LSU.

CWS - appealed for \$150,000 in support of the WCC appeal for \$500,000; forwarded \$68,200 directly to the Mozambique Council of Churches and \$5,000 to UNDRO.

LWR - gave \$100,000 in cash to support the Lutheran World Federation appeal (presumably included in the LWF's listed contribution).

Mennonite Central Committee - provided 8,500 tons of maize valued at \$1,742,500.

World Vision International - operated a program in Tete Province near the Zimbabwe border, providing food (from the Netherlands, initially) and medical services to 100,000 of the most seriously affected drought victims; supplied diesel fuel (12,000 liters per month for seven months, partly financed by Norway) and trucks to carry out the operation.

TOTAL \$1,815,700

Assistance Provided by the International Community

International Organizations

Caritas Internationalis - 300 tons of maize, 100 tons of beans, and cash, all valued at \$108,919; additional cereals and canned food, value not reported.

EEC - \$83,340 in cash through German Caritas; technical assistance (four medical personnel and a logistics expert) for five months, rental of four vehicles, local costs related to the relief program, and cash grants through PVO's, all valued at \$1,530,000; support of German Red Cross program in Inhambane; \$1,565,217 through UNHCR and Commission Delegation for Mozambican refugees in Zimbabwe; 20,000 tons of cereal to WFP (\$3,248,000) (presumably included in WFP's listed contribution); beans (\$812,000); additional 42,000 tons of wheat, value not reported.

FAO - launched an international appeal for assistance to drought-stricken countries of Africa; developed a crop rehabilitation program for Mozambique, including seed procurement; gave seeds valued at \$500,000; sent a team to review food requirements.

ICRC - sent a mission to Mozambique in January/February 1983 to confirm seriousness of the cholera epidemic in Gaza Province.

LORCS - issued appeals for medical supplies and emergency food; provided 3,000 feeding bowls and 300 Red Cross tunics, value not reported; conducted a feeding program in Maputo, Gaza, and Nampula provinces, in cooperation with the MRC; contributed 2,548 MT of maize, 340 MT of beans, and 2.3 MT of freeze-dried products for the Manjacaze intensive feeding center for four months, value not reported.

LWF - launched an international appeal for \$391,000; donated 1,036 tons of maize worth \$320,000 and 2,000 liters of oil, value not reported; provided inland transportation costs (\$60,000) for 4,500 tons of wheat from the Danish government.

OPEC - donated 3,000 tons of cereals, value not reported.

UNDP - assisted the GPRM in a borehole project for Gaza, Inhambane, Sofala, and Manica provinces; contributed \$230,000 in cash for the water supply project and planned to spend an additional \$3.2 million on water recovery projects.

UNDRO - supported the GPRM appeal for assistance for the northern provinces in 1982 and, in January 1983, launched an international appeal for relief for the central and southern provinces; extended the appeal to include medical items, equipment and technical assistance for the Maputo water supply and rural well-drilling projects, and cash assistance for the sea-borne food delivery system; donated \$25,000 in cash; headed a U.N. interagency mission to Mozambique in January 1984 to assess the situation and identify unmet needs and measures for rehabilitation. The U.N. planned to assign a permanent representative to Tete Province to help monitor the emergency and administer U.N. assistance.

UNHCR - planned a program to assist Mozambican refugees in Zimbabwe.

UNICEF - donated medicines and medical supplies valued at \$460,000 as well as cooking utensils, value not reported; sent a transport consultant to Tete Province to work with local authorities and two experts from CARE in identifying transport needs. UNICEF also planned to provide a transportation expert for a three month period starting in January 1985 to suggest ways to rehabilitate the truck fleet.

U.N. Special Account Mozambique - provided \$101,000 in cash for the water supply project.

WCC - launched an appeal for \$500,000 to assist the Mozambique Christian Council in purchasing food and agricultural inputs and forwarded \$384,000 (as of September 1983); gave \$69,000 in medicines for cholera relief.

WFP - arranged a coastal shipping program and provided a transport expert to travel aboard the relief vessels; provided 50,820 MT of maize, 3,600 MT of pulses, and 25 MT of freeze-dried products (as of February 2, 1984), all valued at \$12,243,000; gave additional food assistance, including an intensive feeding program (\$747,800), a program for 75,000 persons in Tete Province (\$753,000), and food for Mozambican refugees in Zimbabwe (\$859,300).

WHO - prepared a list of medical requirements in cooperation with the GPRM and purchased supplies valued at \$183,486 (using cash from the Government of Finland and credited to Finland); gave 100,000 liters of oral rehydration salts for cholera treatment, with a total value of \$23,500.

Governments

Australia - 4,000 tons of rice worth \$25,496 and an additional 4,138 tons of rice, value not reported; \$25,000 in cash through UNDRO.

- Austria - 14,000 tons of maize, value not reported; \$1,225,000 in cash.
- Belgium - \$56,000 in cash through Socialist Solidarity Belgium for the purchase of tools and seeds (presumably included in the listed contributions of that organization); planned to send 2,000 tons of wheat, value not reported.
- Canada - \$293,680 in cash through local and international voluntary agencies; 58,225 MT of food valued at \$15,270,000 (1980 to 1984).
- Denmark - 7,500 tons of wheat and 100 tons of milk powder, all valued at approximately \$1,410,000, and 29,200 tons of maize, value not reported; \$23,645 in cash through LORCS.
- Finland - \$181,818 in cash through WHO and \$131,580 in cash to the Finnish Red Cross; milk powder valued at \$782,609.
- France - cash and in-kind assistance for the water supply project, with a total value of \$265,000; three trucks at a cost of \$104,250; 3,800 tons of cereals through WFP, 2,000 tons of wheat, 10 tons of seeds, emergency food, medicines, and tools; value not reported.
- Germany, Fed. Rep. - 9,000 tons of maize (of which 3,000 tons were valued at \$525,000); \$20,000 in cash through UNDR0 for the coastal shipping operation; \$72,300 in cash through the Embassy in Maputo; corn seeds worth \$38,500; \$153,850 in cash through Caritas and Deutsches Diakonisches Werk for the drought and flood disasters; \$20,770 in cash through Deutsche Welthungerhilfe; \$71,762 in cash to ICRC.
- Greece - \$3,000 in cash for the coastal shipping program.
- Italy - 7,000 tons of rice and 1.1 tons of medicines and tools, all valued at approximately \$2,205,000; 10,000 tons of maize worth \$5,111,821; \$20,000 in cash to UNDR0 for the coastal shipping program and an additional \$263,157 cash grant to UNDR0; \$18,750 for internal transport. Italy planned to provide another 10,000 tons of rice, value not reported.
- Ireland - \$16,762 in cash through UNDR0.
- Japan - 7,614 tons of rice, with a partial value of \$1,412,000.
- Netherlands - 6,000 tons of wheat worth \$1,538,460; cash and in-kind assistance for the water supply project, all valued at \$1 million; 5,000 tons of flour and 10,000 tons of maize with a total value of \$3,340,000; over 20 trucks for Sofala and Manica provinces, value not reported. The Netherlands planned to provide 31,000 tons of maize in 1984 (may include the 10,000 tons listed above).
- Norway - 250 tons of fish valued at \$263,890; \$67,568 in cash through UNDR0; services of a shipping expert valued at \$20,000; hardened fat for margarine worth \$633,000; support for transporting maize from Zimbabwe,

valued at \$1,265,800; \$135,000 for the purchase of diesel fuel for relief operations in Tete Province; \$2,285 in cash through the Norwegian Red Cross for the transport of 500 kg of fish protein concentrate for Manica Province; \$712,510 in cash through local and international voluntary agencies.

Portugal - medicines, food, and water supply equipment, all valued at \$318,360; canned fish worth \$43,000.

Soviet Union - 10,000 tons of rice, value not reported; 500 kg of medicines and medical supplies valued at \$12,500; three cars, two motorcycles, tents, agricultural tools, clothing and footwear, with a total value of \$280,000; domestic goods worth \$12,000,000.

Spain - 2,000 tons of wheat, value not reported.

Sweden - 8,160 tons of wheat valued at \$1,466,666; inland transportation project, including the provision of 32 trucks, spare parts, mobile workshops, and a road diesel tank unit, partially valued at \$1,746,000; follow-up program to train personnel in transport logistics and administration; seeds worth \$200,000.

Switzerland - \$23,100 in cash; 100 family tents at a cost of \$20,833; 53 tons of dairy products, valued at \$230,090, for distribution through various voluntary agencies; 50 tons of dried milk worth \$252,780.

United Kingdom - 3,000 tons of maize, value not reported, and 11,500 tons of cereals valued at \$2,238,000; protein-enriched food, transport and distribution costs, and cash for seeds, all valued at \$292,000; \$196,078 in cash for relief items for Tete Province and an additional \$196,078 for the purchase of eight trucks and spare parts for use in that province; medical supplies valued at \$92,810 for Inhambane Province; \$149,750 in cash.

Vatican - \$35,000 in cash (of which \$20,000 went to Caritas).

Vietnam - 2,000 tons of rice, value not reported.

Zimbabwe - 25,000 tons of maize valued at \$3,535,353; camps to shelter Mozambican refugees in Zimbabwe.

Voluntary Agencies

Arbeiter - Samarita Bund (Germany, Fed. Rep.) - 17.1 tons of food and relief supplies through UNDRO, value not reported.

Belgium Socialist Solidarity, Norske Folkenjelp (Norway), and Arbeiter - Samarita Bund (Germany, Fed. Rep.) - purchased jointly a truck/trailer, food, and seeds at a cost of \$170,068.

Christian Aid (U.K.) - \$41,840 in cash to Mozambique Council of Churches.

Denmark Red Cross - 3,000 tons of wheat (exchanged for maize), value not reported.

Finland Red Cross - 50 MT of dried fish, value not reported, and \$82,600 in cash.

Germany, Fed. Rep. Red Cross - 2,000 tons of maize worth \$350,000; 99,177 kg of dried fish, value not reported; a relief program (with EEC support) in Inhambane; food, medicines, tents, vehicles, etc. for the relief operation, all valued at \$1,470,180.

Norway Red Cross - dried fish valued at \$780,000; two trucks, value not reported, and \$59,700 in cash for operational costs of the trucks.

Oxfam (U.K.) - Land Rover for use of the District Medical Officer in Vilanculos, and seeds, with a total value of \$81,600; medicines, food, clothing, seeds, and another vehicle, all valued at \$171,831; training program for community health workers in Inhambane.

Sweden Red Cross - 76 tons of enriched flour valued at \$44,570; \$202,520 in cash; services of a nutritional delegate, value not reported.

Switzerland Red Cross - \$27,523 in cash; approximately 10 tons of milk powder and services of two delegates, value not reported.

United Kingdom Red Cross - \$1,517 in cash.

TOTAL \$89,556,686

1985 Drought/Famine Case Report

Date: 1981-1985

Location: The provinces of Tete, Manica, Sofala, Inhambane, Gaza, and Maputo

No. Dead: Accurate figures are not available; estimates vary from tens of thousands to as many as 100,000 dead from starvation or disease.

No. Affected: In January 1985, the total affected population was estimated at 2,466,000, with 1,662,000 severely affected.

Damage: Marketed production of maize, sorghum, and rice was only 60,000 MT, while the total emergency food aid requirement was estimated at 400,000 MT. Nutritional surveys recorded that 43% of the children in the most affected provinces were suffering from moderate malnutrition and 19% from severe malnutrition.

The Disaster

A combination of drought, floods, and civil war resulted in a devastating famine that affected six of Mozambique's ten provinces. The drought that began in 1981 was responsible for reducing domestic food production by as much as 80 percent. Floods in 1984 and 1985 destroyed crops and livestock in the south and central provinces. To further aggravate the situation, anti-government guerrillas harassed the rural population, destroyed road and railway links, and attacked relief convoys delivering emergency food aid. By the end of 1984, it was reported that as many as 100,000 people had died as a result of the famine.

Due to the combined relief efforts of the Mozambique government and the international community, the famine situation had noticeably improved by 1985. The number of affected persons was estimated at 2,466,000, down from an estimated 4,750,000 in 1983. In 1984, the international community provided over 308,000 MT of food to Mozambique and in 1985 the emergency food aid requirement was estimated at 400,000 MT. Mozambique's bankrupt economy made it almost totally dependent on the international community for donated food, supplies, and technical assistance.

Despite this massive international assistance, the situation in Mozambique remained critical. Approximately 1,662,000 people were still regarded as severely affected by the famine in Tete, Manica, Sofala, Gaza, Inhambane, and Maputo provinces. Malnutrition persisted in each of these affected provinces, especially among children and young women. Some families in remote rural areas subsisted on seeds, leaves, and aquatic plants. Severe shortages of seeds, agricultural tools, clothing, blankets, and medicines were reported in all of the affected provinces.

Insurgent activity intensified during 1985, causing thousands of Mozambicans to migrate to neighboring countries or move into government-run relief camps. The Gazankulu homeland in South Africa was a haven for tens of thousands of Mozambican refugees trying to escape the ravages of the civil war. Swaziland, Zambia, and Zimbabwe also reported an increased influx of Mozambican refugees. An additional 300,000 displaced persons abandoned their land and moved to government-protected relief camps. With the advent of the rainy season, many of these refugees returned to their land in desperate need of assistance.

Mozambique experienced a near normal rainy season in 1985, but rural insurgency and a shortage of seeds and other agricultural inputs severely inhibited food production. Marketed production from state farms, cooperatives, and private commercial farmers was estimated at only 60,000 MT of maize, rice, and sorghum, 42 percent less than the previous year. While the number of deaths due to starvation was down from the preceding years, the incidence of malnutrition and communicable diseases continued to rise at an alarming rate. By the end of the year, the situation remained precarious and the lives of over 2 million people were still at risk.

Action Taken by the Government of the People's Republic of Mozambique (GPRM)

The GPRM's Department for the Prevention and Control of Natural Calamities (DPCCN) continued to serve as the central government agency responsible for coordinating the relief activities of other government departments, private voluntary organizations, and the international community. Working closely with the Ministry of Internal Commerce and international donors, the DPCCN assessed the food needs of the affected population and issued monthly situation profiles on each affected province. The DPCCN also managed the distribution of emergency food donations and monitored most of the other on-going relief projects in Mozambique. One project that undoubtedly improved the GPRM's ability to deliver emergency commodities was the creation of a Logistical Support Unit (LSU) within the DPCCN. Funded by OFDA and staffed with CARE employees, the LSU was put in charge of port clearance, handling, and warehousing of incoming relief commodities, maintenance and operation of delivery vehicles, and distribution monitoring.

The GPRM used all available means of transportation to deliver emergency food supplies to affected areas. Truck convoys with military escorts were used to deliver food in rebel-controlled areas. Mozambique's antiquated railway system was employed to transport food and other relief supplies to townships in Maputo province. In cooperation with UNDP, DPCCN airlifted hundreds of tons of food and high value goods to remote localities in Manica, Sofala, Tete, and Zambezia provinces. Another cooperative venture for delivering emergency assistance was the charter of the Cinq Juin, a 350-ton capacity, flat-bottomed landing barge. This vessel, financed by UNDRO, UNICEF, and WFP, brought desperately needed

food supplies to famine victims living along the coast of Inhambane province.

Virtually every government agency and local voluntary organization was involved in the disaster relief effort. AGRICOM, the Mozambican agricultural marketing parastatal, purchased surplus food from local farmers to encourage increased agricultural production. The National Seed Company purchased several varieties of high quality cereal seed to give to farmers in affected areas. The Ministry of Marine Transport and Navique, the GPRM shipping agency, assisted in the operation of the Cinq Juin, providing navigational guidance and off-loading the emergency supplies. In cooperation with UNICEF, three government water and drilling agencies were involved in a nationwide water and well rehabilitation project. The Mozambican Red Cross carried out its own emergency airlift and supplementary feeding programs in Gaza, Manica, Sofala, and Maputo provinces, while the Christian Council of Mozambique provided emergency supplies to relief camps in Inhambane, Gaza, Sofala, and Maputo.

Assistance Provided by the United States Government

By the start of fiscal year 1985, the USG's disaster relief effort in Mozambique was already well underway. During the previous fiscal year, the USG provided project grants to CARE, WVRO, LRCS, and WFP and furnished over 50,000 MT of P.L. 480 Title II food commodities. (See FY 1984 Drought Case report). On January 8, 1985, U.S. Ambassador Peter de Vos determined that the drought and food emergency continued to exist in Mozambique, and extended the disaster declaration made in fiscal year 1984. In January, the Ambassador and a U.S. Congressional delegation visited several relief camps to assess the situation. Throughout the disaster, the U.S. Embassy staff in Maputo worked closely with their counterparts in the GPRM, UN, and voluntary agencies to identify the needs of the affected population and coordinate the USG response.

In FY 1985, the USG increased its Title II emergency food aid contribution to Mozambique to over 60,000 MT. A.I.D.'s Office of Food for Peace contributed 42,250 MT of P.L. 480 Title II corn, and 2,850 MT of NFDM, 850 MT of butteroil, 500 MT of cheese, and 1,440 MT of butter (all Section 416) to the Mozambique government for free distribution by the DPCCN. The USG's contribution to WFP included 155 MT of CSM, 70 MT of vegoil, and 104 MT of Section 416 NFDM. As part of its project agreement with Church World Service, the USG provided 313 MT of rice, 226 MT of peas, 121 MT of vegoil, and 635 MT of corn, distributed in Inhambane province. Another 12,850 MT of corn was furnished to the WVRO program in Tete and Manica.

In response to an urgent appeal from the GPRM, the U.S. Embassy in Maputo requested the immediate delivery of blankets to be distributed to thousands of displaced persons. OFDA arranged an immediate airlift of 7,982 blankets from McGuire Air Force Base aboard a USAF C-141 aircraft. The plane arrived in Maputo on February 2 and the blankets were later sent to Manica province. Later in the year, an additional 11,720 wool blankets from the OFDA stockpile in Leghorn, Italy were delivered by a chartered airline and by boat to Beira in Sofala province.

As part of its grant agreement with CARE, OFDA allocated over \$4.2 million to continue the operation of the DPCCN's Logistical Support Unit in FY 85 and 86. This amount supplemented the previous year's allocation of \$1,763,000, which was used for the purchase of 23 Leyland trucks, staff salaries, travel expenses, and start-up costs. In September, OFDA sent two consultants to evaluate the CARE project. During their two-week stay in Mozambique, the evaluation team conducted interviews with several GPRM, CARE, USG, and other relief agency personnel, inspected LSU facilities, and traced a bag of corn from its arrival at port to its delivery to a distribution warehouse. In a report submitted to OFDA, the evaluation team concluded that the CARE-staffed LSU had become an integral unit of the DPCCN and recommended the continued funding of the project.

In support of the CWS feeding program in Inhambane province, OFDA provided a matching grant to CWS for the purchase of four Leyland Landmaster trucks and 24,000 liters of diesel fuel. In support of the WVRO feeding program in Tete and Manica provinces, OFDA provided a \$236,000 grant to WVRO to pay for personnel costs and other operating expenses. OFDA also provided a \$3,250,000 grant to UNICEF to fund an emergency relief and rehabilitation program, which included projects in logistical support, NGO collaboration, and shallow well construction.

The worsening security situation in Mozambique precluded disaster relief personnel from visiting food distribution sites and making assessments in affected areas. In an effort to improve the donor's monitoring capability, OFDA, in cooperation with UNICEF and WFP, funded the charter of a twin-engine airplane and crew provided by the U.S. PVO, Air Service International. The plane was used by various disaster relief personnel to monitor the on-going relief operations.

In anticipation of the 1986 planting season, OFDA allotted \$800,000 to the U.S. Mission in Maputo to purchase high quality seed from the National Seed Company of Malawi. The

seeds were distributed by the GPRM to farmers returning to their fields.

Summary of OFDA Assistance

FY 85

DOD Airlift of 7,982 blankets.....	\$125,865
CARE grant for Logistical Support Unit (\$503,859 is from supplemental funds).....	\$600,000
CARE project evaluation team (supplemental funds).....	\$19,340
CWS matching grant for trucks.....	\$65,000
Grant to UNICEF for emergency relief and rehabilitation program (supplemental funds).....	\$3,250,000
Total FY 85 Assistance.....	\$4,060,205

FY 86

Ocean and Air Transport of 11,720 blankets (supplemental).....	\$97,610
CARE grant to DPCCN Logistical Support Unit (supplemental).....	\$4,201,831
Charter of Air Service International aircraft for monitoring program (supplemental).....	\$76,000
WVRO Grant to emergency feeding program (supplemental).....	\$236,000
Mission allotment for purchase of seeds (supplemental).....	\$800,000
Total FY 86 Assistance.....	\$5,411,441

Summary of USG Assistance

TOTAL OFDA funds.....	\$287,006
TOTAL OFDA-administered Supplemental funds.....	\$8,584,640
TOTAL FFP assistance (FY 85).....	\$20,466,200
TOTAL USG assistance.....	\$29,337,846

Assistance Provided by U.S. Voluntary Agencies

American Jewish World Service - drugs and medical supplies (\$750,000) in support of UNICEF.

Air Service International (ASI) - provided air transportation to DPCCN and LRCS for airlifting emergency supplies to remote relief camps. ASI submitted a proposal to OFDA to finance the charter of a twin-engine airplane for monitoring the emergency assistance program.

CARE - In February 1984 the GPRM signed a project agreement with CARE to manage and operate a logistical support unit within the DPCCN. As part of its agreement, CARE provided on-the-job training to host nationals, with the intention that the LSU would eventually become permanently integrated into the DPCCN. CARE also contributed \$150,000 for continuation of UNDP emergency airlift and a cash grant of \$435,000 to purchase fuel.

CWS - In collaboration with the Christian Council of Mozambique, CWS carried out an emergency feeding program consisting of 1,295 MT of rice, corn, peas, and vegoil to benefit 33,500 persons in Inhambane province.

Hope for Africa - provided \$100,000 worth of seeds and tools for Manica province.

Oxfam/U.S. - managed an integrated rural development project in Magoe District, Tete Province.

USA for Africa - three 20-ton trailer trucks through Red Cross (\$169,500), ten 20-ton trailer trucks through CARE (\$501,200), five tanker trucks through CARE (\$188,300), six 7-ton trucks through UNICEF (\$195,800), eight farm tractors through UNDP (\$145,200), fuel through UNDP (\$500,000), radio for communication through CARE (\$25,000), five forklift trucks through CARE (\$100,000), ten pick-up 4WD trucks through UNICEF (\$120,000) and water supply materials through UNDP (\$55,000).

WVRO - distributed 12,850 MT of P.L. 480 Title II corn to approximately 400,000 famine victims in Tete and Manica provinces.

TOTAL \$3,435,000

Assistance Provided by International Community (as of 10/85)International Organizations

Caritas Internationalis - received contributions in cash and kind from national Caritas societies valued at \$1,564,826.

EEC - provided an estimated \$7,035,230 worth of emergency food commodities (maize, wheat, pulses, butteroil, NFDN) and 30,000 liters of diesel fuel for delivery vehicles; donated 1,200 tons of seeds destined for Inhambane province.

FAO - assessed seed requirements and donated cereal seed for Maputo and Gaza provinces, valued at \$500,000.

ICRC - concentrated on providing medical assistance to victims of civil strife.

LRCS - supported the Mozambican Red Cross emergency airlift and intensive feeding program, providing several League technical delegates to assist in health, school, and training projects. LRCS proposed disaster preparedness and first aid training projects for 1986-88.

LWF - 1,000 MT of maize (\$260,000); 10,000 blankets (\$25,000); seeds, tools, medical supplies (\$435,000); subsidy for fuel (\$10,000)

UNDP - funded emergency airlift service of food and high value goods to affected provinces, using the Mozambique national airline LAM (\$450,000); tractors and landrovers (\$253,500)

UNICEF - \$165,000 to purchase fuel; \$40,000 for continuation of UNDP emergency airlift; continued support of the Cinq Juin; UNICEF's emergency relief and rehabilitation program was financed by numerous donors and includes projects in health care, commodity-grain exchange, food security, refugee rehabilitation, NGO collaboration, logistical support, and rural water supply recovery.

WCC - reported a total of \$1,511,569 of donations from various Christian voluntary relief organizations in response to its appeal, used to purchase beans and support Christian Council of Mozambique.

WFP - distributed 340 MT of CSM, DSM, vegoil, and sugar (\$253,000) to vulnerable groups in Tete province, and 9,000 MT of corn (\$1,980,000) to famine victims in Gaza and Inhambane. WFP also financed and operated the Cinq Juin, the landing barge used to deliver food to famine victims in Inhambane province.

Governments

Algeria - 800 MT of rice, valued at \$350,000

Australia - contributed emergency food commodities (rice, DSM, vegoil) to WFP, valued at \$1,304,347.

Belgium - 3,000 MT of wheat, valued at \$667,000

Canada - diesel fuel for Tete (\$186,000); 30 MT of skimmed milk.

China, People's Rep. - donated 2,000 MT of maize.

Denmark - purchase and transport of food, medicine, equipment (\$692,000); purchase and transport of milk powder (\$213,000) through Red Cross; diesel fuel (\$692,000); cash grant to Danish Red Cross (\$99,000); cash grant to Development Aid from People to People (\$49,500).

France - 13,000 MT of food to CRS; five Renault trucks (\$150,000)

Germany, Fed. Rep. - provided 12,000 MT of cereals through WFP (\$2,981,500), 100 MT of dried fish through the German Red Cross (\$161,290), and insecticides (\$15,238).

Greece - 3,000 MT of cereal

Ireland - cash grant to UNDR0 (\$16,762)

Italy - two cash grants to UNDR0 appeal (\$1,304,823); 10,000 MT of rice; processed food, seeds, vehicles, and tools (\$11,500,000); 26 MT of canned meat and soap through UNICEF; six generators (\$660,000)

Japan - five Mitsubishi Pajero jeeps to WFP for DPCCN emergency logistic operations (\$50,000); six Toyota Landcruisers (\$60,000); two generators for Ministry of Health emergency hospital unit in Tete province

Kuwait - \$420,000 for relief assistance.

Netherlands - 6,950 MT of wheat and 15 trucks to Sofala and Manica provinces; funded operation of four landing barges for off-loading the Cinq Juin (\$500,000)

Norway - 300 MT of stockfish (\$12,600); 500 kgs of fish protein concentrate (\$2,285); NORAD (Norwegian government aid agency) assumed operating costs of Cinq Juin.

Portugal - agricultural tools (\$38,600); grant to Ministry of Industry and Energy (\$17,000); technical assistance (\$10,200); insulation materials (\$85,500); calculators and other equipment (\$1,550).

Soviet Union - 2,000 MT of rice and consumer goods.

Sweden - \$5,000,000 for medical assistance from SIDA (Swedish government aid agency); pesticides (\$500,000); agricultural tools (\$2,000,000)

United Kingdom - cash grant to support Oxfam/UK project in Tete (\$196,078); 17 trucks and spare parts (\$196,078); medical supplies (\$92,810).

Yugoslavia - 10,000 MT of maize, 100 MT of canned meat, 128 MT of food, 25 MT of beans, 7.5 MT of rice, and 1,863 kg of canned fish.

Voluntary Agencies

Arbeiter-Samariter-Bund (FRG) - 17.1 MT of food and relief supplies (rice, beans, vegoil, peas, cornmeal, DSM, sugar, salt, meat, and soap)

Aviation sans frontieres - provided air service for UNDP/DPCCN emergency airlifts.

CAFOD (U.K.) - cash grant to Caritas of \$15,000

Caritas Austria - cash grant of \$63,960

Caritas Belgium - cash grant of \$19,000

Caritas Germany - cash grant of \$102,000

Caritas Italy - cash grant of \$900,000

Denmark Red Cross - 200 MT of DSM, 50 MT of vegoil, 100 medicine kits, three relief delegates

Development and Peace - cash grant of \$87,400

Diakonisches Werk - cash grant of \$25,000

Dutch Solidarity Group - 10,000 liters of diesel fuel

Germany (DRG) Red Cross - 960 blankets

Germany (FRG) Red Cross -- one delegate

Finland Red Cross - 13 MT of cheese, 10 MT of macaroni, 32 MT of DSM, 24 MT of vegoil, 32 MT of wheat flour

Japan Red Cross - 500 MT of DSM, 45 MT of vegoil, 60 MT of corn flour, 8,300 blankets, seven transport vehicles, ten portable radio sets

Knights of Malta - 5,000 cases of canned tuna and doses of medicine; 367 MT of food, clothes and seeds (\$10,000,000)

Medecins du Monde - rural health program in Sofala

MSF - sent medical teams to Tete City, Mutarara, Inhambane, and Manica.

Netherlands Red Cross - 5,000 blankets, 45 MT of vegoil, 55 MT of sugar, 27 MT of soap.

Oxfam/UK - vehicle spare parts, fishing supplies (\$11,618); seeds and vehicles (\$70,200); projects in Tete, Gaza, and Cabo Delgado provinces.

SCF/UK - sent epidemiologist to work with GPRM Ministry of Health; and provided material assistance to Zambezia province.

Spain Red Cross - one relief delegate

Switzerland Red Cross - three relief delegates

TOTAL \$56,094,264

1985 Floods Case Report

Date: February 7-12, 1985

Location: Maputo, Gaza, Manica, and Sofala provinces in south and central Mozambique

No. Dead: 8

No. Affected: 500,000 directly affected by disruption of food delivery

Damage: Over 14,000 hectares of farmland were flooded causing significant losses of rice, maize, sweet potato, and butterbean crops. The bridges at Moamba, Chimoio, and Boane and 400 meters of National Route 1 were completely washed away. Although no official damage estimates were made, the government appealed for over \$500,000 for repair work.

The Disaster

After four long years of devastating drought, the rains returned to Mozambique with a vengeance in early February 1985. Torrential rains fell steadily for six days on the southern and central provinces, causing the Limpopo, Incomati, Pungue, and Zambezi rivers to overflow. The rains were a mixed blessing to farmers, bringing an end to the drought, but flooding several thousand hectares of farmland and destroying crops. There were eight storm-related deaths reported, two from electrocution by downed power lines. The flooding also disrupted several of the vital transportation links used to deliver food to famine-stricken populations in these areas. The country's most important highway, National Route No. 1, was cut in several places and 400 meters of it were completely washed away. The bridges at Moamba, Chimoio, and Boane were also washed away and landslides destroyed several segments of the southern railroad network. Streets in the low-lying areas of Maputo city were submerged beneath a meter of water.

Action Taken by the Government of the People's Republic of Mozambique (GPRM)

In 1984 Cyclone Domoina (see OFDA Annual Report FY 84, Mozambique - Cyclone) destroyed much of Maputo's infrastructure, most of which had not been repaired before the flooding. However, due to their experience dealing with the cyclone disaster, local and national authorities were better prepared to evacuate people living along the rivers and relief operations were better organized. Lacking foreign exchange reserves, the GPRM appealed to the international community for over \$500,000 for highway repairs. The GPRM's Department of Roads and Bridges requested international donations to purchase culverts, 12-ton tipper trucks, cement and bitumen for road pavement, and diesel fuel for earth-moving

equipment. A parastatal construction company was contracted to reconstruct the 400 meters of destroyed roadway and resurface an additional 2,000 meters on National Route No. 1 with asphalt.

Assistance Provided by the United States Government

On February 22, Ambassador De Vos determined that a disaster situation warranting USG assistance existed. The Ambassador's \$25,000 Disaster Authority was provided as a grant to the GPRM's Ministry of Construction to be used to purchase cement, asphalt, and fuel for rehabilitation work on National Route No. 1 between Palmeira and Xinavane.

TOTAL \$25,000

Assistance Provided by U.S. Voluntary Agencies

None reported

Assistance Provided by the International Community

International Organizations

EEC - provided a grant of \$228,000, specifically for emergency aid to flood victims.

Governments

Italy - contributed \$352,000 for reconstruction of the bridge over the Incomati River at Moamba.

Netherlands - provided a \$16,000 cash grant to UNDR0 to reimburse the cost of helicopter operations for rescue and relief missions.

United Kingdom - donated ten pipe arch culverts, two 12-ton tipper trucks, and two radio communication units for repair crews working on National Route No. 1 (estimated cost \$134,000).

TOTAL \$730,000

1985 Storm Case Report

Date: March 26, 1985

Location: Maputo province

No. Dead: None reported

No. Affected: Not reported

Damage: Thirty-two electrical transmission towers between Maputo and the South African border were blown down or struck by lightning and 400 houses and 3 warehouses were damaged.

The Disaster

On the evening of March 26, a cyclonic storm, with 100 km/hr wind gusts, knocked out thirty-two high-tension pylons, which supplied the capital city of Maputo with electric power generated from South Africa. Coming on the heels of the previous month's flooding in the south and central provinces, the storm destroyed hundreds of homes and flooded 800 hectares of farmland cultivated with maize. The disruption of electrical power in the port city of Maputo adversely affected ongoing relief activities in the famine-stricken provinces of Gaza and Inhambane, by temporarily shutting down port facilities, refrigerated warehouses, hospitals, industrial plants, irrigation schemes, and waterworks. With all electricity supplied by South Africa effectively cut off, Maputo Province was forced to rely on the generating capacity of a single, antiquated, thermal power station.

Action Taken by the Government of the Peoples Republic of Mozambique (GPRM)

To the beleaguered nation of Mozambique, already beset by a prolonged drought and recent floods, the disruption of electrical power threatened to create a serious setback to the local economy and the continuing disaster assistance effort. The GPRM ordered the curtailment of all industrial activities, port operations, and public services and rationing of domestic energy consumption to five hours per day in Maputo Province. The GPRM estimated that it would take at least three months and \$1.5 million to repair the high-tension lines. In the meantime, between \$8.5 and 10 million would be needed to purchase fuel to supply the Maputo power station for three months. Fearing that the antiquated Maputo thermal plant would fail, and with no back-up installation available, the GPRM also requested technical assistance and funds to conduct a complete overhaul of the Maputo facility.

Assistance Provided by the United States Government

On March 29, Ambassador De Vos determined that the power shortage caused by the storm endangered the lives of drought victims receiving emergency assistance and declared a state of disaster for the third time in a year. The Ambassador obligated \$250,000 (including the \$25,000 disaster assistance authority) to purchase 30,000 tons of coal for the Maputo generating plant so that emergency relief efforts would not be disrupted. At the request of the U.S. Mission in Maputo, OFDA identified and dispatched an electrical engineer to make an assessment of the Maputo power station, including recommendations on necessary improvements to increase the reliability and generating capacity of the power station. The two week TDY of the electrical engineer totaled \$17,321.

TOTAL \$267,321

Assistance Provided by U.S. Voluntary Agencies

None reported

Assistance Provided by the International CommunityInternational Organizations

EEC - made a cash grant of \$283,660.

LWF - provided a cash grant of \$10,000 to purchase jet fuel.

UNDRO - provided a cash grant of \$20,000.

Governments

Denmark - made a cash grant of \$909,090 to purchase diesel fuel to run Maputo power plant.

Italy - provided \$1,500,000 to repair the damaged transmission line.

Netherlands - gave \$285,000 to buy diesel fuel.

Norway - donated \$1,100,000 to purchase diesel fuel.

Sweden - contributed \$1,700,000 for diesel fuel purchase.

Switzerland - contributed \$208,333 to finance the overhaul of the diesel generator at the Maputo plant.

United Kingdom - provided services of an electrical engineer, value not reported.

Voluntary Agencies

Medecins du Monde - sent teams of doctors and nurses to Maputo and Nhamatanda, value not reported.

TOTAL \$6,016,083

Bibliography

- Brennan, Tom. Refugees from Mozambique: Shattered Land, Fragile Asylum. Washington: U.S. Committee for Refugees; 1986.
- CARE. Grant Proposal for Emergency Logistics Support. New York: CARE; 1986.
- Department for the Prevention and Control of Calamities. Natural Disasters Hamper Development. Maputo: Government of the People's Republic of Mozambique; 1984.
- Economist Intelligence Unit. Country Profile Mozambique. London: The Economist Publications Ltd. 1986.
- Ministry of Agriculture. Some Areas for Investment. Maputo: Government of the People's Republic of Mozambique. 1985.
- National Oceanic and Atmospheric Administration. Agroclimatic Conditions and Assessment Methods for Drought/Food Shortages in Subequatorial Africa. Columbia, Mo.: University of Missouri; 1983.
- National Planning Commission. Mocambique Informacao Estatistica. Maputo: Government of the People's Republic of Mozambique; 1982.
- Nelson, Harold, D. Mozambique: A Country Study. Washington: American University, Foreign Area Studies (Area Handbook Series); 1984.
- Office of the United Nations Disaster Relief Co-ordinator. Multi-Agency Mission to Mozambique. Geneva: United Nations; 1984.
- Office of U.S. Foreign Disaster Assistance. Annual Report: Fiscal Year 1984. Washington: U.S. Agency for International Development; 1985.
- _____. Annual Report: Fiscal Year 1985. Washington: U.S. Agency for International Development; 1986.
- Simmons, Richard L. Mozambique: An Economic Base Study with Emphasis on Agriculture. Raleigh: North Carolina State University; 1978.
- Stauffer, Bruce. Mozambique: Country FEWS Report Series. Price, Williams, & Associates, Inc. prepared for U.S. Agency for International Development; 1986.
- Tuck, Laura. Trip Report. Food Deficit Assessment. Mozambique, March 22 - April 5, 1986. Prepared for U.S. Agency for International Development, Office of Food for Peace; 1986.
- United Nations Children's Fund. Mozambique: Emergency Relief and Rehabilitation. New York: UNICEF; 1986.

- United Nations Office for Emergency Operations in Africa. Status Reports on the Emergency Situation in Africa: Series. New York: United Nations; 1985-86.
- U.S. Department of State. Mozambique Background Notes. Washington: Bureau of Public Affairs; 1985.
- . Mozambique Post Report. Washington: Foreign Affairs Information Management Center; 1982.
- U.S. Agency for International Development. Mozambique Annual Budget Submission FY 1987. Washington: A.I.D. Bureau for Africa; 1986.
- Walt, Gillian ed. Mozambique: Towards a People's Health Service. London: Zed Books Ltd.; 1984.
- World Bank. Mozambique: An Introductory Economic Survey. Washington: The World Bank; 1985.
- World Vision Relief Organization. Proposal Requesting Provision of Operations Support for Emergency Food Distribution in Mozambique. FY 87-88. Monrovia, CA: WVRO; 1987.
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